THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF SOUTH DAKOTA

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IN THE MATTER OF THE APPLICATION OF BLACK HILLS POWER, INC. FOR AUTHORITY TO INCREASE ITS ELECTRIC RATES — EL14-026

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Transcript of Proceedings
March 2, 2015

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BEFORE THE PUBLIC UTILITIES COMMISSION,
CHRIS NELSON, CHAIRMAN
KRISTIE FIEGEN, VICE CHAIRMAN
GARY HANSON, COMMISSIONER

COMMISSION STAFF
Rolayne Ailts Wiest
John Smith
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Katlyn Gustafson

APPEARANCES
Andrew Moratzka and Mark Moreno
Amy Koenig, Black Hills Power
Lee Magnuson, Black Hills Power (by telephone)

Reported By Cheri McComsey Wittler, RPR, CRR

TRANSCRIPT OF PROCEEDINGS, held in the above-entitled matter, at the South Dakota State Capitol Building, Room 413, 500 East Capitol Avenue, Pierre, South Dakota, on the 2nd day of March, 2015, commencing at 2:02 p.m.

CHAIRMAN NELSON: EL14-026, In the Matter of the Application of Black Hills Power, Inc. for Authority to Increase its Electric Rates.

The questions that are posed, today shall the Commission grant the Joint Motion for Approval of the Amended Settlement Stipulation, approve the terms and conditions stipulated therein? And shall the Commission approve the interim rate refund plan? Or how shall the Commission proceed?

Commissioner Hanson, for your --

COMMISSIONER HANSON: Benefit --

CHAIRMAN NELSON: Benefit. Yeah.

Counsel Smith was pointing something out to me so just give me a second.

Yeah. The other question that we will deal with before we're done today, if we get that far today, and we're not sure exactly what direction we're going to go, but the other question that needs to be resolved is whether the Commission shall approve the Contract with Deviations with the South Dakota Authority, Science and Technology Authority.

But whether we get to that point today or not, we'll see.

So, Commissioner Hanson, for your benefit, we do have representatives from Black Hills Power here. We have Mr. Moratzka here in the meeting room. Lee Magnuson is on the phone line. And so that's kind of where folks are physically located so far as the proceeding.

At this point the parties have filed their briefs. I want to say on behalf of myself to all of the parties, thank you, first of all, for accommodating the tight time line that we have, if there's any hope of resolving this in a timely manner. And I guess we'll find out today whether or not that happens or not.

But thank you for getting those briefs timely filed to both and all parties. They were very, very helpful to us, and I appreciate that.

And so I think at this point I am going to turn to Commissioner questions, if there are questions arising out of those briefs or anything else.

Commissioner Fiegen, I'll turn to you first.

COMMISSIONER FIEGEN: First of all, I'd like to reiterate what Chairman Nelson just said. I appreciate the post briefs, how timely they were and how thorough they were.

Black Hills Industrial Interveners made a couple good points, or interesting points maybe, that I want the company to address. So I don't know if I'm asking Mr. White.

First one is going to be on pension expense normalization.

The Black Hills Industrial Interveners made a point in their post brief, didn't bring it up a lot in the hearing in January, but they were going to Jon Thurber's rebuttal testimony that was before the hearing.

And they talked -- Jon Thurber talked about the 2015 pension expense being -- knowing that actual expense. And what I'd like to know is when did you know that?

Because we certainly could have went with the Black Hills Industrial Interveners' idea, but I don't know exactly when you knew information.

MR. WHITE: Yeah. Pension expense is calculated on a calendar year basis. So it was just early January --

CHAIRMAN NELSON: If would you just identify yourself, please.

MR. WHITE: I'm sorry. Kyle White representing Black Hills Power.

And so the 2015 actual pension expense -- or the pension expense under discussion wasn't known until, you know, early January, and the Settlement was filed -- basically negotiated October, November and filed in December. So it was well after the initial Settlement.

COMMISSIONER FIEGEN: Okay. I just wanted to make sure of that. Because they certainly brought up a good point. But if it wasn't known in your meeting in October 28, and certainly they were part of that meeting, I can see why you kept it out.

But I would expect, like Mr. Thurber said, you should be able to kind of normalization pension expenses in the future, maybe decades to come, because of the defined contribution.

Do you see your pension expense being less in the future because of the defined contribution or just the volatility will be flatter?

THE WITNESS: Well, the pool of candidates eligible for the pension will be more stable going forward since the company froze its pension plan and is now offering a defined contribution plan for all new employees.

What's going to continue to be volatile is the earnings on the pension plan because it's a large pool of sums that are invested in the market, and it's based upon those expected earnings. And, as you know, they vary from year to year and particularly have the last years. Which is why the Staff suggested that we normalize that on a five-year basis.

The company in the Settlement has agreed to normalize that again if there's a rate case within the next five years.

COMMISSIONER FIEGEN: And one last question, just for my information.

When did you change the new employees or the new hires to a defined contribution? So you have a very large pool, I assume, in the defined benefit because you have a very stable staff.

MR. WHITE: Yes. The company has approximately 2,000 employees. And it was probably four or five years ago when we froze our defined benefit pension plan. Essentially, at that point you had to be 45 years of age and 10 years of service or you were not eligible to continue under the program and were automatically switched to the defined contribution plan.

The utility actually was fairly early in the industry in making that switch. But as we looked at future liabilities, it was something that we needed to get better predictability under.

COMMISSIONER FIEGEN: I certainly appreciate that. Because I've been kind of a stickler of the defined benefit versus the defined contribution. And what you have done has certainly protected ratepayers in the future.

Instead of putting the risk in their hands, you have really put it in the employees' hands to manage their own 401(k) so I certainly appreciate that.

The second question that the Black Hills Industrial Interveners brought up was incentive compensation.

And this question actually is going to go to -- is Dave Peters on the line?

Okay. Good.

This question is really going to go to Dave Peters -- Peterson. Thank you.

And stay here, Mr. White, in case I'll ask you a question too.

They brought up the disallowance of the 666 million [sic] dollars out of the 3.7 million dollars incentive pay. My question for Dave Peterson, the Staff witness, is do you feel adequately prepared in your data requests -- and just realize that I think you had over 500 data requests and the Commission does not get to see all of those so I'm sure you asked a lot of questions that we didn't all see.

Do you feel confident that there was the -- $666,000 is the only financial incentive in -- or in the performance paid portion of it? Or did you go through that? Or did you just take the number from Black Hills Power?

MR. PETERSON: Hello.

CHAIRMAN NELSON: Dave Peterson, are you on the line?

MR. PETERSON: Do you hear me?

CHAIRMAN NELSON: Yes. We hear you now.

MR. PETERSON: Yes. Okay. I'm confident that the $666,000 represents the financial portion of incentive pay.

COMMISSIONER FIEGEN: Thank you, Mr. Peterson. So I'm assuming you have information that we weren't all privy to.

MR. PETERSON: Yeah. We had a copy of the complete performance plan and the goals and criteria for reaching those goals, yes.

COMMISSIONER FIEGEN: Thank you.

This is a question that I'm going to try to stay out of confidentiality, Mr. White.

In the Black Hills Industrial Interveners' Brief, post brief to us, they copied part of your performance compensation plan in that brief. And on page 37 in Article 12 it gave a list of performance incentives that you look at. And the list, I think, was A through T.

Is that only for stock, or is that for stock and cash?

MR. WHITE: I believe that under that plan it specifically addresses stock compensation.

COMMISSIONER FIEGEN: Okay. So when I look at that list, they mostly look like financial incentives. So were those the ones that were mostly pulled out?

CHAIRMAN NELSON: And I would just say to the company if at any point you think we're getting into confidential, flag us. I'll let you be the judge of that.

COMMISSIONER FIEGEN: It looks like when I look at the list A through T, except customer satisfaction, I think there was one -- most of them look very financial based or -- so is that --

Are those the incentives pretty much that were pulled out, that $666,000? Based on those type of incentives?

MR. WHITE: Yes. It's based upon financial incentives. Some of these have not historically been considered the financial threshold. Specifically, what's been looked at in the past has been earnings per share.

And so as we went through and categorized these we essentially disallowed those that were primarily shareholder driven in their results.

COMMISSIONER FIEGEN: Okay. Now I have to think about this. If they were shareholder driven, you pulled

1979 WL 461902 (S.D.P.U.C.), 30 P.U.R.4th 26

Re Otter Tail Power Company

(F–3286)

South Dakota Public Utilities Commission

July 20, 1979

Before Klinkel, chairman, and Fischer and Stofferahn, commissioners.

By the COMMISSION:

Procedural History

Otter Tail Power Company (Otter Tail or company) of Fergus Falls, Minnesota, a supplier of retail electric service to customers in South Dakota, under date of October 20, 1978, filed with the public utilities commission new tariff schedules proposing increases in rates for retail electric service in the amount of approximately 22.5 per cent over amounts being collected at the time of filing by the company from ratepayers in South Dakota. The proposed tariff schedules were to become effective on November 20, 1978. The commission, by order of suspension dated November 9, 1978, ***27** suspended the aforementioned tariff schedules for a period of ninety days from the proposed effective date. In addition, and in the same order, the commission required that Otter Tail Power Company deposit the sum of $20,000 with the South Dakota Public Utilities Commission special hearing fund in order to defray the expenses incident to conducting a hearing in the matter. In due course, the amount so required was duly deposited with the commission. Thereafter, under date of January 19, 1979, the commission further suspended the proposed tariff schedules for a period of twelve months to commence on the expiration of the ninetieth day of the commission's previously entered order of suspension. On February 22, 1979, Otter Tail Power Company filed its application for rehearing and reconsideration of portions of the commission's January 19, 1979, order. On March 29, 1979, the commission entered its order denying rehearing and reconsideration. On March 2, 1979, the commission issued its order for notice of procedural schedule establishing dates for the submission of testimony, rebuttal testimony, and ordering that the hearing commence on March 26, 1979. On March 14, 1979, the commission issued its order for notice of consumer input hearing. Under date of March 15, 1979, commission staff counsel filed a motion for postponement of procedural dates and on March 29, 1979, the commission issued its order for and notice of revised procedural schedule setting the hearings in this matter to commence on May 14, 1979. Under date of May 9, 1979, the procedural order was amended by the commission and provided for the commencement of the hearings on May 15, 1979.

Hearings upon the company's application were held commencing May 15, 1979, in Pierre, South Dakota, before the public utilities commission, before Commissioners Klinkel, Fischer, and Stofferahn. The following appearances were entered of record: Peter A. Hoff, of the firm of Arvesen, Donoho, Lundeen, Hoff, Svingen & English appeared as counsel for Otter Tail Power Company; Ms. Frances E. Francis, of the firm of Spiegel & McDiarmid, Washington, D. C., appeared as counsel for commission staff; Ben Stead, assistant attorney general, appeared as counsel for the public utilities commission.

The following witnesses testified on behalf of Otter Tail Power Company: Robert M. Bigwood, president and chief executive officer, Otter Tail Power Company; Dennis R. Emmen, vice president, finance, Otter Tail Power Company; Andrew E. Anderson, controller, Otter Tail Power Company; Warren K. Nye, member, board of directors and senior vice president (retired), Otter Tail Power Company; Robert L. Hahne, CPA, partner, Deloitte, Haskins & Sells, Washington, D. C.; David B. DuPont, vice president, Goldman, Sachs & Company, New York, New York.

The following witnesses testified on behalf of the commission staff: Timothy A. G. Dupic, utility analyst, fixed utilities division, South Dakota Public Utilities Commission, Pierre; Deborah A. Jorgensen, utilities specialist, fixed utilities division, South

Dakota Public Utilities Commission, Pierre; Richard A. Oppedahl, Vermillion; Dr. Caroline M. Smith, senior consultant, J. W. Wilson and Associates, Inc., Washington, D. C.; Robert G. Towers, vice president, Hess and Lim, Inc., Hyattsville, Maryland.

After due deliberation and upon all of the files, records, and testimony adduced as said hearings, this commission hereby finds, concludes, and orders as follows:

***28 I**

Transmission Allocation

(a) Staff Position:

Staff based its recommendation regarding transmission allocation on a method utilizing demand for transmission facilities 34.5 kv and above and mileage for those transmission facilities below 34.5 kv which in staff's view perform the subtransmission or distribution function. Staff witness Towers segregated the transmission facilities performing an integrated transmission function from those facilities that serve a distribution, or more local, function. Staff witness Towers analyzed the company's transmission system and concluded that those transmission facilities 34.5 kv and above performed a bulk power supply function while those facilities 2.4 kv to 24 kv performed a predominantly local function. Further, staff witness Towers testified that Otter Tail, in Federal Power Commission Docket Nos. E–9507 and ER77–5, utilized a functional method for the separation of transmission facilities which totally comports with and endorses that recommended by staff in this proceeding.

Staff witness Towers testified that the bulk power supply function is a part of the overall power supply system. Witness Towers pointed out that the bulk power supply function serves to move power in bulk from one part of company's system to another and to transfer such bulk power supplies to company's distribution system. Further, staff contends that its recommendation is wholly consistent with the terms 'transmission' and 'distribution' as those are defined and commonly accepted in the electric utility industry. As previously noted, staff contends that company's witnesses also define the transmission function in the same manner. Staff contends that company's position fails to accept the commonly defined meaning of transmission facilities and to apply that meaning to its own method of allocating such facilities. Staff notes that transmission facilities principally relied upon by company to deliver power to its ultimate consumption centers are company's 41.6-kv network.

Witness Towers allocated the costs of transmission facilities performing subtransmission or distribution functions by mileage as a reasonable approximation of the costs attributable to each jurisdiction wherein company operates. Witness Towers developed a composite factor to be applied to the transmission facilities with a resulting weight for demand and for mileage. The demand component represents company's investment in transmission lines 34.5 kv and above and thr mileage component represents company's low-voltage transmission lines. Staff's weighting is consistent with its determination of the functions company's transmission facilities perform.

In the two previous Otter Tail rate proceedings before the South Dakota Public Utilities Commission, Otter Tail did not present any witness to explain how Otter Tail's 60–40 formula was developed. In this proceeding, Otter Tail sponsored witness Nye, who had participated in the development of the formula. Mr. Nye testified that the formula was not the result of any mathematical calculation but was solely based on a judgment factor. As a result, the rationale for the development of the 60–40 formula cannot be derived. Staff contends that the vagueness as to the basis for the formula does not in any manner ***29** detract from the fact that the formula was developed under very different circumstances. Staff notes that Mr. Nye testified that Otter Tail's transmission system is an evolving system and changes all the time. Staff contends that the record in this proceeding makes clearer than ever before the validity of commission staff's position as to this transmission allocation issue.

Staff contends that company's assertion that this commission should adopt the 60–40 allocation proposed by company because both North Dakota and Minnesota commissions have done so is without merit. Staff notes that company's allocation method was not subject to cross-examination in either North Dakota or Minnesota, nor was there any direct testimony presented by the staffs of either jurisdiction. Hence, staff contends that company's allocation method was never subject to any meaningful scrutiny.

Finally, staff notes that the Minnesota Public Service Commission has presently asked Otter Tail for a review of all of its allocation factors and it is possible that those allocation factors will be changed in the future. Hence, staff contends that Otter Tail's argument can no longer be seriously advanced in any event.

(b) Company Position:

Otter Tail contends that for the purposes of this rate proceeding it was necessary to allocate portions of Otter Tail's total rate base between the three states served by Otter Tail. With respect to transmission plant, Otter Tail, in determining the per cent to be included in South Dakota rate base, assigned certain weights to customer demands and to mileage of transmission lines in the state on the basis of 60 per cent weight to mileage and 40 per cent weight to demand. Otter Tail maintains that this method of allocation was determined through the management decision-making process in consultation with company engineers and others who contributed meaningful input. Warren K. Nye, retired vice president of Otter Tail Power Company, testified at some length as to the reasoning process utilized by the company to develop this allocation percentage. Indeed, Otter Tail contends that in his capacity as vice president, Mr. Nye had the responsibility to review the factors studied and recommendations by other company engineers to arrive at a fair and equitable method of allocation among the three states. Otter Tail points out that this is the same system of transmission allocation utilized by Otter Tail in Minnesota and North Dakota and that the 60–40 transmission formula has not been disputed by the commissions in the states of either North Dakota or Minnesota.

Otter Tail notes that its transmission investment allocation basis provides for 100 per cent allocation among and between the three states so that no over-allocation or underallocation occurs. Consequently, Otter Tail is able to earn a return on the entire amount of its transmission investment in those three states.

Otter Tail contends that there is no record that Otter Tail's allocation method is either arbitrary, unreasonable, or unfair to the ratepayers in South Dakota.

Otter Tail contends that staff witness Towers arbitrarily divided transmission lines into two categories on the basis of the function performed and utilizes a 91.5 per cent weight to the demand factor and 8.5 per cent weight to the mileage factor. As a result, Otter Tail ***30** has $517,821 of transmission plant excluded from South Dakota rate base. Otter Tail points out that that investment would not be allowed in any other jurisdictional rate base.

Otter Tail further points out that the primary difference between commission staff and Otter Tail is the definition to be applied to Otter Tail's 41.6-kv transmission lines. Staff contends that Otter Tail's 41.6-kv lines serve the purpose of integrating the company's power supply sources and moving power in bulk from one part of Otter Tail's system to another. However, Otter Tail contends that its 41.6-kv lines transfer power from the bulk power supply system to the local distribution areas and that company witness Nye has so proven. Company witness Nye testified that 43 cities in South Dakota are served directly by 41.6-kv lines and that those towns constitute more than 85 per cent of Otter Tail's kilowatt-hour sales in South Dakota. Company witness Nye testified that power flows into South Dakota on all 41.6-kv lines and that it is impossible for power to flow out of South Dakota on those 41.6-kv lines. Otter Tail contends that Exh C–17 reveals that Otter Tail's 41.6-kv facilities in South Dakota do not serve the function of integrating any other portion of Otter Tail's power supply system, nor do they enhance system-wide reliability. Rather, Otter Tail contends that the exhibit shows that the 41.6-kv system in South Dakota is fed from a high-voltage network but not used for serving other portions of the system. Otter Tail concludes that staff witness Towers has erred in not assigning Otter Tail's 41.6-kv system to the lower voltage classification. Otter Tail points out that the effect of including Otter Tail's 41.6-kv lines in the lower voltage category arrives at essentially the same 60–40 weighting given to mileage and demand that Otter Tail originally assigned.

Otter Tail claims that the FERC wheeling rate case does not lend any credence to staff witness Tower's recommendation. Otter Tail points out that the FERC case is for establishing wheeling rates and that Otter Tail's allocation of 34.5-kv and above lines solely on the basis of demand for its wheeling customers is not inconsistent with its 60–40 allocation for retail customers. Otter Tail argues that since its wheeling customers are located throughout its system, and not only in one state jurisdiction, it is proper to look at the entire system as one unit. Further, Otter Tail points out that it is proper in a wheeling case to allocate on the basis of demand since the entire system may be used to render service. Hence, the purpose for making allocations in the state jurisdictions is an entirely different matter than it is in the FERC proceedings.

Commission Findings

The commission finds that staff's recommendations regarding transmission allocation are proper and should be adopted in this proceeding for the reasons set forth in (a) above. The commission finds that transmission allocations should be based upon a method utilizing demand and mileage components determined by the function the particular transmission facilities perform. The commission finds, upon review of the evidentiary record, that transmission facilities which perform an integrated transmission function are facilities of 34.5 kv and above. The commission finds that such facilities perform a bulk power supply function and are properly allocated on the basis of demand. The commission finds that Otter ***31** Tail's transmission facilities of 2.4 kv to 24 kv perform a predominantly local function and serve as distribution facilities. As a result, the commission finds that they are properly allocated on the basis of mileage.

The commission further finds that Otter Tail fully concurs in this approach for Federal Energy Regulatory Commission filings and that Otter Tail has made the same analysis and has utilized the same method that the commission has determined to be proper herein. The commission finds that, while the Federal Energy Regulatory Commission proceedings deal with wheeling rather than retail rates, the analysis and considerations for determining which transmission facilities perform bulk power supply functions over local distribution functions are identical. The commission finds that Otter Tail's attempt to distinguish the two proceedings is without merit.

Finally, the commission finds that Otter Tail's witness Nye established the arbitrary and unfounded nature of the 60–40 formula originally utilized by Otter Tail in the early 1950's. Company witness Nye recognized that Otter Tail's transmission system changes substantially over time. However, witness Nye acknowledged that Otter Tail did not change its 60–40 formula accordingly to recognize those changes in the transmission system. The commission finds that, consequently, staff's recommendation is the only recommendation which is based upon recognition of the functions that Otter Tail's transmission system performs and that staff has properly allocated that system.

II

Short-term Construction Work in Progress

(a) Staff Position:

Otter Tail originally claimed $334,094 for short-term construction work in progress. Commission staff recommended that $139,078 of that amount be allowed since the plant it represented was actually in service during the test year but the CWIP account had not been changed because of bookkeeping lags. Staff recommended disallowance of the remainder because the items it reflects do not represent plant in service that is used and useful. Staff recommends that Otter Tail should capitalize AFUDC on those items in order to be compensated for the carrying charges associated with the construction. However, staff opposes inclusion of CWIP in rate base until it is actually placed into service and used and useful in rendering electric service to customers.

Staff contends that to allow CWIP would violate the matching principle underlying the use of a test period and, thus, staff's disallowance should be adopted by the commission. Additionally, staff points out that this is the only proper manner for treatment of such CWIP since that CWIP is not used and useful to the ratepayer.

(b) Company Position:

Otter Tail contends that CWIP should be included in rate base. Otter Tail points out that it books AFUDC on new construction projects which are more than thirty days in duration and involve more than $10,000 of expenditure. Otter Tail contends that the amounts which are not of 30-day duration and do not involve $10,000 of expenditure relate to jobs which are completed to keep the existing system in operating condition and ***32** that are used and useful by existing customers. Otter Tail contends that this short-term CWIP should be included in rate base and that Otter Tail should not have to book AFUDC on these projects.

Otter Tail further contends that both Minnesota and North Dakota regulatory commissions allow such short-term CWIP in Otter Tail's rate base.

Commission Findings

The commission finds that staff's recommendations should be adopted for the reasons set forth in (a) above. The commission finds that short-term construction work in progress should be eliminated from Otter Tail's rate base. The commission finds that such short-term CWIP is not used and useful in providing electric service to Otter Tail's present customers. The commission finds that Otter Tail is fully entitled to claim AFUDC on such short-term CWIP and that this is the only proper method for treatment of that CWIP.

The commission further finds that to allow CWIP in rate base would violate the matching principle which should not and cannot be permitted. Since Otter Tail can be fully compensated by capitalizing AFUDC on such CWIP, the commission finds that that will be the method Otter Tail shall utilize in recovering the carrying charges associated with the construction.

III

Cash Working Capital Allowance

(a) Staff Position:

Otter Tail in its application utilized a modified 'one-eighth' or 'FPC' rule to determine its working cash allowance. Commission staff determined Otter Tail Power Company's cash working capital requirement through the utilization of a lead-lag study. Staff witness Dupic measured the cash flows of Otter Tail for its current operations. Staff witness Dupic considered Otter Tail's cash transactions; i.e., its receipts of revenues and its disbursements of operating and maintenance expenses, federal income taxes, state property taxes, interest on long-term debt, and preferred stock dividends.

Commission staff contends that the 45-day formula does not establish whether working capital is supplied by investors, vendors, or customers. Staff points out that since the only justification for including a positive working cash allowance in rate base is to provide Otter Tail investors a return upon that portion of their invested capital which is necessary in Otter Tail's operations and upon which they would not otherwise receive a return, Otter Tail's proposal is not acceptable. Staff contends that staff witness Dupic's lead-lag study is far superior for determining the proper level of Otter Tail's working capital.

Staff witness Dupic's lead-lag study measures the time interval between payment by Otter Tail of its operating expenses and the receipt of payment from the customers for the service supplied. Staff witness Dupic segregated Otter Tail's test-year operation and maintenance expenses into measurable components, utilizing the major categories of fuel cost, purchased power, labor, and other operation and maintenance expenses. Having made this categorization, staff witness Dupic computed the weighted average lead time between when the goods and services were used and when these were paid for by Otter Tail. Staff witness ***33** Dupic then analyzed the time in days between the provision of electricity to customers and the day that Otter Tail received payment for the services. Staff witness Dupic then made a comparison between the expense lead and the revenue lag which resulted in a day's cash required by Otter Tail for its category of operations and maintenance expenses.

For purposes of calculating the number of days lag in the receipt of revenue from the customers, commission staff witness Dupic used data provided by Otter Tail. The data included the actual number of billing cycles per month, the actual interval between meter readings and the billing date, and the average number of days between billing and payment for the state of South Dakota. Staff witness Dupic determined that when these considerations were added to the fifteen days representing the midpoint of the service month, an average lag of thirty-three days existed. Staff witness Dupic revised this number to thirty-five days to allow for the collection period to be weighted by the revenue amounts per class. Staff witness Dupic also recognized in the working capital allowance the effects of transactions whereby Otter Tail collects funds from its customers far in advance of the utility's requirement to make the associated disbursements. Those disbursements are for state property taxes, federal income taxes, interest on long-term debt, and preferred stock dividends. Staff concluded that the cash working capital allowance for Otter Tail should be a negative $277,413 since the customers of Otter Tail are providing working capital to Otter Tail in excess of its gross requirements and that this customer-contributed capital which is available to the company for any purpose must be, accordingly, deducted from rate base.

(b) Company Position:

Otter Tail computed its cash working capital claim by using the FPC formula with a significant adjustment thereto. Otter Tail reduced the amount derived from the formula by the low point of accrued real estate taxes for the test year. Otter Tail chose to make the low point adjustment since that represents the only amount Otter Tail claims is consistently available to provide cash.

Otter Tail feels its recommendation should be adopted. Otter Tail contends that commission staff's lead-lag study is deficient and should not be relied upon. Otter Tail contends that staff's lead-lag study is not a proper lead-lag study. Otter Tail contends that commission staff did not consider a number of areas which affect rate base and revenue requirements. Otter Tail contends that commission staff did not recognize and consider the delay in recovering fuel adjustment revenues, the delay in recovering depreciation and deferred taxes which are used to reduce rate base immediately, and minimum cash deposits maintained at various banks for services provided. Company witness Hahne testified that staff's inclusion of interest on long-term debt and preferred stock dividends for reduction of cash working capital requirements was not proper because, in Mr. Hahne's view, interest and dividends are paid from investor funds and are normally not to be considered in a lead-lag study.

Otter Tail contends that the staff acknowledges that witness Dupic's lead-lag study was not totally comprehensive. Otter Tail points out that staff witness Dupic testified that there could be a ***34** more extensive lead-lag study done and that a different approach to conducting a lead-lag study might take up to four months to perform. Otter Tail further argues that the data provided to commission staff was not appropriate for utilization in the lead-lag study because customers making partial payments on billings made during the year or customers who paid for two billings in one payment may not be included within that data.

Commission Findings

The commission finds that staff's recommendation should be adopted for the reasons set forth in (a) above. The commission finds that where a proper lead-lag study has been performed, it should be utilized in lieu of the formula approach. The commission finds that staff witness Dupic's lead-lag study is such a proper study.

The commission finds that staff witness Dupic's study was sufficiently comprehensive and exhaustive to be utilized in this proceeding. The commission further finds that the data utilized by staff witness Dupic and supplied by Otter Tail provided a proper data base for staff witness Dupic's study. The commission finds Otter Tail's contentions to the contrary to be without merit.

Finally, the commission finds that funds contributed by the ratepayer in advance of the payment date by Otter Tail should be properly offset against Otter Tail's cash working capital requirements, since Otter Tail should not be allowed to earn a return on those retepayer-contributed funds.

IV

Advertising and Miscellaneous General Expenses

(a) Staff Position:

Commission staff recommends that the total advertising costs recorded in Account 913 be disallowed from Otter Tail's cost of service because the expenses incurred are not essential for the provision of adequate, safe, and reliable service.

Commission staff witness Jorgensen testified that the charges to informational advertising were primarily advertisements run on a cooperative basis with local electric suppliers and that the community affairs advertising consisted primarily of radio broadcasts of local school events. Ms. Jorgensen testified that these expenditures are not necessary in providing adequate, safe, and reliable electric service and, accordingly, should be disallowed.

Staff witness Jorgensen also testified that certain miscellaneous general expenses should likewise be disallowed. Ms. Jorgensen utilized three criteria in evaluating whether allowance should be made. First, she considered whether these expenses were essential for the rendition of adequate, safe, and reliable electric service. Secondly, whether the customer should be forced to support organizations performing lobbying activities, since these lobbying activities are primarily motivated by concerns of Otter Tail Power Company's shareholders and management, and that those activities may be more of a benefit to the stockholder than to the consumer. Finally, she considered whether South Dakota consumers should pay for donations to out-of-state organization when the benefits to South Dakota consumers are doubtful. Ms. Jorgensen concluded that only those expenses which were essential for the rendition of adequate, safe, and ***35** reliable electric service should be allowed and that no lobbying activities or donations should be paid for by ratepayers.

Commission staff witness Jorgensen testified that in reviewing Otter Tail's list of organizations and the dues associated therewith, she found that many of the organizations performed lobbying activities that are directed to satisfying shareholder and management concerns. Likewise, in reviewing samples of national and local informational advertising, Ms. Jorgensen found that that category consists primarily of rate justification advertising which attempts to build support for rate increases or the utility's filed rates. She found that this type of advertising is unnecessary for the rendition of adequate, safe, and reliable electric service and therefore cannot properly be charged to customers in their rates. The remaining items disallowed by Ms. Jorgensen related to costs of press meetings, memberships, and open houses. Ms. Jorgensen testified that these costs do not contribute to rendering adequate, safe, and reliable service.

To the extent that Otter Tail's advertising expenses met the commission's criteria set forth in the commission's rules, staff included those costs.

Staff contends that Otter Tail did not make clear distinctions between institutional, in contrast to informational or conservation-related, advertising. Additionally, staff contends that Otter Tail felt that if customers were informed in the advertising that those customers were paying for same, customers would have a very negative reaction. Commission staff recognizes that Otter Tail can advertise if it so desires, but that the ratepayers should not pay for advertising that does not contribute to Otter Tail's rendering adequate, safe, and reliable service.

(b) Company Position:

Otter Tail contends that its dues to Edison Electric Institute and the North Dakota Lignite Council, as well as the national and local informational advertising, its membership dues in American Fisheries Society, and Otter Tail's share in the cost of 'Energy Today and Tomorrow' should be allowed. Otter Tail contends that lobbying expenses are not necessarily improper to pass along to customers and that the record does not establish that there is no benefit to ratepayers resulting from such lobbying. Otter Tail contends that its dues to Edison Electric Institute should be paid for by retepayers because, in addition to lobbying, Edison Electric Institute supplies industry information, technical assistance, educational training, and other beneficial services to Otter Tail. Likewise, Otter Tail contends that its dues to the North Dakota Lignite Council are beneficial because of that council's research and development programs which directly benefit Otter Tail's ratepayers.

Otter Tail also disputes staff's disallowance of advertising expenses and disagrees that they are primarily and mainly directed toward rate justification. Otter Tail claims that the samples provided neither attempt to promote public acceptance of Otter Tail's filed rates nor encourage opposition to decisions by regulatory entities. Rather, Otter Tail contends that the advertisements set forth the reasons why customers should conserve energy. Otter Tail contends that its advertising is within the allowable expenses set forth in the commission's rules.

Otter Tail also objects to disallowance of its dues to American Fisheries Society and its share in the cost of producing a ***36** program entitled 'Energy Today and Tomorrow.' Otter Tail contends that there is no record evidence which allows for such exclusion and that the expenses do contribute to rendering adequate, safe, and reliable electric service. Otter Tail contends that these expenses are clearly beneficial to the consumer in that the American Fisheries Society is very much environmentally oriented and Otter Tail attempts to place its facilities in locations where minimal environmental effects will occur. As for the 'Energy Today and Tomorrow' program, Otter Tail contends that it is an informational program sponsored by a number of utilities for circulation to high school students in order to provide information related to energy, energy supplies, conservation, and energy production.

Commission Findings

The commission finds that staff's recommendations should be adopted for the reasons set forth in (a) above. The commission finds that staff's recommended disallowances are totally proper. The commission finds that Otter Tail's disallowed advertising does not perform an essential and necessary function and that Otter Tail's ratepayers should not be required to pay for any expenses in their rates which do not contribute to the rendition of adequate, safe, and reliable electric service. The commission finds that, while Otter Tail may undertake whatever advertisement promotional endeavors it desires, Otter Tail's ratepayers are not to be the ones to necessarily pay for same. The commission finds that Otter Tail's expenses related to miscellaneous general expenses and proposed to be disallowed by staff are also not essential or necessary in the rendition of reliable, safe, and adequate electric service. The commission finds that lobbying activities of various organizations to which Otter Tail belongs and pays dues are of benefit to the shareholder and Otter Tail's management, not its customers. As a result, such expenses will not be allowed to be charged to ratepayers because they are not necessary or essential to the rendition of adequate, safe, and reliable service.

Finally, the commission finds that staff's disallowance of out-of-state organization expenses is also proper. The commission finds that South Dakota consumers do not benefit from the expenses related to those organizations in that those organizations do not in any manner contribute to the rendition of adequate, safe, and reliable electric service. As a result, ratepayers should not be required to pay for those expenses in their rates.

V

Tax Normalization

(a) Staff Position:

Otter Tail proposed to fully normalize taxes in this proceeding. Staff witness Towers testified that the practical effect of normalization would be to increase electric rates in South Dakota immediately and significantly. Further, staff witness Towers testified that continuous application of Otter Tail's recommendation is almost certain to result in rates in the future which would be higher than the rates necessary if staff's 'flow-through' recommendation were consistently followed. Hence, staff recommends that 'flow-through' treatment is the proper treatment.

Under normalization, staff contends that consistently higher electric rates are likely to result from the combined effects of the recurring nature of construction ***37** overheads and growth in plant expenditures. Staff points out that Otter Tail is continously engaged in a construction program and that construction overheads and the associated tax savings that Otter Tail would normalize recur year after year. Staff points out that if would take approximately thirty years before the 'phantom' income tax expense would be offset by an equivalent credit for taxes deferred in prior years.

Staff witness Towers testified that realistically a utility's total plant rarely decreases over time and seldom remains stable. Rather, staff witness Towers testified that the utility's plant grows and that the consequence of normalizing the income tax effects of construction overheads, and the inevitable growth in plant expenditures and construction overheads, would require ratepayers over time to compensate the utility for tax expenses which, for all practical purposes, are never paid. Staff witness Towers points out that this occurs because the generally increasing plant expenditures will generate new construction-related tax benefits generally equal to or greater than the combined effect of the credits associated with prior years' normalization. Under normalization, staff contends a utility will collect from its ratepayers increasingly greater amounts in compensation for tax expenses than it returns to the ratepayers in recognition of previous tax benefits. The continuing deferral feature of normalization, in effect, forces ratepayers to make capital contributions to the utility. It is staff's view that a utility's stockholders, not its customers, are responsible for providing the capital required to render utility service and that the customers are obliged to pay for the service that they receive, including a return on that capital.

Staff points out that there is no question that Otter Tail's construction expenditures will increase in the foreseeable future and that normalization is totally improper to utilize. Staff contends that it is improper to defer the recognition of current tax savings in order to use those tax savings to offset increased tax liabilities that might arise in the future because predicting the company's future income tax liability is highly speculative. In addition to the speculative nature of normalization, it is also a fact that income taxes currently payable are the only income taxes for which Otter Tail has a real liability and that that liability is the only income tax expense that can be measured reliably in staff's view. Finally, staff points out that a desirable matching is achieved when the income tax allowance reflected in Otter Tail's rates matches the income tax that the company is currently paying and that normalization destroys that necessary matching.

(b) Company Position:

Otter Tail contends that normalization is proper because the tax laws provide that certain construction costs can be deducted for tax purposes as current expense. The effect of this reduction is to reduce the utility's tax liability. Otter Tail contends that these deductions occur as a result of construction costs and, therefore, the reason for the tax savings are directly related to Otter Tail's construction program. Otter Tail contends that since Otter Tail's present ratepayers do not pay for the construction costs until the project is completed, those ratepayers should not gain the benefit of the tax savings arising out of that construction activity. By utilizing full tax normalization, Otter Tail contends that it merely passes on these benefits or savings to the future ***38** ratepayers that are going to be paying for the plants presently under construction. Those tax benefits are then spread out over the life of the plants so that future ratepayers who pay for that plant also get the tax benefits arising during the construction of that plant. Otter Tail contends that there is a net savings to the ratepayers as a result of full normalization.

Otter Tail disputes staff's proposed 'flow-through' recommendation. Otter Tail contends that it is an unfair burden placed on future ratepayers because of such tax treatment. Otter Tail contends that tax normalization is the only alternative that is fair to all generations of consumers and that normalization assures that energy is priced at its true economic cost. Otter Tail contends that when energy is so priced, consumers receive an accurate picture of the real cost of energy and are better able to make decisions on how wisely or unwisely to use that energy.

Otter Tail also contends that the Federal Power Commission's position is in accord with Otter Tail and that Congress looks with favor on income tax normalization. Otter Tail notes that the Tax Reform Act of 1969 expresses congressional endorsement of the normalization approach and that the endorsement was reaffirmed in the Revenue Act of 1971. Otter Tail also notes that the Department of Energy and the Treasury Department are on record as favoring full normalization and that both North Dakota and Minnesota regulatory bodies allow full normalization of income taxes.

Commission Findings

The commission finds that staff's recommendation regarding 'flow-through' treatment should be adopted for the reasons set forth in (a) above. The commission finds that actual taxes paid constitute the basis for determining Otter Tail's tax allowance, unless otherwise precluded by federal law. The commission finds that Otter Tail has not shown that tax benefits associated with construction will generate a mere tax deferral rather than an effective tax savings which should be passed on to its ratepayers. The commission further finds that normalization of all tax benefits results in higher taxes, over time, to the detriment of Otter Tail's ratepayers. The commission further finds that tax normalization is not essential to assure equitable treatment of present and future ratepayers, but, indeed, will probably insure inequitable treatment of both sets of ratepayers.

The commission finds that the continuing deferral nature of normalization forces ratepayers to make capital contributions to the utility, which is improper. The commission finds that Otter Tail's construction expenditures will increase in the foreseeable future and that it will be totally improper to utilize normalization. The commission finds that failure to recognize current tax savings in order to use those savings to offset increased tax liabilities which might arise in the future is an exercise in pure speculation and should not be allowed. Finally, the commission finds that the proper matching is achieved when the income tax allowance reflected in Otter Tail's rates matches the income tax that Otter Tail is currently paying. The commission finds this proper and that normalization would destroy that matching.

VI

Income Tax Expense Allocation

***39 (a) Staff Position:**

Staff contends that an allocation method must be adopted after a consideration of all of the facts and circumstances. Staff contends that the method which allocates Otter Tail costs in a manner which recognizes the relative responsibility of jurisdictions for which the cost is incurred is the proper method. Staff points out that the cost responsibility concept is so widely accepted that its application is often automatic. Staff takes the position that the proper allocation method for income taxes, transmission plant, or any other cost, is the method which can be demonstrated to distribute the costs among the several jurisdictional classes in accordance with their cost responsibility. Staff contends that Otter Tail's income tax expense allocation fails this test.

Staff's method is cost-based, logical, and demonstrably equitable in staff's view. Staff notes that the fact that the North Dakota and Minnesota commissions may have accepted Otter Tail's incorrect allocation method in their rate determinations does not require South Dakota to make the same mistake. Staff points out that if Otter Tail determines that the combination of the allocation methods used by various jurisdictions results in the recovery of more or less than its costs, Otter Tail's recourse is to propose methods of allocation based upon cost responsibility for those jurisdictions' consideration.

Staff notes that Otter Tail did not contend that its income tax allocation method has been used by the Federal Energy Regulatory Commission. Indeed, the Federal Energy Regulatory Commission routinely employs the method of allocation of income tax expense utilized by staff in this proceeding.

Staff maintains that Otter Tail's method of allocating per books income tax expense on the basis of pretax operating income in each jurisdiction is blatantly wrong because it does not recognize cost responsibility and, moreover, it is inconsistent with its method of allocating other components of income tax expense. Additionally, staff contends that Otter Tail has absolutely no record support to justify its method. Staff points out that Otter Tail's own witness testified that Otter Tail's method of allocation makes the income tax expense allocated to South Dakota customers a function of the electric rates that it charges customers in Minnesota and North Dakota. Otter Tail's witness testified that Otter Tail's allocation method resulted in an increase in South Dakota income tax expense when electric rates were increased in Minnesota. Staff contends that this is absolutely wrong and that the method proposed by Otter Tail is without any merit.

Further, staff contends that the method proposed by Otter Tail is inconsistent with Otter Tail's method of allocating other elements of the income tax allowance. Staff points out that Otter Tail is a proponent of income tax normalization. Staff contends that while staff opposes tax normalization, staff's cost of service recognizes deferred taxes with respect to certain tax deductions wherever it is necessary to do so under the applicable federal statutes. Staff points out that under Otter Tail's method, the taxes and tax savings involved are allocated to South Dakota on the basis of pretax book income. However, staff points out that when it comes to normalizing these tax savings—i.e., establishing a provision for deferred income taxes to reverse the effects of the actual tax savings—Otter Tail ***40** proposes to allocate the total company provision for deferred income taxes on the basis of plant investment. Staff feels it is inconceivable that Otter Tail can endorse and indeed suggest that the commission must adopt the method of allocating income tax expense which charges South Dakota customers a higher amount of deferred income tax expense for each unit of tax savings to be normalized.

Staff's approach is to determine a taxable income associated with South Dakota's operations by allocating each of the income tax deductions to South Dakota on a basis which recognizes the individual state's relative responsibility for the deduction. As a result, the additional depreciation expense deductible on the company's income tax return is allocated among the three states on the basis of plant investment. Similarly, the income tax deduction for interest expense is allocated among the three states on the basis of net investment.

Staff also argues that Otter Tail's claim for an allowance for Internal Revenue Service audits is totally unacceptable. Staff encourages South Dakota utilities to be aggressive in their income tax policies by seeking the maximum benefits available under the prevailing law. If in carrying out these policies, the utility's rates are based upon the assumption that it will succeed in reducing income taxes by a questionable deduction and the deduction ultimately is disallowed, the utility should in a subsequent case present those facts to the commission for review and consideration and ultimate determination of whether the amounts can be recovered prospectively. Staff finds Otter Tail's suggestion in this case that the commission should add a little something to income taxes on the theory that the Internal Revenue Service undoubtedly will disallow some deductions is conjectural, speculative, and could be counterproductive in Otter Tail's negotiations with the Internal Revenue Service.

(b) Company Position:

Otter Tail allocated actual income tax expense in South Dakota based on the percentage of South Dakota income before income taxes to total company income before income taxes. Otter Tail utilizes this method both for current tax expense and investment tax expense. Otter Tail claims that its method properly allocates the actual tax expense recorded on the books for the test year to the various state jurisdictions. Otter Tail points out that its method of allocating income taxes has been utilized in rate cases in both North Dakota and Minnesota and has been adopted and approved in both said jurisdictions.

Otter Tail contends that its method of income tax allocation deals practically with the realities of the income tax law and procedure. Otter Tail maintanins that its allocation method recognizes that investment tax credit expense changes with income tax expense and that its method properly deals with all federal income tax return, Schedule M, adjustments and considers all Internal Revenue Service audit adjustments.

Otter Tail contends that staff's method of allocating income tax expense to the three jurisdiction is an attempt to treat Otter Tail as if it were a separate business operating in each jurisdiction. Otter Tail maintains that staff witness Towers approach does not fairly treat the company in several respects, including failure to recognize that all of the allowable income tax return, Schedule ***41** M, adjustments available to Otter Tail should be recoverable by Otter Tail. Otter Tail points out six such adjustments.

Otter Tail also contends that an allowance should be made for Internal Revenue Service audits in order to recognize the realities Otter Tail faces. Otter Tail maintains that it does take an aggressive approach in its tax policies and that as a result, audit adjustments are inevitable. Finally, Otter Tail contends that adoption of staff's recommendation would underallocate Otter Tail's total system-wide income tax and that that should not be permitted.

Commission Findings

The commission finds that staff's recommendation regarding income tax expense allocation should be adopted for the reasons set forth in (a) above. The commission finds that commission staff's method is cost-based, logical, and is demonstrably equitable. The commission finds that staff's approach to determine a taxable income associated with South Dakota's operations by allocating each of the income tax deductions to South Dakota on a basis which recognizes the individual state's relative responsibility for the deduction is the only proper manner to allocate income tax expense. The commission finds that, consequently, the additional depreciation expense deductible on the company's income tax return is allocated among the three states on the basis of plant investment and that the income tax deduction for interest expense is, similarly, allocated among the three states on the basis of plant investment.

The commission finds the Otter Tail's method is improper. The commission finds that Otter Tail's method of allocating per books income tax expense on the basis of pretax operating income in each jurisdiction is totally without merit because it does not recognize cost responsibility. For South Dakota ratepayers to be required to pay rates based on a method of allocation which makes the income tax expense a function of the electric rates that Otter Tail charges customers in Minnesota and North Dakota is without any support or justification and will not be permitted.

The commission further finds that Otter Tail's method of allocation is inconsistent with its method of allocating other components of income tax expense.

Finally, the commission finds that Otter Tail's claim for an allowance for Internal Revenue Service audits is improper and should not be allowed. The commission finds that utility companies operating in South Dakota must be aggressive in their income tax policies by seeking the maximum benefits available under the prevailing law. Ratepayers should receive nothing less than such aggressive action by utilities. The commission finds that should a deduction ultimately be disallowed, Otter Tail has the recourse to present its claim for prospective treatment thereof to the commission in future filings for commission consideration.

VII

Investment Tax Credit Expense

(a) Staff Position:

Commission staff recognizes that the amortization of investment credits reflected on Otter Tail's books is an amount which is determined for each calendar year. In this proceeding, Otter ***42** Tail selected a test year ending May 31st for rate-making purposes. As a result, the investment credit amortization on its books for the test year represents a portion of two years' amortizations. Staff contends that although the test year is the 12-month period ending May 31, 1978, the investment tax credit amortization claimed by Otter Tail is affected by the methods used to establish an investment tax credit amortization over a two-year period, from January 1, 1977, to December 31, 1978. It is not an amount determined precisely as applicable to the test year.

Staff's method is based upon the investment tax credits generated through the end of the calendar year 1977. Using the December 31, 1977, balance as a proxy for the average balance of investment credits for the twelve months ended May 31, 1978, staff witness Towers calculated an annual amortization associated with test-year operations. Staff contends that meaningful balances are not likely to be available since the investment tax credit determination is made on an annual, calendar year basis.

Further, staff points out that Otter Tail amortizes during the calendar year the balance of investment tax credits generated through the end of the prior calendar year. As a result, Otter Tail does not amortize in February investment tax credits to which it is entitled based on construction expenditures in January of the current year. Staff notes that the amortization of investment credits generated by January construction are not reflected on Otter Tail's books until January of the following calendar year. As a result, staff contends there is no justification for such delay and if matching of costs and operations is to be achieved, it is necessary to calculate a pro forma amortization of tax credits in the manner proposed by commission staff.

(b) Company Position:

Otter Tail determined investment tax credit expense by adding seven-twelfths of the investment tax credit amortization for calendar 1977 to five-twelfths of the amortization for calendar year 1978. Otter Tail contends that this method tracks with the test year in these proceedings.

Otter Tail contends that staff witness Towers is in error in his method because his method includes seven months of post-test-year investment tax credit amortization. Otter Tail contends that if staff's recommendation is adopted, Otter Tail should also be allowed to include in these proceedings seven months of higher post-test-year investment tax credit expense.

Commission Findings

The commission finds that staff's method for reflecting investment tax credit expense should be adopted for the reasons set forth in (a) avove. The commission finds that the investment tax credit amortization claimed by Otter Tail is affected by the methods used to establish an investment tax credit amortization over a two-year period from January 1, 1977, to December 31, 1978. The commission finds that staff's method is based upon the investment tax credits generated through the end of the calendar year 1977. The commission finds that staff's method utilized the year-end 1977 balance as a proxy for the average balance of investment credit for the twelve months ended May 31, 1978, in order to calculate an annual amortization associated with test-year operations. The commission finds that Otter Tail ***43** amortizes during the calendar year the balance of investment tax credits generated through the end of the prior calendar year and not at any other time. Commission finds that, consequently, Otter Tail does not amortize in February investment tax credits to which it is entitled based on construction expenditures in January of the current year. Those January generated credits are not reflected on Otter Tail's books until January of the following calendar year. The commission finds that staff's method is proper and is the only accurate reflection of annual amortization associated with test-year operations. The commission finds that Otter Tail's method is not consistent with Otter Tail's amortization practices. The commission finds that Otter Tail's method does not accurately or appropriately reflect the proper amortization associated with the test-year operations in this proceeding. As a result, the commission finds that Otter Tail's method should not be adopted and that Otter Tail's contentions regarding staff's method are without merit.

VII

Annualized UMVPP Rate Increase

(a) Staff Position:

Staff contends that for rate-making purposes both Otter Tail and commission staff treat sales for resale as a credit to Otter Tail's costs of serving retail customers. Staff witness Towers repriced Otter Tail's participation power and peaking power demand charge revenues to reflect the UMVPP rate changes effective May 1, 1978. While staff notes that the UMVPP rates were increased again on May 1, 1979, staff feels that reflection of an additional revenue credit is not proper because the changes occurred too far beyond the end of the test period. However, staff contends that its revenue credit based on the May 1, 1978, rate change is totally appropriate and should be adopted by the commission. It is staff's position that consistency and fairness require that known increases in revenues, as well as costs, should be recognized in rate determinations.

Staff points out that Otter Tail has in its test-year cost of service costs associated with a certain quantity of generating capacity. That capacity was used to satisfy a certain mix of internal and external requirements during the test year and will be used to satisfy a different mix in subsequent years. Staff notes that in each case, however, it is proper to assume that all the capacity will be used. Staff contends that it would be simply wrong to remove from the test period profitable transactions which will be displaced by other equally or even greater profitable transactions in the following years when the rates in this proceeding will be in effect.

(b) Company Position:

Otter Tail contends that the vast majority of the power Otter Tail sold in the test period was actually sold under the old rates; i.e., fixed rate contracts that Otter Tail negotiated well in advance of the test year and that Otter Tail was unable to modify or change. Otter Tail points out that it did not receive increased revenues during the test year, nor is there assurance that it will receive revenues corresponding with staff's proposed adjustment prospectively.

Otter Tail contends that staff's adjustment is not a known change, but rater is speculative. Otter Tail contends that it will not have anywhere near the capacity ***44** to sell in the future that it had during the test period and that, as a result, staff's adjustment contemplates neither actual test-year experience nor reasonably anticipated future events.

Otter Tail further contends that it is dangerous to permit test-year numbers to be adjusted on a selective basis. Otter Tail argues that when certain potential future changes to the rate base or the operating statement are allowed to be considered in modifying the test year on an arbitrary basis, the entire test year is unfairly distorted. Otter Tail contends that the concept of the test year would be derogated.

Commission Findings

The commission finds that staff's recommendations should be adopted for the reasons set forth in (a) above. The commission finds that the repricing by staff witness Towers of Otter Tail's participation power and peaking power demand charge revenues in accordance with the UMVPP rate change, which became effective May 1, 1978, is totally proper. The commission also finds that the additional revenue credit related to the UMVPP rate change increase effective on May 1, 1979, should not be made because that change occurred too far beyond the end of the test period. The commission finds that to fail to reprice Otter Tail's participation power and peaking power demand charge revenues would destroy the necessary matching and would be totally unfair to ratepayers by not recognizing a known change in revenues. Otter Tail's contentions to the contrary are without merit. The commission finds that staff's adjustment is not speculative in any sense, but rather reflects a known change in revenues. Commission finds that Otter Tail will utilize its capacity to satisfy a certain mix of internal and external requirements in the future, which may be somewhat different from that existent during the test year, but that all the capacity will be utilized. Therefore, the repricing adjustment proposed by staff is totally proper and is a known change that must be recognized.

IX

Inflation Adjustment

(a) Staff Position:

Staff disputes Otter Tail's adjustment to its operation and maintenance expenses to reflect the general 'inflation adjustment.' Otter Tail's adjustment is calculated by applying one-half year's increase in the average per cent change of the consumer price index and the producer price index between May, 1977, and May, 1978, to those operation and maintenance expenses that are not otherwise adjusted.

Staff does not accept Otter Tail's inflation adjustment. Staff attempted to identify specific increases or decreases in costs rather than utilizing an arbitrary basis for adjusting operation and maintenance expenses.

The information supplied by Otter Tail to staff was utilized to develop unit revenues and unit costs experienced at the end of the test period. From that data, staff developed a list of adjustments it believed were significant and adequately supported to include as known changes in Otter Tail's cost of service. Commission staff's adjustment included increases in charter air transportation costs, increase in the cost of chemicals for boiler feed water treatment, increases in contract tree trimming costs, increases in ***45** property and liability insurance rates, and increases in the cost of Manitoba hydro power. In addition, staff adopted the adjustments made by Otter Tail to reflect increased wages and salary levels and increased postage cost. Staff made these adjustments because they were known changes.

Finally, staff contends that Otter Tail's adjustment is totally speculative and has no basis in that it is arbitrary and has nothing to do with Otter Tail's operations.

(b) Company Position:

Otter Tail proposes adjusting certain operating expenses to reflect what it contends are the effects of inflation that occur during the test period. Otter Tail contends that its approach is conservative in that the actual rate of inflation that occurred during the test period was substantially higher than the rate Otter Tail proposed in its adjustment. Otter Tail points out that its proposed adjustment does not consider inflation occurring after the expiration of the test year.

Otter Tail contends that staff's adjustment does not acknowledge cost increases occurring in other areas and that staff merely refuses to analyze those areas in determining an inflation adjustment. Further, Otter Tail contends that staff's analysis establishes that Otter Tail's approach is indeed conservative. Otter Tail contends that had staff analyzed all the different transactions and determined the impact of inflation upon them, it is obvious that an inflation adjustment substantially greater than the one requested by Otter Tail in these proceedings would have to be made. Further, Otter Tail disputes staff's analysis because of its selectivity and claims that staff has ignored substantial areas in which inflation is known to have occurred. Otter Tail contends that its adjustment is the proper one for rate-making purposes and that it is conservative and effectively understates the impact of inflation.

Commission Findings

The commission finds that staff's recommendation regarding Otter Tail's proposed inflation adjustment should be adopted for the reasons set forth in (a) above. The commission finds that staff's adjustment identifies specific increases or decreases in costs rather than utilizing an arbitrary basis for adjusting operation and maintenance expenses. The commission finds that commission staff's adjustment reflects unit revenues and unit costs experienced at the end of the test period. The commission finds the commission staff's adjustment to reflect increases in significant and adequately supported expenses and to include those expenses as known changes is entirely proper.

The commission finds that Otter Tail's proposed inflation adjustment is arbitrary and totally speculative. The commission finds that Otter Tail's adjustment has no basis and that said adjustment has nothing to do with Otter Tail's operations. The commission finds that, on the other hand, staff's adjustment reflects known changes and is in no manner speculative or arbitrary. Accordingly, the commission finds that staff's adjustment for certain operation and maintenance expenses should be adopted and Otter Tail's arbitrary inflation adjustment should be rejected.

X

Rate of Return

***46 (a) Staff Position:**

Commission staff presented the testimony of two rate of return witnesses, Dr. Oppedahl and Dr. Smith. Dr. Oppedahl presented rate of return testimony utilizing both the comparable earnings and the discounted-cash-flow (DCF) methods. Dr. Smith presented a cost of capital study utilizing the DCF method.

Staff utilized the comparable earnings approach because it is well grounded in utility regulation. The comparable earnings approach derives a return on equity based on the actual historical earnings experience of comparable companies. Staff contends that from this information it is possible to derive an adequate and appropriate earnings requirement for the stockholders of the company involved in this case. Staff notes that regulatory commissions have traditionally looked at the returns earned on common stock equity by other comparable companies and the reaction of the market to those earnings to establish a fair and reasonable rate of return.

Staff witness Dr. Oppedahl testified that a proper rate of return begins with a calculation of the overall weighted average cost of money. This is accomplished by determining the cost of the types of funds used by the company and then averaging the cost based on a proportion of each type of financing the company has utilized. Dr. Oppedahl utilized the costs of embedded debt and preferred stock equity on the basis of historical cost. Dr. Oppedahl noted that in connection with common stock equity, the investor expectations are not susceptible of precise mathematical derivation as is the case with debt and preferred stock because the cash receipts foreseen from the investment are not fixed. Hence, Dr. Oppedahl testified that no absolute measure of investor expectations from common stock equity exists and, consequently, judgment must be exercised in the analysis of the available information. Dr. Oppedahl relied on the comparable earnings approach to the cost of common stock equity and also utilized the discounted-cash-flow approach to reinforce the validity of his comparable earnings recommendation.

To arrive at his recommendation, Dr. Oppedahl examined the actual returns earned on common stock equity for 89 independent electric utilities from the years of 1970 to 1977. These 89 utilities are covered by Value Line and represent the electric utilities industry. Over the five-year period 1973–77, these rates of return average between 11 per cent and 12 per cent. Dr. Oppedahl determined that the average of the five yearly figures is 11.54 per cent. For an eight-year average, the indicated return for these utilities is 11.89 per cent. The March 19, 1979, *Electrical Week* publication indicated that the returns earned were still valid because the 1978 preliminary results which were available for 75 companies out of the 89 companies utilized showed earnings of 11.7 per cent on common stock equity. Additionally, the estimated results for all 89 companies included in the most recent Value Line edition indicated earnings of 11.1 per cent. Utilization of median return figures for the five-year period would be 11.4 per cent. Based upon his examination of these earned returns and on other data, Dr. Oppedahl concluded that a reasonable rate of return on common equity would be in the range of 11 per cent to 12 per cent.

Dr. Oppedahl also looked at other market data to arrive at his recommendation. Dr. Oppedahl examined the ***47** market price to average book value for 44 central United States utilities. From this evaluation, Dr. Oppedahl concluded that stockholders were willing to pay a high of 122.5 per cent of average book value in 1977 for the 44 independent utility companies covered by Value Line in the central United States survey. The low market price to average book value that year was 104.0 per cent resulting in the ability of these companies to sell common stock at net proceeds around or above book value at any time during the year. Dr. Oppedahl found that the ratios of market price to average book value for 1978 are not as high, but still the midpoint of the high and low ratios is 100.7 per cent of book value. Under the circumstances prevalent during 1978, Dr. Oppedahl found that the midpoint was very reasonable. Dr. Oppedahl noted that interest rates were rising almost continually during 1978, and as a result, the market values of the existing income securities were under extreme pressure.

Dr. Oppedahl pointed out that the commission is not obligated to insure or guarantee market values above book value at all times. If this were the case, all risk of common stock ownership would be eliminated and it would allow for the price to rise excessively when interest rates drop and income securities begin to fare better in the market. Dr. Oppedahl pointed out that over the long term, the market price should approximate book value and that this would occur when the rate earned on common is about the same as the rate which stockholders desire to earn. As a general matter, Dr. Oppedahl testified that the aim of the commission should be to regulate on the basis of today's market status and allow the company to cover its costs, including the cost of common stock equity, so that the stock will sell at a price that will prevent dilution and provide an attractive investment. However, Dr. Oppedahl noted that this does not dictate a return allowance that keeps the market from ever dropping below book.

In addition to his evaluation of the utility industry generally, Dr. Oppedahl examined the particular circumstances of Otter Tail. On the basis of his studies, Dr. Oppedahl concluded that an adjustment was in order since Otter Tail had not fared as well as some in the industry in terms of maintaining its market-to-book ratio. Dr. Oppedahl recommended that the average return be adjusted to determine what return will allow the company to sell common stock without seriously diluting the stockholder's equity per share on a continuing basis. Dr. Oppedahl recommended a 12.26 per cent return on equity as being sufficient to enable the stock of the company, on average, to sell above book value. Dr. Oppedahl noted that if conditions become more stable, the stock of Otter Tail, like most other utility stocks, should fare much better and sell at quotations considerably above book value.

Dr. Oppedahl also testified that there was evidence that investors would be expecting returns in the 11 to 12 per cent range rather than substantially higher levels on the common stock of Otter Tail and other utilities. Dr. Oppedahl noted that although the all-industry's average return on common equity in recent years has averaged around 13.5 per cent, the range has been from 11.8 per cent for 1975 to 14.1 per cent for 1977, and in any single year, there are companies that experience miniscule or negative returns. Dr. Oppedahl noted in contrast, that utilities do not face so wide a variation range and the industry has not experienced ***48** bankruptcy. Additionally, electric utilities enjoy a monopoly position.

As for the beta coefficient, which is a measure of the volatility of the stock against the stock market, Dr. Oppedahl observed that Otter Tail's beta of .7 indicated that its stock is considerably less volatile than the market. Further, Otter Tail has about the same volatility characteristics as the other electric utilities in the Value Line central state survey, which had an average beta of .69. Another of the Value Line risk measures is the safety index which establishes Otter Tail to be in about the same position as most electric utility firms today. Otter Tail is rated two on a scale of five, with one being highest. On price stability index, Otter Tail is 100 on a scale of zero to 100 with 100 being the best possible.

Dr. Oppedahl concluded that utility common stocks are continually assessed by security analysts as being much safer investments than nonregulated companies. He found that Otter Tail is as safe or safer than the average utility. Dr. Oppedahl testified that Otter Tail had certain characteristics that indicated it needed little in the way of a special return. Specifically, Dr. Oppedahl noted that Otter Tail generates almost all of its electricity from abundant lignite coal rather than other less secure sources of generating power and the Otter Tail is not greatly subject to the vagaries of recession because of its stable territory without large industrial cities. Finally, Dr. Oppedahl felt that Otter Tail is basically well managed and has provided sufficiently for near-term generating needs.

Dr. Oppedahl utilized the DCF approach to verify the accuracy of the cost of common stock equity arrived at by the comparable earnings approach. Dr. Oppedahl found that the dividend yield is now 9.09 per cent based on the new dividend rate of $2 per share and the typical price of $22 since the new dividend rate was declared. With a cost of common equity of 12.26 per cent, Dr. Oppedahl determined that the growth factor provided for in the dividend yield plus growth formulation of the DCF method is 3.17 per cent. Dr. Oppedahl found this reasonable in light of evidence of a dampening of growth and other financial factors tending to depress electric utility earnings in the year ahead. Dr. Oppedahl also found that his conclusions and recommendations were consistent with other commission precedents.

Dr. Oppedahl determined that the appropriate level at which to set the overall return allowed at this time would be 9.31 per cent with the freedom for it to move within the above equity range before it would be considered excessive or deficient. Dr. Oppedahl testified that this rate should be applied to the December 31, 1978, capital structure since that structure, in Dr. Oppedahl's opinion, reflects the company's actual test-year cycle of financing. Dr. oppedahl did, however, recognize the retirement of some bonds in 1979, because at the end of 1978, those bonds were a short-term obligation.

Staff witness Dr. Smith focused upon investor requirements measured by means of a traditional DCF model modified to account for intraindustry risk differences. Generally, the DCF model is based upon two fundamental principles. First, it is based on the principle that rational investors evaluate the risk and expected returns of all securities in the capital markets and establish a price for a particular security which adequately compensates investors for the risks to which they are exposed. Secondly, ***49** the model is based upon the proposition that the total return received by shareholders consists of dividends and capital gains, and that these are measured in terms of the current dividend yield plus the expected rate of dividend growth.

Since dividend and price values are known, the primary focus in a DCF determination is to estimate the expected rate of dividend growth. The essence of this determination is to find the most probable projection of the rate of growth that is presently anticipated by the investors. The rate of return analyst must determine what growth rate investors are expecting, not to forecast the actual growth rate itself.

In developing the growth rate appropriate for estimating the cost of common equity to Otter Tail, Dr. Smith made a statistical study of growth expectations for the electric utility industry as a whole. Dr. Smith's statistical approach made it possible for her to estimate the dividend growth rates anticipated by investors in view of both the circumstances anticipated by investors of the industry and the unique circumstances of Otter Tail. In applying her DCF approach, Dr. Smith determined the yield component with current price and dividend data, and the expected growth estimate was based upon history. Dr. Smith utilized historical growth rate information available to investors together with the actual prices which they have established for common stock to estimate investors' growth expectations. Since investor expectations about future growth are the relevant consideration in this process, Dr. Smith found that existing information easily available to investors and likely to be used by them in assessing future financial prospects is the most appropriate factual data on which to rely. Dr. Smith utilized data relating to the 100 electric and combination utility companies included in Value Line's industry group. Dr. Smith testified that these 100 companies can, from the point of view of investors, be considered the electric utility industry, and thus, they provide an appropriate frame of reference for evaluating investors' perceptions of the financial prospects for Otter Tail.

Dr. Smith estimates the expected rate of dividend growth by using ten different growth periods. She found that most of the growth rates are clustered in the 3 to 4 per cent range and the weighted average is 3.58 per cent. The data strongly suggests that investor expectations for the average growth in dividends for utility common stocks are in the 3 to 4 per cent range.

As a result of her analysis, Dr. Smith concluded that the current cost of common equity capital for utilities generally is approximately 12.8 per cent. For purposes of determining Otter Tail's rate of return, however, Dr. Smith made further analyses to take into account Otter Tail's differences within the utility industry. She found that the cost of common equity to Otter Tail under this analysis would be 13.05 per cent.

Finally, Dr. Smith testified that the April, 1979, capital structure should be utilized, as it is the latest known change. Dr. Smith thus found that Otter Tail should receive a 9.72 per cent overall rate of return.

Commission staff recommends that the commission adopt an overall rate of return within the range of 9.31 per cent to 9.72 per cent and a return on common equity within the range of 12.26 per cent to 13.05 per cent.

(b) Company Position:

Company witnesses Dennis R. Emmen ***50** and David B. DuPont testified for Otter Tail Power Company regarding an appropriate rate of return. Company witness Emmen generally testified as to the financial condition of Otter Tail, Otter Tail's needs for present and future capital, and Otter Tail's construction budget. Mr. Emmen enumerated eight factors which he felt should be considered in determining a fair rate of return. The eight factors are cost of money, maintenance of adequate credit, type of rate base, attrition because of inflation, comparative risks of specific utilities, comparative situation with other industries, recognition of efficient management, and regulatory lag. Mr. Emmen concluded that a rate of return of 10.161 per cent overall and 15 per cent on common equity would be appropriate. In its filing, Otter Tail utilized 14 per cent on equity and an overall rate of return of 9.81 per cent using test-year capitalization.

Company witness Emmen testified on Otter Tail's problems faced in the past and its need for adequate return in the future to support its large construction program. Otter Tail is currently involved in the construction of Coyote plant in order to satisfy the growth in Otter Tail's demands. While witness Emmen stated that Otter Tail is able to generate some of the funds necessary to pay for its construction internally, a substantial portion must be generated through the issuance of new securities. As a result, Otter Tail needs a return in these proceedings sufficient to be able to allow it to attract this needed capital at reasonable rates. In addition to the construction program, Otter Tail is faced with the necessity of retiring certain outstanding obligations that will mature in the next few years. Those obligations must be replaced by bonds and other capital at a much higher cost than the ones being replaced. Company witness Emmen stated that the key to meeting Otter Tail's large financing needs lies in maintaining the company's ability to sell its common stock and that Otter Tail must be able to maintain a common equity ratio in the vicinity of 35 per cent or higher.

Company witness Emmen testified that he was extremely concerned about the fact that Otter Tail has been unable to market its stock at a price above book value in its last four common stock offerings and that Otter Tail's market-to-book ratios are clearly undesirable. Company witness Emmen described Otter Tail's most recent common offerings and concluded that these sales indicated that investors required earnings per share ranging from 14.2 per cent in 1974 to 16.2 per cent in 1979. Company witness Emmen testified that due to the fact that Otter Tail's stock during the last four issues sold below book and that Otter Tail's stock has been consistently below book on the market over the last few years, investors are expecting approximately 15 per cent return on equity when they purchase Otter Tail stock.

Company witness DuPont testified in rebuttal to the presentations of commission staff witnesses Oppedahl and Smith. Otter Tail contends that Dr. Oppedahl's analysis is incorrect and that his assumptions are erroneous. Otter Tail contends that Dr. Oppedahl's comparable companies are not comparable to Otter Tail and that Dr. Oppedahl failed to determine which, if any, companies in this comparable group are substantially similar in risk to Otter Tail. Otter Tail contends that Dr. Oppedahl fails to recognize that each utility is different, having different risk characteristics which substantially disturb their comparability ***51** to other utilities. Additionally, Otter Tail contends that Dr. Oppedahl's analysis is suspect because he focuses on historic rates of return earned rather than rates of return allowed. Otter Tail maintains that there exists a differential between earned and allowed rates of return in the vicinity of 1.5 to 2 per cent.

Otter Tail also criticizes Dr. Oppedahl's adjustment to return he made for Otter Tail because Dr. Oppedahl utilized the average of the high stock price to average book and the low stock price to average book that occurred during the entire year's period. Otter Tail contends that Dr. Oppedahl did not consider whether or not the high stock price was achieved by the utility companies, including Otter Tail, once during the year or whether it was a normal occurrence. Otter Tail contends that this fails to give the range in which the utility's stock usually trades and causes a distortion.

Otter Tail also critizes Dr. Oppedahl's utilization of the DCF approach. Otter Tail contends that Dr. Oppedahl did not utilize any analysis but rather simply concluded that the growth rate of 3.17 per cent is within the area of reasonable expectations for growth in the electric utility industry in the future. Otter Tail contends that Dr. Oppedahl inappropriately compared growth rates for the entire industry with that of Otter Tail Power Company and that the companies Dr. Oppedahl utilized in that comparison are not comparable to Otter Tail.

Company witness DuPont testified that Dr. Oppedahl relied on the use of the comparable earnings approach to arrive at his recommended rate of return for Otter Tail and that to the extent that factual erros and inconsistencies in logic, as are contended by Otter Tail to exist, the rate of return result is suspect. Company witness DuPont further testified that Dr. Oppedahl paid considerable attention to the safety inherent in utility investments without reviewing the realities of alternative investments. Company witness DuPont also testified that certain of Dr. Oppedahl's recommendations are not documented or are otherwise incorrect.

Otter Tail Power Company concludes that the commission should base its recommendations primarily upon the testimony of company witnesses Dennis Emmen and Dr. Smith.

Commission Findings

The commission finds that staff's recommended zone of reasonableness of 12.26 per cent to 13.05 per cent for the cost of common equity should be adopted for the reasons set forth in (a) above. The commission finds that Dr. Oppedahl's comparable earnings analyses verified through his discounted-cash-flow studies are proper and are not subject to defect. The commission finds that Dr. Oppedahl's recommendation of 12.26 per cent establishes the lower end of the range for setting a fair rate of return. The commission finds that Dr. Oppedahl properly examined the actual returns earned on common stock equity for 89 independent electric utilities from the years 1970 to 1977, and the five-year and eight-year periods from 1973 to 1977 and 1970 to 1977, respectively. Additionally, Dr. Oppedahl utilized the most recent data available in evaluating 1978 preliminary results available for 75 of the 89 companies. The commission finds that Dr. Oppedahl's analysis of the 44 central United States utilities is also of assistance in setting a fair rate of return. The commission finds that Dr. Oppedahl's ***52** adjustment to provide for the particular circumstances of Otter Tail is also proper and recognizes that Otter Tail had not fared as well as some in the industry in terms of maintaining its market-to-book ratio. Dr. Oppedahl's conclusion on the basis of his analyses that 12.26 per cent return on equity is sufficient to allow Otter Tail to attract capital and to fairly compensate its investors is a proper rate of return and, on the basis of the evidentiary record, establishes the lower end of the zone of reasonableness for setting the rate of return for Otter Tail Power Company on common equity. The commission finds that Dr. Oppedahl's discounted-cash-flow analysis verified the accuracy of the cost of common equity arrived at by Dr. Oppedahl's comparable earnings analysis.

The commission further finds that Dr. Smith's discounted-cash-flow model modified to account for intraindustry risk differences also is of assistance in establishing the proper rate of return for Otter Tail. The commission finds that Dr. Smith's determination that the expected rate of dividend growth in the range of 3 to 4 per cent is proper and is fully supported by the data base she utilized and her analysis thereof. The commission finds that in light of Dr. Smith's testimony that she questioned the growth rate as being too high, and in light of her exclusive reliance upon the DCF method, Dr. Smith's recommendation of 13.05 per cent as being the cost of common equity to Otter Tail establishes the high end of the zone of reasonableness in determining the cost of equity to Otter Tail.

The commission finds that Otter Tail's cost of common equity should be 12.5 per cent. The commission finds that on the basis of the analyses performed by Dr. Oppedahl and Dr. Smith, the commission's determination that Otter Tail's cost of common equity as being 12.5 per cent is more than sufficient to assure confidence in the financial soundness of Otter Tail in order that Otter Tail can maintain and support its credit, attract capital, and fairly compensate its investors. The commission finds that anything greater than 12.5 per cent would be excessive and unjust and unreasonable. The commission further finds that its determination herein is consistent with past commission precedent and is fully supported in this proceeding.

The commission finds that Otter Tail witness Emmen's analysis is of little assistance in establishing a fair rate of return. Company witness Emmen primarily utilized a series of price-earnings ratio calculations as the basis for his recommendation. The commission finds that such an analysis provides no reasonable nor recognized basis for arriving at a proper rate of return recommendation. The commission finds that Mr. Emmen's testimony regarding Otter Tail's construction program and his concern regarding Otter Tail's recent common offerings was of assistance in providing background, but that that testimony did not, in any manner, provide the rationale or justification for his conclusions relating to his recommended rate of return. As a result, the commission finds that Otter Tail witness Emmen's determination that the cost of Otter Tail's common equity is 15 per cent is unsupported and without foundation.

The commission further finds that company witness DuPont's testimony merely attempted to point out flaws or erroneous assumptions made by staff witnesses Oppedahl and Smith. As has been previously found by the commission, ***53** those criticisms are without merit.

Finally, the commission finds that Otter Tail should be allowed to utilize its updated capital structure in this proceeding. The commission finds that the updated capital structure is a known change which should be recognized. The commission finds that this is consistent with the commission's past precedent and is fully supported in the record.

Upon the foregoing findings of fact, the commission enters the following conclusions of law:

Conclusions of Law

I

That the commission has jurisdiction over the subject matter and the applicant in this proceeding.

II

That the commission's decision entered herein establishes just and reasonable rates for Otter Tail Power Company and fully comports with all statutory and constitutional provisions.

III

That the suspension of Otter Tail Power Company's proposed rate schedules and related tariff sheets filed with Otter Tail Power Company's application herein is terminated, and that said rate schedules and related tariff sheets are rejected in their entirety.

IV

That pursuant to the commission's order entered on the twenty-seventh day of November, 1978, in the proceeding entitled Re Otter Tail Power Co., PUC Docket (F–3164), the rate schedules and related tariff sheets to be filed by Otter Tail Power Company implementing the commission's decision and order herein shall also implement the memorandum decision of the Honorable Robert A. Miller in PUC Docket (F–3052) as the same pertains to and is applicable to this proceeding and issues comparable therein; and that said rate schedules and related tariff sheets to be filed to implement the commission's decision and order herein and the above referenced memorandum decision of the Honorable Robert A. Miller shall be approved, subject to Otter Tail Power Company's obligation to refund with interest all revenues collected over and above those allowed the commission in its decision and order herein as may be determined to be excessive in the litigation in the supreme court of the state of South Dakota in PUC Docket (F–3052).

End of Document

1985 WL 1205459 (S.D.P.U.C.), 68 P.U.R.4th 436

Re Northwestern Bell Telephone Company
Intervenors: South Dakota Independent Telephone Coalition and South Dakota Innkeepers Association

Decision and Order (F–3520)

South Dakota Public Utilities Commission

July 31, 1985

(EISNACH, commissioner, dissents, p. 472.)

Before Solem, chairman, and Stofferahn and Eisnach (dissenting), commissioners.

By the COMMISSION:

On the 1st day of February, 1985, Northwestern Bell Telephone Co. (NWB or company) filed with this commission an application for authority to increase rates for intrastate telephone service. By the terms of its application, NWB requested to increase rates for intrastate telephone service by $9,861,726, on an annual basis. Subsequently, at the hearing held on May 27–29, 1985, NWB increased the amount requested to $10,338,884, on an annual basis.

By order dated February 11, 1985, the commission entered its order for requirement of deposit and establishment of time for intervention. By order dated March 29, 1985, the commission entered its order establishing procedural schedule and order for and notice of public hearing. On April 30, 1985, the commission entered an order granting petitions for intervention filed by the South Dakota Independent Telephone Coalition (SDTC) and by the South Dakota Innkeepers Asso. (SDIA). By that order, the commission also amended the procedural schedule regarding the issues of affiliated transactions and the AT&T-NWB shared network facilities agreement.

On April 22, 1985, the commission ordered NWB to remove the surcharge placed on intrastate telephone rates effective June 1, 1985. In that order, the commission found that it is in the public interest for the excess revenues collected by the surcharge to be refunded to the ratepayers in conjunction with the rates implemented in this docket effective August 1, 1985.

On May 1, 1985, commission staff filed initial testimony and supporting exhibits on cost issues presented in this application. On May 9, 1985, pursuant to the amended procedural schedule, commission staff filed supplemental initial testimony on affiliated transactions and the AT&T-NWB shared network facilities. On May 15, 1985, NWB filed rebuttal on all of the issues other than affiliated transactions and the AT&T-NWB. On May 22, 1985, NWB filed rebuttal on these last two issues.

On May 15, 1985, commission staff filed a motion to compel production of data and for related relief. In that motion, commission staff requested commission to compel NWB to produce requested material concerning consolidated tax accruals, U S WEST Direct's publishing of NWB's telephone directories, and U S WEST's allocation of costs to subscribers. On May 27, 1985, NWB filed a memorandum of Northwestern Bell Telephone Co. in opposition to staff's motion to compel production of data and for related relief. In that response, NWB stated that these data are not relevant to this proceeding and that since U S WEST refuses to provide the data, NWB cannot produce the requested data.

***439** Contested case hearings on NWB's application were held in Pierre, S. D., on May 27–29, 1985. Present and represented by counsel at the hearing were NWB and commission staff. Intervenor South Dakota Innkeepers Asso. was represented by Mr. Johnson at the hearing. Subsequently, NWB and commission staff filed simultaneous posthearing initial briefs on June 24, 1985, and reply briefs on July 8, 1985.

On July 2, 1985, the commission issued on order for and notice of decision in which the commission ordered that the decision in this matter would be rendered at 1:30 P.M. CDT, on July 23, 1985. On that date, the commission met in open meeting for its deliberation on the rate increase application in this docket. Present and represented at that meeting were NWB and commission staff. At that meeting, the commission by formal vote ruled separately on each matter at issue in this case.

The following is a summary by issue of the testimony and evidence presented by NWB and commission staff. Following the summary on each issue are the commission's findings of fact based upon all of the testimony taken and the evidence presented in this docket.

SUMMARY OF ISSUES

I.

Rate Base

1. *Average Cash Balances*

(a) Staff Position

Staff witness Maginnis recommends the elimination of average cash balances from the calculation of the company's working capital allowance. He testified that the lead-lag study performed by the company to calculate the operating components of working capital 'measures the funds necessary to pay operating expenses and taxes prior to the collection of revenues applicable to the same accounting period.' To include an additional working capital allowance for average cash balances and working funds would provide the company a 'double dip' because the company would be recovering a working capital allowance on the same working capital component measured in two different ways.

Mr. Maginnis testified that from an accounting standpoint, cash balances and working funds are book balances which are elements of a company's current assets. As Mr. Maginnis testified, an accountant measures working capital as 'current assets less current liabilities.' He testified that the lead-lag methodology is an alternative means of measuring working capital requirements. Mr. Maginnis argues that the company's working capital requirements have been calculated through the lead-lag study, and that to add a component of the accountant's calculation of working capital to the lead-lag study calculation is to borrow an element of a separate methodology designed to measure the *same* financial set of conditions. He testified that the company has failed to show how average cash balances and working funds are additional working capital *requirements* where it has determined capital requirements through its lead-lag study.

Mr. Maginnis argues further that to the extent cash balances are used to pay for plant items already included in rate base, the company will earn a double return on those plant items if the commission allows a working capital allowance for cash balances. Mr. Maginnis testified that when a plant item is charged directly to plant in service accounts it is ***440** immediately included in rate base, and so immediately begins to earn a return. If, as is usually the case, payment for the plant item occurs approximately 30 days after it is in service, both the plant item and that portion of cash balances used to pay for it will earn a return, under the company's proposal. Mr. Maginnis testified that in order to prevent the company from earning a double return on such plant items, the commission must deny the company a working capital allowance for average cash balances. This issue is now before the supreme court. Mr. Maginnis recommends exclusion of average cash balances from NWB's working capital allowance, subject to whatever the supreme court decides.

(b) Company Position

Mr. Jeter testified that a lead-lag study is used to estimate the amount of investorowned funds required over the above minimum cash balances. He pointed out that lead-lag studies analyze working capital requirements as though cash were always available as needed to meet those requirements. In reality, however, that availability may not exist. Therefore, the additional cash and working funds which the company must maintain in order to cover actual working capital requirements must be considered in addition to the theoretical working capital requirements estimated by the lead-lag study. Unless a working capital allowance is provided for those amounts, investors will be deprived of their return on these cash funds which they have provided. Mr. Jeter opposes Mr. Maginnis' exclusion of average cash balances from the company's lead-lag study. He argues that lead-lag studies are based on the premise of average zero cash balances and do not consider the practical needs to carry cash and working fund balances. To the extent incoming and outgoing cash flows are not equal, which Mr. Jeter argues is the case in the real world, the average cash balances are necessary to cover daily cash payments. This cash comes from investors who are entitled to earn a return on it.

Mr. Jeter disputes the usefulness or relevance of using the accountant's traditional definition of working capital cited by Mr. Maginnis ('current assets less current liabilities') in the rate-making setting as a method of determining working capital requirements. For purposes of rate making, it is necessary to calculate the amount of investor-supplied funds actually being used in the company's day-to-day operations, Mr. Jeter testified.

Mr. Jeter also defends the use of 'average' cash balances as a means of measuring the amount of cash necessary for day-to-day operations. He argues that average balances do represent the minimum cash balances necessary to meet daily operations and that it would be uneconomic for the company to maintain any excess cash on hand because it loses interest income if it has an uninvested excess.

Finally, Mr. Jeter refutes Mr. Maginnis' claim that a large portion of the cash in average cash balances will be used to pay for items of plant already in rate base. He argues that this argument involves the timing of plant in rate base which Mr. Maginnis has made no attempt to quantify.

(c) Commission Findings

The commission finds that the company's claim for average cash balances should be rejected in this proceeding.

The commission finds that essentially no new evidence since that which was before us in the prior proceeding, docket (F–3442), has been presented in this case. Therefore, the commission finds that it is appropriate to decide this issue consistent with our findings in the prior proceeding, dependent ultimately, of course, on the supreme court's final disposition of this issue.

The commission finds that if the company ultimately prevails on this issue in the supreme court, the amount of the adjustment will be permitted in rates effective at the time of the court's decision.

2. *Cost of Removal*

(a) Staff Position

According to staff witness Maginnis, company's rate base should be reduced by an adjustment to restore the deferred tax balance associated with the cost of removal for pre-1971 property. This adjustment is necessitated by the overdivestiture of the tax balance to AT&T caused when the company divested a portion of its deferred tax balance to AT&T as if none of the balance had flowed back. This overdivestiture of the deferred tax balance resulted in an understatement of the remaining deferred tax balance for purposes of South Dakota accounting and rate making. According to staff witness Maginnis, the adjustment would correct this understatement of the remaining deferred tax balance.

Staff witness Maginnis testified this adjustment is required for the same reason that an adjustment was required in relation to the flow back of deferred tax balance associated with the reduction in the corporate tax rate. According to staff, company's resistance to the adjustment for the cost of removal is inconsistent with company's acquiescence to the adjustment related to the reduction in the corporate tax rate. Staff insists that company has not identified any provision in the plan of reorganization that would require the commission to reverse its previous decision and order requiring the flow back. The company simply failed to preserve the correct amount of deferred tax balance at divestiture. According to staff, to compensate the company for its failure, the commission would have to reverse previous orders of the commission.

(b) Company Position

Company witness Jeter testified that the company should recover these cost of removal expenses from the ratepayers who benefited from the company's previously ordered 'flow through.' In dockets (F–3375), (F–3410), and (F–3442), the commission ordered the company to 'flow through' the timing difference of pre-1971 cost of removal of plant (decision and order (F–3442)). This 'flow-through' accounting resulted in a net underaccrual of deferred income taxes applicable to certain assets which company divested to AT&T. The plan of reorganization contains no provision requiring transferring this underaccrual to AT&T at divestiture. The company has already paid the 'flow through' and thus the company should be allowed to recover the underaccrual of deferred taxes from the ratepayers who benefited from the 'flow through.'

(c) Commission Findings

The commission finds that staff's adjustment to restore the deferred tax balance associated with the cost of removal for pre-1971 property is proper and should be adopted. The commission finds that the company improperly divested accumulated deferred income tax balances to AT&T which balances were properly returnable to the company's South Dakota ratepayers. The commission finds that the company was not precluded by the plan of reorganization from preserving this deferred tax account for the benefit of its ratepayers.

442 3. *Telephone Plant UnderConstruction—Capitalized Property Taxes

(a) Staff Position

Staff witness Maginnis testified that the company filed according to the findings of the commission in docket (F–3442) concerning the appropriateness of capitalizing property taxes during the construction period. Mr. Maginnis thereby accepted the company's unmbers as filed.

(b) Company Position

NWB witness Wahlert testified that a significant amount of time and money is required to maintain accounting records for this adjustment and the effect of continuing this adjustment will become minimal. Ms. Wahlert testified that NWB had to train somebody in order to keep track of accounting records for this adjustment because it is not a common job function. Therefore, Ms. Wahlert recommends the discontinuance of this adjustment.

(c) Commission Findings

The commission finds, in agreement with the previous commission order and the sixth judicial circuit court's memorandum decision in docket (F–3442), that capitalization of property taxes on TPUC is proper. The commission finds that such taxes are a cost of construction similar to other construction costs and therefore should be reflected in TPUC.

4. *Property Taxes —Flow Through Versus Normalization*

(a) Staff Position

Staff witness Maginnis testified that the company seeks to normalize the tax effect of capitalizing property taxes during the construction period. Mr. Maginnis testified that property taxes are currently deductible on the company's tax return whether capitalized or not, which means there is a 'timing' difference between the manner in which these taxes are reflected on the company's books and tax return. Mr. Maginnis testified that he has consistently recommended that such timing differences be 'flowed through' rather than 'normalized.' Mr. Maginnis also testified that the commission's decision in (F–3442) reflected flow-through accounting.

(b) Company Position

NWB witness Jeter testified that he has consistently advocated normalization of tax timing differences related to construction. He lists as principal arguments for normalization the generally accepted accounting principles, the matching of costs and related income tax effects, and the risk that future customers will not be required or able to pay the income tax effects.

Mr. Jeter testifies that flow-through accounting is clearly inequitable in the situation of capitalization of taxes during construction. Mr. Jeter demonstrated through an example how, as he claimed, flow-through benefits customers of one period with an offsetting charge to customers of another period.

(c) Commission Findings

The commission finds that it has consistently advocated flow through of tax/book timing differences when such treatment does not jeopardize tax benefits. The issue of flow through versus normalization is not new. The commission before has deliberated the issue and has consistently found maximum total benefit accrues when flow-through principles are adopted. NWB has adopted the common argument that customers benefit unfairly with adoption of flow through. An argument as commonly ***443** made is that customers may never receive the benefits of normalization. The commission finds that generally accepted accounting principles expressly allow regulated utilities to reflect flow through.

5. *Right-to-use Fees*

(a) Staff Position

In docket (F–3442), the commission held that the right-to-use fees for certain software be deferred or capitalized and then expensed or amortized over a three-year period (decision and order in docket (F–3442)). Staff witness Maginnis' position is that since company divested some of the software associated with the right-to-use fees to AT&T that the unamortized balance of the right-to-use fees should be eliminated from the company's proposed rate base. Staff contends that these fees are not expenses since in docket (F–3442) the commission reversed the company's treatment of the fees as immediately chargeable expenses because the fees should be charged to those who benefit from the software in future years. Since now AT&T owns the software, AT&T's customers are receiving its benefit. This software is no longer used and useful for intrastate South Dakota telephone service. Staff contends that there is nothing in the plan of reorganization that foreclosed or even impeded company from charging AT&T for the unamortized balance and that these right-to-use fees should have been transferred to AT&T along with the software.

(b) Company Position

Company witness Jeter testified that these right-to-use fees are expenses which in docket (F–3442) the commission ordered the company to recover over a three-year period. Company contends that the plan of reorganization sets forth the treatment of incurred right-to-use fees and that that portion of the plan should be followed rather than the portion of the plan relating to the treatment of nonphysical assets. According to company, the plan of reorganization does not transfer unamortized right-to-use fees to AT&T and further, that nothing in the plan of reorganization obliges AT&T to pay for the unamortized balance of these fees. Company argues that since staff's position is a product of the commission's prior action and the plan of reorganization, neither of which was within the control of the company, that this adjustment would constitute a clear confiscation of capital.

(c) Commission Findings

The commission finds that staff's proposed adjustment to eliminate the unamortized balance of right-to-use fees associated with divested plant should be rejected. The commission finds that these right-to-use fees, which have previously been paid to AT&T by NWB, have not yet been fully recovered from NWB's ratepayers. Since NWB did not recover from AT&T at the time of divestiture these unamortized right-to-use fees, their removal from rate base would amount to their disallowance. The commission finds that these fees are reasonable expenses which should be recovered from ratepayers and that therefore staff's adjustment should not be made.

6. *Separations Changes*

(a) Staff Position

Staff witness Maginnis recommends an adjustment to NWB's rate base to annualize the effect of certain changes in the Separations Manual approved by the Federal Communications Commission in December, 1983; the changes became effective in June, 1984. The changes in the Separations Manual have the effect of transferring certain items of plant and expense which had previously been considered 'intrastate' to the 'interstate' jurisdiction. Mr. Maginnis testified that since these changes occurred in the middle of the test year, it is necessary to adjust rate base and operating results to annualize their effect.

(b) Company Position

Company witness Baird presented testimony in opposition to Mr. Maginnis' adjustment to annualize the effect of certain changes in the Separations Manual that became effective in June, 1984. She testified that Mr. Maginnis did not include all of the changes affecting separations in 1984 in his adjustment. Witness Baird said that Mr. Maginnis should consider the implementation of all new monthly studies or basic studies which occurred in the test year in his adjustment if he intends to annualize separations changes at all.

(c) Commission Findings.

The commission finds that the adjustment proposed by staff to annualize the separations changes should not be made. The commission finds that the adjustment proposed by staff is selective in that it does not reflect all new basic study changes. The commission finds that staff has not adequately addressed, on the record, the reasons that the adjustment only partially reflects the effects of the 1984 separations changes and that, therefore, the adjustment must be rejected.

II.

Operating Expenses

7. *Telephone Pioneer Expense*

(a) Staff Position

Staff witness Maginnis recommends adjusting NWB's operating expenses to remove the expenses associated with the activities of the Telephone Pioneers. In support of his adjustment, Mr. Maginnis testified that contributions to social and charitable organizations, such as Telephone Pioneers, are not legitimate operating expenses required to provide telephone service.

(b) Company Position

Company witness Wahlert supports the inclusion of expenses associated with the activities of the Telephone Pioneers in the company's operating expenses. She testified that through the voluntary community services of the Pioneers, NWB has another communication link with its customers which provides NWB with input important in keeping service quality as high as possible.

(c) Commission Findings

The commission finds that the expenses associated with the Telephone Pioneers should not be allowed in rates. While the commission does not necessarily dispute the social contribution the Pioneers make, it is and has been a long-standing commission policy that ratepayers should not be forced to make involuntary contributions through increased rates. The commission finds that NWB may chose to support, with ratepayer funds, organizations that may be personally objectionable to individual ratepayers. The ratepayer would also forfeit the tax deductibility of such a contribution. The commission has no objection if stockholders' funds are used to support charities and organizations. Such expenses are not, however, necessary for provision of telephone service and therefore should not be paid for by ratepayers.

445 8. *Employee Decline

(a) Staff Position

Staff witness Maginnis proposed an adjustment to the company's operating income to reflect the decline in employment which had occurred during and after the test year. He calculated his adjustment by applying the percentage decrease between the average test-year employees and the level at January 31, 1985. He applied this percentage decrease to test-year wages, benefits, and social security taxes after giving effect to the impact of the divestiture. Mr. Maginnis used a weighted average percentage decrease in this case instead of the percentage decrease for NWB in total as he had done in the prior case, because the South Dakota experience in employee declines in this case is markedly different from the experience of the company as a whole. Mr. Maginnis testified that his weighted average percentage decrease of 5.14% is less than the percentage decrease for South Dakota-located employees of 6.28%.

In support of his adjustment, Mr. Maginnis testified that a failure to reflect the employee decline would be to recognize a level of wage and benefit expense which did not exist either during or after the test year. Mr. Maginnis further testified that his proposed adjustment reflects known changes affecting wages and benefits, based on the most recently available information, just as the company's adjustments to reflect nonmanagement wage increases effective in August, 1984, and August, 1985, as well as social security tax rate increases effective in January, 1985, reflect known changes. Mr. Maginnis testified that the problem with accepting only those labor-related adjustments proposed by the company is that they are based on the underlying assumption that average test-year levels of employment were 'normal' for rate-making purposes, when in fact there was a gradual but consistent decline in total employment levels.

Mr. Maginnis testified that the company recognized the lower employee level in computing its post-test-year wage and benefit adjustments, but inconsistently failed to reduce test-year booked amounts with the results that pro forma wages included in the company's cost of service are higher than actual levels which occurred either during or after the test year.

Mr. Maginnis testified that in cases where employment is declining, it is not necessarily true that employment expenses match output, both before and after the increase in demand. Mr. Maginnis asserted that this is true because most companies do not respond as quickly to indicators calling for reduced levels of employment, relying instead on retirements and voluntary resignations rather than laying off employees. Mr. Maginnis testified that if layoffs or forced retirements are utilized, they are often accompanied by generous retirement incentives, such as the company's management income protection plan (MIPP) and supplemental income protection plan (SIPP); such costs are reflected in the cost of service in this case in the amount of more than $1 million. Because Mr. Maginnis did not remove the MIPP/SIPP benefits, he testified that failure to make his proposed adjustment would result in a higher level of wage-related expenses being reflected in the test year than if there had been no reduction at all in employment throughout the year.

Mr. Maginnis testified that the decline in employment which occurred through January, 1985, is attributable to test-year equipment installations, which he recognized. Mr. Maginnis testified that it would not be appropriate for the commission to ***446** adopt a year-end rate base to match the year-end level of employees because there is a lag between the placement of the equipment and employee reduction and because revenues and nonwage expenses do not match a year-end rate base.

(b) Company Position

Company witness Wahlert testified that the employee decline adjustment sponsored by staff witness Maginnis is inappropriate for this proceeding because it violates the basic matching principle. Ms. Wahlert testified that the employee decline affects not only expenses, but revenues, and investment as well. Ms. Wahlert testified that in June, 1984, an electronic switching system was placed in service in Pierre and that the plant was actually in service for less than half the test year. Ms. Wahlert testified that because Mr. Maginnis did not annualize this investment in his presentations and because he did not annualize other associated changes, such as depreciation expense, he has mismatched rate base with revenues and expenses. Ms. Wahlert further testified that the adjustment is faulty because Mr. Maginnis did not attempt to identify other equipment installations which made possible employee reductions. Ms. Wahlert testified that usage of a year-end test period would account for all the effects, but that this case is based on the historical test-year concept.

Ms. Wahlert also takes issue with the calculations made by Mr. Maginnis to determine the percentage decline attributed to South Dakota. Ms. Wahlert calculates a 2.34% decline in employment by using Mr. Maginnis' weighted average methodology and correcting for Mr. Maginnis' failure to compute January, 1985, employees located outside the state. Ms. Wahlert testified that the same result, a 2.34% decline, would result from looking at South Dakota equivalent employee levels.

(c) Commission Findings

The commission finds that the theory of the adjustment proposed by staff witness Maginnis is correct and therefore should be made, but that the proper percentage decline to be utilized is 2.34% as calculated by company witness Wahlert, rather than the 5.14% used by staff.

The commission finds that the adjustment to recognize post-test-year employee declines is identical to the adjustment approved by the commission in the last NWB rate case, (F–3442). The commission finds that the adjustment was later affirmed by the circuit court. The commission finds that a further adjustment is required in this case because of a further decline in the number of NWB employees. The commission finds that a failure to make the adjustment would be to recognize a level of wage and benefit expense which did not exist either during or after the test year. The commission finds that the cost of service in this proceeding includes more than $1 million in retirement incentives and that the rate base includes all test-year equipment installations to which the decline in employment is attributable.

The commission finds that recognition of the reduction in employees which has occurred in the post-test-year period does not violate the matching principle as asserted by Ms. Wahlert. Rather, the commission finds that staff's adjustment, which reflects both the increased plant which makes employee reductions possible, and the reduced work force, is the only attempt on this record to provide the proper matching of test-year investment, expenses, and revenues.

The commission finds that use of year-end rate base, as advocated by the company, would violate the matching principle because there is a lag between the placement of equipment and the employee reduction and because test-year revenues and nonwage expenses do not match a year-end rate base.

The company finds, however, that it is appropriate to utilize a percentage decline of 2.34% as calculated by the company, rather than Mr. Maginnis' 5.14% decline, because the 2.34% decline properly measures the decline in employees which occurred directly in South Dakota and the decline in employees located outside South Dakota but attributable to this state. The commission finds that, with this numerical alteration, the adjustment is identical both in concept and application to the adjustment made in the prior proceeding and which was affirmed by the circuit court.

9. *Antitrust Settlements*

(a) Staff Position

Staff witness Maginnis recommended that the amount included by the company for its antitrust settlements be deleted from operating expenses. Mr. Maginnis testified that the expenses should be chargeable to ratepayers only if the company establishes clearly and convincingly that they would have won the antitrust case *and* that the settlement amount is less than the cost to the company of proceeding with litigation. Mr. Maginnis testified that if the commission does not set such standards, NWB could afford to settle even blatant antitrust violations at the ratepayers' expense. Mr. Maginnis noted that approximately 20 cases were settled during the test year and that it is not reasonable to expect the commission to analyze the many documents associated with each case to determine whether these costs are appropriate.

(b) Company Position

Ms. Wahlert, testifying on behalf of the company, stated that NWB has made reasonable settlements which are legitimate operating expenses. She explained that prior to settlement payments being made, the reasonableness of the settlements are evaluated by outside antitrust counsel and committees of the company's antitrust lawyers.

Ms. Wahlert further testified that the test-year average settlements were approximately $23,000 per case, which compares favorably with judgments rendered in the Pierre area where $1.25 million and $7 million were awarded in two separate cases.

Ms. Wahlert testified that telephone utilities are targets for antitrust claims due to the perceived monopoly of AT&T. Further, Mr. Wahlert testified that the time, effort, and cost of processing a case involving hundreds of thousands of documents appears to be much higher and settlements for the amounts in the test year are reasonable.

(c) Commission Findings

The commission finds that the test-year cost of antitrust settlements should be allocated 50% to the company's shareholders and 50% to the ratepayers. The commission finds this to be in compliance with the sixth judicial circuit court's decision in the appeal of NWB, docket (F–3375). The commission finds that the resolution of this issue in this manner provides some assurance to the ratepayers that NWB is not just settling blatant antitrust actions and the decision also recognizes that antitrust settlements are legitimate operating expenses.

10. *Inflation*

(a) Staff Position

***448** Staff witness Maginnis recommended that company's proposed inflation adjustment be deleted because the adjustment ignores numerous advances in technology and productivity which have occurred in the telecommunications industry. Mr. Maginnis testified that these efficiencies would offset the effects of inflation. Mr. Maginnis testified that his employee decline adjustment simply recognized productivity gains that affect wage-related expenses, not improvements in technology which allow other gains in productivity, principally through the use of more efficient telecommunications equipment. Mr. Maginnis testified that virtually all of the improvements in technology result from research and development activities paid by ratepayers on a current basis. He testified that if the company is allowed an inflation adjustment, ratepayers will be paying for research and development activities plus the inflation adjustment without enjoying the benefits of gains in technology which will result from these activities in the future.

Finally, Mr. Maginnis noted that the issue is currently pending before the supreme court, and since he knew of no change in the facts relied on by the commission since the prior case, recommended that the commission decide the case according to the court's decision.

(b) Company Position

Ms. Wahlert, testifying on behalf of the company, computed an inflation adjustment by applying one-half of the percentage increase in the consumer price index at the beginning and end of the test year times test-year booked expenses not otherwise adjusted.

Ms. Wahlert testified that her adjustment recognizes price changes for goods and services in the same way that the wage adjustment recognizes price changes for labor. Ms. Wahlert testified that Mr. Maginnis' productivity analysis is inapt because productivity changes relate to changes in levels of input relative to changes in levels of output and are unrelated to price changes. Further, Ms. Wahlert stated that Mr. Maginnis' reliance on productivity gains as an offset to inflation is inappropriate because he has offered no evidence that productivity has resulted in a change in revenue requirements.

Ms. Wahlert disputed staff's contention that ratepayers pay for virtually all improvements in technology on a current basis, citing the commission's order in a prior case for the company to recover these costs over a period of years, rather than currently.

Finally, Ms. Wahlert testified that her adjustment has been accepted by the supreme court in the past, and more recently by the circuit court in NWB's last rate case, (F–3442).

(c) Commission Findings

The commission finds that the inflation adjustment should be rejected at this time for the reasons set forth in (a) above.

The commission finds that essentially no new evidence since that which was before us in the prior proceeding, docket (F–3442), has been presented in this case. Therefore, the commission finds that it is appropriate to decide this issue consistent with our findings in the prior proceeding, dependent ultimately, of course, on the supreme court's final disposition of this issue.

To supplement our decision in docket (F–3442), the commission finds that there have been significant productivity gains experienced in the telecommunications industry, virtually all of which arise from improvements in technology resulting from research and development activities incurred through Bellcore. The commission finds that these expenses are funded currently by ratepayers. Therefore, since productivity gains resulting from these current expenditures are not recognized currently, the commission finds it is not appropriate to allow an arbitrary inflation adjustment.

The commission finds that if the company ultimately prevails on this issue in the supreme court, the amount of the adjustment will be permitted in rates effective at the time of the court's decision.

11. *Management Bonus*

(a) Staff Position

Staff witness Maginnis proposes an adjustment to disallow one-half of the expense charged for the 'officers long-term incentive plan,' 'officers short-term incentive plan,' 'management team incentive compensation plan,' and the 'Northwestern Bell bonus plan.' In docket (F–3442), the commission approved this same adjustment to eliminate half of the management bonus because the bonus was based in part on earnings maximization (decision and order, docket (F–3442)). The commission decision to eliminate half of the bonus was affirmed by the circuit court (memorandum decision).

Staff proposes the disallowance because the bonus was based on earnings maximization. Telephone subscribers should not be charged for the company's justifying rate increase; the ratepayers already reimburse the company for regulatory expense when the company raises its rates. Staff opposes company's contention that bonuses are in lieu of salary and therefore should be allowed because company management salaries are high without the bonuses. Company management salaries are generally more than 20% above the average for large companies. According to staff, company witness Wahlert has presented no evidence that the adjustment should be less than half the bonus, which was the amount disallowed by the commission in docket (F–3442).

(b) Company Position

Company presented testimony through company witnesses Kline and Wahlert in opposition to Mr. Maginnis' proposed adjustment to eliminate one-half of the bonuses for various management incentive plans. Company witness Kline testified that the Hay Study found that the company is paying management people appropriate and competitive salaries. Witness Kline also testified that the Hay Study recommended that the company leverage its position by basing a greater percentage of management salaries on incentives. Thus, rather than grant salary increases which the commission has never disallowed, the company developed the management bonus plans as recommended by the Hay Study. Company criticizes staff's conclusion that company's management salaries are too high as based upon a study which was outdated and not necessarily applicable to South Dakota. According to company witness Wahlert in docket (F–3442), only senior management bonuses were allowed. Witness Wahlert concluded that variance in treatment of management demonstrates there is no foundation for the one-half disallowance.

(c) Commission Findings

The commission finds that NWB should be allowed to recover the costs of management bonuses. The commission notes that rulings in prior dockets have not allowed NWB to recover the full costs of such bonuses. The commission finds, however, in the instant docket, the NWB has instituted a companywide compensation plan based on [the] Hay Study. The commission's understanding of the Hay Study plan indicates that good and sufficient reason exists for the commission to allow, contrary to previous decisions, bonuses paid to employees. The commission also finds that NWB's Hay Study compensation plan will be subject to review in subsequent rate increase filings, and that the commission will thoroughly review the implementation of the plan at that time.

12. *Pension Accrual Adjustment*

(a) Staff Position

Staff witness Maginnis adjusted the test-year pension costs for company's reduction in December, 1984, of its pension accrual rates retroactively to January 1, 1984. Staff witness Maginnis, however, opposes the further adjustment proposed by company witness Wahlert for 1985 increases in the accrual rates. Staff opposes the 1985 adjustments reflecting new pension accrual rates because those are interim rates, which are unreliable and subject to downward revision, according to experience in prior years.

In January, 1982, NWB's pension rate was 17.55% for management and $241 for nonmanagement; but later in the year those rates were revised downward retroactive to January, 1982, to a rate of 16.3% for management and $205 for nonmanagement. In September, 1983, the company revised its pension rates to 12.06% for management and $148 for nonmanagement, retroactive to January, 1983. Then, later in 1983, the company revised its pension accrual rates upward to 12.76% for management and $157 for nonmanagement. In June, 1984, the company revised its pension accrual rates downward to 12.39% for management retroactive to January, 1984, and kept the nonmanagement rate at $157; but in December, 1984, the company revised its accrual rates downward further to 12.81% for management and to $154 for nonmanagement, retroactive to January, 1984.

According to staff, the fluctuation in these rates illustrates the unreliability of interim accrual rates and demonstrates that these rates are often adjusted downward in the latter part of each year. Accordingly, staff opposes the 1985 changes offered by company witness Wahlert as unreliable. Staff, however, approves the December, 1984, pension accrual rates which the company made retroactive to January, 1984, as the most recent actuarially determined pension rates.

(b) Company Position

Company witness Wahlert testified that company's proposed pension accrual adjustment which is effective January 1, 1985, utilities the most current pension accrual rates. Company contends staff has offered no evidence to refute the proposed adjustement. Staff witness Maginnis testified that the appropriate pension rates to be used are those 'used to compute 'service pensions and death benefits' expense on the operating statement.' Company insists that this is precisely what the company has done in its pension adjustment. According to company witness Wahlert, the pension accrual rates have been adjusted to use the most current information available to determine 'service pensions and death benefit' expense levels. Company further points out that staff erroneously concludes that pension accrual rates will decrease later in the year since in 1983, one of the years cited by staff, the rates actually increased rather than decreased. According to company, since company's proposal utilizes the most recently available data, the pension rates ***451** used by the company should be accepted by the commission.

(c) Commission Findings

The commission finds that actual test-year pension costs should be reflected in rates. The commission rejects NWB's proposal to base test-year pension costs on interim accruals. The commission, similar to staff's proposal, finds that actuarially correct rates should be used. The commission finds, however, that NWB pension costs should be based on the year-end, actuarially correct costs for both 1984 and 1983 (adjusted for divestiture), but scaled back to reflect the test year. This calculation will necessarily include one month of divested 1983 data and 11 months of 1984 data. The commission finds that interim accruals based on estimates have fluctuated to such a degree that their usage would generate an unreliable test-year amount.

13. *Late Payment Charge Revenues*

(a) Staff Position

Staff witness Best recommends an adjustment of $553,426 to NWB's operating revenues to reflect the annualization of late payment charge revenues. In his calculation, Mr. Best derived an average monthly amount of $47,696 from the months of November, 1984, to March, 1985. Mr. Best excluded the October, 1984, result of a *negative* $41,524 from his calculation of the $47,696 average to arrive at a more representative average of late payment charge revenues. Mr. Best subtracted from the $572,352 the amounts of late payment charges already included in the test year resulting in a revenue adjustment of $553,426.

(b) Company Position

Company witness Wahlert presented testimony in opposition to Mr. Best's adjustment to annualize late payment charge revenues. She opposes the adjustment because net revenues have fluctuated as much as 246% since the implementation of the late payment charge and cannot be considered reasonably measurable, shifts are occurring in customer bill paying habits, and a sufficient history has not been established to accurately measure the effects of late payment charges. She also notes that Mr. Best is inconsistent in his approach in handling the October, 1984, late payment charge revenues and by doing this is trying only to manipulate his methodology without regard to the accuracy of its results. The company has provided a forecast of anticipated net revenues from late payment charges to be approximately $432,000 annually pursuant to staff Data Request 4–1 but does not believe that late payment charge revenue can be measured accurately with the available data.

(c) Commission Findings

The commission finds that staff's adjustment to reflect annualization of late payment charge revenues be adopted. The commission finds that staff's method of annualizing the revenues from the late payment charge most fairly reflects the expected future revenues. The commission finds no merit in NWB's position that no adjustment be made. The late payment charge allows NWB to directly recover costs that are reflected in test-year results. The late payment charge furnishes NWB with a vehicle to recover those costs. The result of not reflecting late payment charge revenues would be an obvious overrecovery. The late payment charge was initiated near the end of the test year, therefore, the commission finds it necessary to annualize the revenues which will accrue. Staff's method ***452** is the most reasonable annualization. Staff correctly ignored the negative October start-up costs when annualizing the revenues. A negative balance in the revenue account, if annualized, would most assuredly not reflect ongoing and expected circumstances which should be reflected in a representative test year. A finding otherwise would be absurd. The commission notes that NWB's forecasted annualization most nearly reflects the month in which payments were lowest, which if adopted, would result in a likewise unfair measurement.

The commission finds staff's adjustment, due to inclusion of the one-time start-up costs in test-year data, is likely to understate the ongoing effects of the late payment charge, a fact which should prove the adjustment conservative, to NWB's benefit.

The commission notes that staff Exh S–16 inadvertently was not placed into evidence. The oversight placed no burden on any party to the proceeding as the exhibit was made available to all parties prior to the hearing and the witness was presented for cross-examination during the hearing. The commission therefore rules that staff Exh S–16 will be officially made part of the record.

14. *Interest-tax Synchronization*

(a) Staff Position

Staff witness Maginnis performed a calculation to match interest expense for income tax purposes, with rate base and the weighted cost of debt. Mr. Maginnis included in his rate base the amount of telephone plant under construction ('TPUC'). Mr. Maginnis testified that NWB must finance TPUC, and similar to other financial plant, incurs interest charges in the process; and the interest, which is deductible for tax purposes, must be reflected in his calculation.

Mr. Maginnis testified that the component of rate base funded by the job development investment tax credit ('JDITC') is required by law to earn the overall rate of return designated by the commission. Mr. Maginnis also testified that this overall return is composed of the weighted return on equity and the weighted cost of debt, which is interest, and that to allow a return on the debt component of JDITC without recognizing a corresponding effect on tax expense would be inconsistent and unfair to ratepayers.

Witness Maginnis testified that the JDITC accumulated on the company's books represents amounts of tax credits enjoyed by the company, but which have not been passed through to ratepayers. Mr. Maginnis testified that ratepayers are required by law to pay the company interest on this investment, but since the ratepayers are the source of the funds, the interest is not passed through to debtholders, but is, instead, retained by stockholders.

Mr. Maginnis testified that Congress intended to divide the benefits of the investment tax credit. Mr. Maginnis testified that the courts and the Treasury Department have recognized that if the JDITC were treated as common equity only, then ratepayers would have to pay a higher rate of return on JDITC funds than the rest of rate base. Mr. Maginnis claims that the weight of legislative, administrative, and judicial review tends to view JDITC financing as proportionate equity and debt.

(b) Company Position

NWB witness Jeter testified that ratepayers are required by law to pay a return on the investment represented by ***453** JDITC credits rather than pay interest as claimed by staff witness Maginnis. Witness Jeter claims the regulations do not consider the return to be interest, even though the overall rate of return is used. Witness Jeter states that regardless of the authority cited by Mr. Maginnis, all that really matters, in the final analysis, is the Internal Revenue Service's ruling, because of the IRS' ability to not allow the company to take advantage of the credit. Mr. Jeter testifies that there already is a sharing of the benefit. Mr. Jeter also testified that he does not agree with staff witness Maginnis' adjustment to flow through the tax benefit of interest capitalized during the construction period of telephone plant.

(c) Commission Findings

The commission finds staff's adjustment to synchronize interest for income tax purposes to be correct. The commission finds that it is proper to flow through to ratepayers the tax benefits of interest expense associated with telephone plant under construction. The commission finds that it has consistently advocated flow-through principles when their usage does not jeopardize company's ability to take advantage to tax benefits.

The commission also finds it proper to include the portion of plant financed by job development investment tax credit (JDITC) in derivation of an appropriate level of interest expense. The commission finds, in agreement with the courts cited in staff's brief, that the JDITC does not change debt/equity ratios, and therefore plant funded by JDITC should earn the overall return, and imputed interest should be used to calculate income tax allowances.

NWB has characterized the adjustment as one which reflects hypothetical tax benefits of two items of hypothetical interest expense.

NWB also claims that staff's recommendation, in violation of IRS regulations, will not allow them to earn the overall rate of return on the JDITC investment.

The commission finds NWB's arguments fail to address the issue. The socalled 'hypothetical' is a commonly used tool in making rates. The issue is determination of the proper rates. This adjustment matches interest on debt which is accounted for in the revenue requirement, with interest expense reflected in the income tax allowance, which is also in the revenue requirement.

The commission noted NWB's argument that the JDITC came from the United States Treasury by means of tax credits. Although it is not central to the issue, the commission feels compelled to point out that the funds were not provided by the United States Treasury, but by ratepayers who were and are legally subject to pay for a hypothetical income tax expense which is not fully returned to them.

The commission notes the proposed IRS rule making regarding investment credits. The commission, NWB, and staff have all been concerned about jeopardizing company's ability to utilize the JDITC. It has now become clear through case law, IRS actions, and the IRS proposed rule making that this matter may be, as described above, properly treated for rate-making purposes without fear of possible IRS action to revoke the credit.

15. *Excess Profits to Bellcore*

(a) Staff Position

Staff witness Maginnis recommended that operating expenses be reduced to reflect a reasonable return on total capital of 11.49% on charges which the company pays to Bellcore, an affiliate of the company.

Mr. Maginnis testified that Bellcore provides services similar to those provided by Bell Labs prior to divestiture. These services are more efficiently provided on a national rather than a regional or local basis and are primarily technical in nature, consisting of such activities as network engineering, marketing, research, and computer and system software development. Mr. Maginnis testified that Bellcore's projects are of two types, 'core' projects which are allocated in equal amounts to the regional companies and 'noncore' projects which are allocated only to the using regions and through them to their subsidiaries. Bellcore recovers their direct costs and a return which Mr. Maginnis testified is purportedly designed to achieve a 15% return on equity after taxes. Mr. Maginnis testified, however, that according to his calculations Bellcore earned almost a 19% return on equity, on an annualized basis, for the first 11 months of 1984. Mr. Maginnis testified that Bellcore earned such a return because it includes in equity not only stockholder's equity but deferred taxes and investment tax credits as well, which Mr. Maginnis testified is not appropriate since these taxes were not even paid. Mr. Maginnis testified that these excess returns being charged to the regulated ratepayers through payments to Bellcore may be used to subsidize the competitive activities of the seven regional holding companies in such areas as cellular radio, interLATA communications, or CPE development and marketing, for which Bellcore is also capable of providing services. Accordingly, Mr. Maginnis computed the difference between the actual annualized return earned by Bellcore and a reasonable return for Bellcore to earn on its work charged to NWB, and recommends disallowance of the difference. Staff determined that a reasonable return, in its view, would be that return recommended for the company in this case based on the facts that Bellcore provides functions of the type that would otherwise be provided by the Bell OTCs, that these activities are provided for the OTCs, and that Bellcore asks to be reimbursed on a 'cost plus profit' arrangement.

Mr. Maginnis also testified that the allocation by Bellcore of 'noncore' project costs to using regions should be modified. Mr. Maginnis recommends that these costs should be allocated by Bellcore based on the subsidiaries rather than the regions which benefit from the projects. According to Mr. Maginnis, the method currently used by Bellcore to allocate these costs results in an overallocation to NWB because if another U S WEST subsidiary chose not to participate in a given project, it arbitrarily results in more of that project's cost being charged to NWB. In this case, Mr. Maginnis did not propose an adjustment to correct this allocation process because the effects are immaterial.

(b) Company Position

Company witness Barnes testified that the adjustment proposed by Mr. Maginnis to disallow Bellcore excess profits is not appropriate. First, Ms. Barnes testified that it is not appropriate to determine Bellcore's earnings on the basis of a hypothetical capital structure. She testified that Bellcore's earnings should be evaluated on the basis of its actual capital structure. Secondly, Ms. Barnes testified that it would not be appropriate to have Bellcore's return set by the particular regulating state rather than the competitive market rate set by investors in research, engineering, and consulting firms. Ms. ***455** Barness testified that Mr. Maginnis' method would require Bellcore's return on equity to vary from state to state.

With regard to Mr. Maginnis' objection to the method used by Bellcore to allocate 'noncore' project costs, Ms. Barnes testified that for Bellcore to bill only the participating subsidiaries of a region would greatly increase the complexities and expense of Bellcore's billing process, which would greatly exceed any supposed benefit to be derived from Mr. Maginnis' suggestion.

(c) Commission Findings

The commission finds that the adjustment proposed by staff to eliminate excess profits paid to Bellcore is proper for the reasons set forth in (a) above.

The commission finds that Bellcore provides functions of the type which would otherwise be provided by the Bell operating telephone companies and that Bellcore's method of reimbursement is a 'cost plus profit' basis. The commission finds that Bellcore's 100% equity is only nominal and that since Bellcore is owned entirely by the telephone companies for whom services are provided, it is appropriate to utilize the overall rate of return on rate base granted herein to evaluate the reasonableness of the profits NWB has paid to Bellcore. The commission finds that Bellcore has no competition and is not comparable in its business and financial risks to independent research firms. The commission finds therefore that Bellcore's rate of return would not appropriately be set in comparison to competitive market rates set by investors for research, engineering, and consulting firms as asserted by the company. The commission finds that the overall rate of return to be utilized in computing this adjustment is 11.9%, based on the return on equity and capital structure decisions contained here.

The commission finds that many multijurisdiction utilities, including NWB, have different returns among various state jurisdictions. The commission further finds that even affiliates of multijurisdictional utilities have different returns among various state jurisdictions. Therefore, the commission finds no merit in the company's contention that staff's method will lead to erratic results for Bellcore among state jurisdictions.

The commission finds that the authority to make this adjustment is well established. The commission finds that according to express statutory policy in South Dakota, the 'burden of proof shall be on the public utility to prove that no unreasonable profit is involved.' SDCL 49–34A–19.2. The commission further finds that it is well established that telephone rates should not cover more than a reasonable return on services or products provided by an affiliate to the telephone company. Re Northwestern Bell Teleph. Co. (1950) 73 SD 370, 85 PUR NS 368, 43 NW2d 553.

16. *Shareholder Service Costs and Consolidated Tax Savings*

(a) Staff Position

Mr. Maginnis testified that because U S WEST has taken major steps toward entering various competitive businesses in both communications and noncommunications fields and because U S WEST allocates certain costs to both its unregulated and regulated services, there could result a classic case of subsidization of unregulated activities by regulated service. Therefore, Mr. Maginnis testified that the commission should be very concerned about the allocation of U S WEST costs to NWB because to the extent that ***456** shareholder service or federal relations costs are underallocated to the competitive arena and overallocated to NWB, the holding company will enjoy an advantage over its competitors while its regulated companies pay improper and excessive costs.

Mr. Maginnis testified that in order to assess the reasonableness of these cost allocations, he requested materials to enable him to review the allocation of the charges to all of U S WEST's subsidiaries, to review budget documents at U S WEST which approved expenditures for the allocated activities, and to review financial statements of U S WEST's subsidiaries to evaluate whether the allocators were reasonable. Mr. Maginnis testified that U S WEST failed to provide the requested material, claiming that the requests were either 'irrelevant' or 'oppressive' or not available. Mr. Maginnis therefore recommended that because U S WEST failed to provide information which would support its allocation of expenses to NWB, that these allocated expenses be disallowed.

Mr. Maginnis also testified that the company failed to provide information relative to the U S WEST consolidated tax return, stating that 'U S WEST has not yet filed a consolidated federal income tax return or such a return on the state or local level,' ignoring the staff request for expense *accrual* work papers for the test year.

In brief, staff argues that the commission should disallow the shareholder service costs, even if these were eventually determined to be otherwise chargeable to ratepayers, until the consolidated tax information is forthcoming. As to NWB's statement that U S WEST has not yet decided whether to file a consolidated tax return, staff argues in brief that U S WEST's choice is irrelevant because to the extent that U S WEST could achieve consolidated tax savings by filing a consolidated tax return, the ratepayers are entitled to share in the consolidated tax savings.

(b) Company Position

The company position is that the value of the services provided by U S WEST is undisputed, that if each state's operation were responsible for providing these services, it would be extremely wasteful and that these costs should be allowed in their entirety. Ms. Barnes testified that through her direct testimony, responses to data requests, and in rebuttal testimony, the allocation procedures in operation have been demonstrated. At brief, the company argues that it produced all the data relating to itself and most of the data relating to U S WEST and its unregulated subsidiaries. The company states in its briefs that some of the data requested by staff simply does not exist.

Ms. Barnes testified that there is no substance to the claim that NWB is subsidizing the nonregulated subsidiaries of U S WEST because there are separate accounting systems and a structural separation between regulated and unregulated entities.

(c) Commission Findings

The commission's findings will be discussed under Directory Income.

17. *Directory Income*

(a) Staff Position

Staff witness Maginnis testified that an adjustment should be made to test-year operating income for net directory revenue in an amount which assumes that the transfer of the directory function to U S WEST Direct, and affiliate, had not occurred. Mr. Maginnis testified that pursuant to the divestiture, U S WEST create U S WEST Direct to perform directory functions, both white and Yellow Pages, previously performed by NWB. Mr. Maginnis testified that traditionally, directory advertising has been one of the more profitable telephone operations, citing evidence obtained from other jurisdictions that loss of this function will increase monthly telephone rates substantially. Mr. Maginnis testified that the arrangement between NWB and U S WEST Direct provides no assurance that ratepayers will receive continued benefits after the initial three-year period, during which time NWB will receive ‘transition fees' totaling $13 million in addition to the annual ‘publishing fees.’

Mr. Maginnis testified that available evidence suggests that a loss of contribution has already occurred in South Dakota. Mr. Maginnis compared the increase of 1.55% during the test year to historical data which showed increases over the past several (predivestiture) years averaging 10%.

Because staff had been refused access to financial statements of U S WEST's nontelephone subsidiaries for the test period, Mr. Maginnis testified that he performed a linear regression analysis to obtain a more realistic calculation of the level of contribution from directory operations during the test year, assuming that no transfer to U S WEST Direct had taken place. Mr. Maginnis testified that in his view the calculation represents a reasonable level of directory contributions, but that if the commission were to require NWB to submit the data to enable him to determine if unreasonable profits were involved, refunds could be made, if appropriate.

(b) Company Position

Mr. Buch provided testimony on behalf of the company to the effect that because of growing competition in the directory business, the regression techniques used by Mr. Maginnis to project the financial results he did are far too optimistic. Mr. Buch testified that growth in net revenues from directory functions was only 2.6% in 1983, showing an obvious declining trend from the average of 10% from 1980–83.

Mr. Buch testified that competition in the telephone directory business is growing rapidly. For example, Mr. Buch said between 1975 and 1981 memberships in the National Yellow Pages Service Asso. (NYPSA) grew from 20 to 100. Today, according to Mr. Buch, over 200 publishers produce telephone directories. NWB had 58 listing agreements with other publishers in November, 1983, according to Mr. Buch and today has 86 such agreements. Mr. Buch testified that in South Dakota, there are 26 directories published, 15 published by other companies and 11 by U S WEST Direct. Of these 15, Mr. Buch testified that 13 books compete directly with NWB books, and the competitors' books are less expensive to advertise in than U S WEST Direct's books. Mr. Buch testified that according to a 1983 study, several competing directories get over 70% of their revenues from NWB business customers. Mr. Buch testified that 25% of the towns in South Dakota are covered by more than one directory.

Mr. Buch presented several articles from various publications to show that the increasing competition in this area is widely recognized, to show how relatively easy it is to form a directory company, to show that companies like U S WEST Direct will face major competition, and to show that directories will have to compete with companies offering electronic directories.

Mr. Buch testified that revenue growth ***458** since 1980 would have declined if there had been no price increases. Mr. Buch also testified that, in addition to being vulnerable in terms of its high rates, U S WEST Direct faces pressure to increase its expenses in publishing the directories in order to enhance the features of its books in order to keep up with the competition.

Mr. Buch testified that if gross revenues are lost due to competition, it may well mean that the publishers will sustain a loss and he concluded therefore that Mr. Maginnis' adjustment should not be made.

Mr. Quinn also testified on this issue on behalf of the company with regard to the regression analysis performed by Mr. Maginnis. Mr. Quinn testified that staff's methodology does not define the best fit for directory revenues and expenses. Mr. Quinn used what in his view was a more appropriate equation for directory expenses and the results were to increase staff's estimated expenses by almost $45,000. Mr. Quinn testified that he additionally calculated the percentage change from year to year and forecasted the percentage change for both revenues and expenses, using the same basic data as staff had, but including 1978 and 1979 data, which staff did not. While Mr. Quinn testified that his forecasted expenses were within $7,000 of staff's, his revenue estimate was $238,780 lower than Mr. Maginnis'. To determine which estimate was most reasonable, Mr. Quinn prepared a graph plotting the actual percentage increases in revenues from 1979–83. Mr. Quinn testified that his estimated growth fit in well with the graph of historical trend of directory revenue increases, while Mr. Maginnis' was too high.

(c) Commission Findings

The commission finds that these adjustments proposed by staff witness Maginnis have merit and should be explored in more detail after full and complete information has been provided by the company. The commission finds that pending receipt of the additional information (discussed more fully in the order to compel production of documents), the adjustments proposed by staff shall not be made. The commission finds, however, that this determination should be made subject to refund. In other words, if after the additional data has been provided and further analysis is completed it still appears that adjustment is warranted, the company shall be required to refund, on an annual basis, the amount of each adjustment.

III.

Rate of Return

18. *Capital Structure*

(a) Staff Position

Staff witness Copeland recommends the use of a hypothetical capital structure in this proceeding. He recommends that the company's actual common equity ratio of 57.2% be reduced to 50% and that its actual debt ratio of 42.8% be increased to 50%. Mr. Copeland testified that the standard which should be utilized by the commission in determining the appropriate capital structure is one which minimizes total costs to the ratepayers while satisfying the investors' desires to maintain the security of their investment.

In support of his hypothetical capital structure recommendations, Mr. Copeland pointed out that a higher equity ratio leads to higher return requirements because the equity return is fully taxable. He pointed out that interest expense, on the other hand, is tax deductible. Mr. ***459** Copeland stated that the higher return requirements associated with a higher equity ratio exceed the advantage gained by a higher debt rating, which tends to be derived, in part, from a higher equity ratio. Because the cost to the ratepayer is greater the higher the equity ratio, Mr. Copeland, on the basis of his studies, concludes and recommends that regulatory commissions should *not* follow a policy of allowing the earnings necessary to secure AAA bond rating. Rather, Mr. Copeland advocates earnings necessary to support a solid A bond rating as optimal, consistent with the standard of minimizing total costs to the ratepayers while satisfying the investors' interests in the safety of his capital. Mr. Copeland testified that bond ratings lower than A may lack adequate financing flexibility and that bond ratings higher than A are not worth the cost.

In support of his theory that a debt ratio of 50% is consistent with an A bond rating, Mr. Copeland testified that independent telephone companies have an average debt ratio of 49.7%, yet they appear to experience equity costs no higher than the cost of equity capital for regional Bell holding companies. Mr. Copeland also cited a recent example when Pacific Bell, with a debt ratio of 49%, sold bonds at a yield equivalent to the AA Southern California Edison bonds.

Mr. Copeland further testified that the company's equity ratio should be lowered by the commission because as a regulated utility, the company faced fewer risks than unregulated businesses operating in a competitive environment. Mr. Copeland also testified that the operating risks for NWB in South Dakota are less than the operating risks of NWB as a whole, citing a Standard & Poor's rating agency document as the basis for the conclusion.

In support of his contentions that utilities face fewer business risks than unregulated firms, Mr. Copeland testified that while utilities may recover their cost of production under regulation, competitive firms can price their products at no more than what the consumer is willing to pay, even if this is below the cost of production. Additionally, utilities may recover their fixed costs over fewer units of production in periods when demand fails to materialize as expected while competitive firms receive no such relief. Mr. Copeland further testified that the utilities' practice of capitalizing and later recovering interest during construction represents another benefit which unregulated firms do not enjoy since such costs are not a component of the unregulated businesses' short-run marginal costs. Another factor making utilities less risky generally is that the process of regulation can result in respite from inflationary cost pressures through reclassification as customer service is expanding. By being allowed frequent rate adjustments based on cost-of-service pricing, utilities enjoy a measure of protection during periods of rising costs unavailable to companies in competitive markets. Mr. Copeland testified that telecommunications utilities have experienced fewer problems with regulatory lag than other regulated utilities, such as electric utilities whose fuel costs increased tremendously after the 1973 embargo. There was little technological progress in this industry which would ameliorate the effect of these rising fuel costs on the price of electricity. By contrast, Mr. Copeland testified that telecommunications utilities have been and are still in a period of technological progress, which has worked to mitigate inflationary pressures. Nor, according to Mr. Copeland's testimony, have telecommunications utilities had to cope with ***460** the cost and uncertainty of environmental controls, lengthening lead times, and associated uncertainty of bringing new units of production on line.

As a final example of the higher risks faced by competitive firms, Mr. Copeland stated that while regulated utilities virtually never have to write off obsolete assets 'below the line' this frequently occurs in the unregulated sector of the economy.

(b) Company Position

The company position, presented through the testimony of witnesses Cummings and Fleming, is that the actual capital structure is appropriate for use in this proceeding.

Witness Cummings testified that the company's South Dakota operations are not less risky than the company's operation as a whole, as asserted by staff witness Copeland. In fact, Mr. Cummings testified that a stand-alone South Dakota operation would have less geographic diversification, only one local economy, and only one regulatory body to set its rates and consequently would be a higher-risk operation than the present, existing structure of the company. Moreover, Mr. Cummings pointed out that the Standard & Poor's document referred to by Mr. Copeland actually categorized NWB as in Group III and that the company's five states were not categorized individually.

Mr. Cummings further testified that the capital structure recommendation of Mr. Copeland is a hypotheitcal structure which cannot be analyzed or used by investors, bond rating agencies, or security analysts. Because rating agencies and securities analysts examine a company's present position and expected future position in their evaluations, the actual capital structure representing the actual financial risk is the starting point. Moreover, Mr. Cummings testified, bond ratings are complex, considering both qualitative and quantitative criteria which are not made public by the institutions.

Mr. Cummings testified that the assumptions implicit in Mr. Copeland's hypothetical capital structure recommendations are not plausible; to wit, Mr. Copeland assumes his capital structure will result in an A bond rating and a 13.8% cost of equity. Mr. Cummings testified that this is not plausible to him in light of the fact that a 14% return is available from U S WEST, a company with 43% debt, which would be a lower risk investment than an investment returning 13.8% on stock in a 50% debt company.

Mr. Cummings testified that adoption of a hypothetical capital structure would prevent the company from earning its authorized rate of return because it would attribute to the company more debt than it actually has.

According to Mr. Cummings' testimony, adoption of a hypothetical capital structure will lower the credit quality of NWB's bonds, raise the risk of investment in the company and the cost of equity, and cause NWB to issue bonds worth $228.9 million in exchange for common stocks. Mr. Cummings testified that in light of increased business risks caused by increased competition and increased financial risks caused by divestiture, it would not be prudent for the company to take on a higher debt load.

Mr. Cummings characterized Mr. Copeland's view of the company's financial objective as that of securing debt rating as simplistic. Rather, Mr. Cummings testified that the company's financial objectives are varied and attempt to enable the company to raise capital at the most reasonable cost.

Mr. Cummings testified that by employing Standard & Poor's benchmarks ***461** for debt rating, he infers that Standard & Poor's would view the company's *actual* capital structure as indicative of an A bond rating only.

Finally, Mr. Cummings presented a comparison of NWB's capital structure to other operating telephone companies' capital structure. According to his comparison, NWB's debt ratio of 44 is right at the average of the 27 companies he compared. Mr. Cummings noted that the independent telephone companies who were not affected by the divestiture have been reducing their debt ratios, reflecting the increasing risk in the telecommunications business and consequent need for more conservative capital structure. Mr. Cummings testified that not one of the 27 companies he compared had a debt ratio of 50%.

Mr. Fleming presented testimony on behalf of the company to the effect that NWB is facing increased business and financial risks which dictate that the capital structure should include decreasing, not increasing amounts of debt. Mr. Fleming testified that the company's goal should be a 40% debt ratio, although future circumstances could dictate a 35% debt ratio.

Mr. Fleming testified that the unprecedent high level of business risks now faced by telephone companies results from the newly competitive environment, the divestiture, technological improvements which may result in inadequate capital recovery, and subsidies and pricing disparties in the company's current tariff structure.

Mr. Fleming testified that unless NWB can compete effectively in the new environment, it will lose customers. As regards the divestiture, Mr. Fleming testified that there is a risk that carrier common line charges (CCLCs) recently instituted as compensation for the loss of participation in intrastate-interLATA toll may not be adequate to cover fixed costs. Moreover, if CCLCs are perceived as too high, certain customers may bypass the network. Other factors resulting from the divestiture which have increased business risks are that there is no longer an AT&T umbrella to rely on which if an unusual circumstances occurred in one region of the country, it could be offset by another region and secondly, after divestiture former Bell companies cannot provide any service which is not a natural monopoly subject to tariff provisions. This prohibition restricts NWB to the single business of providing local exchange services.

Mr. Fleming testified that increasing competition, which has evolved principally due to pricing disparities, has allowed competitors to selectively invade NWB's market in a wide range of areas. As a result, rates will prospectively be restructured so that local rates will reflect costs of providing service more accurately. This rate restructuring carries with it, according to witness Fleming, a high degree of risk that bypass will occur, resulting in the loss of customers, thereby burdening even more the remaining customers.

Mr. Fleming testified that technological improvements pose a risk, especially in the competitive environment, in that the investor will have to assess the company's ability to recover its investments in equipment through rates.

As regards increased financial risks facing the company, Mr. Fleming testified that upon divestiture, the transfer of equity to the parent resulted in debt ratios increasing, thereby increasing financial risk. Secondly, the new parent companies, which will provide equity infusions to the telephone companies as AT&T formerly provided to the Bell operating companies, have no track record in the equity market. Because these new parent companies have never sold common stock, Mr. Fleming testified that there is some uncertainty concerning the availability and cost of such an equity contribution. Because the company does not have complete control over the amount or timing of any equity infusion, Mr. Fleming testified that maintenance of a strong capital structure is required.

Mr. Fleming testified that the risks imposed by inflation may be greater today because productivity gains, which offset the effects of inflation, have traditionally been higher in the long-distance market. Mr. Fleming testified that government regulation may inhibit the elimination of subsidies, resulting in the customers contributing that subsidy to use alternative means of communication.

Mr. Fleming testified that Duff & Phelps has given the company's debentures a D & P–2 rating, on the basis of both the qualitative and quantitative measures which are used in evaluating a company's credit worthiness.

Mr. Fleming testified that telephone utilities are riskier than electric utilities because telephone companies have higher business risks and must have stronger same senior debt rating. According to Mr. Fleming's exhibit which compares electric and telephone utilities rated D & p–2 through D & P–4, the divested telephone companies have median estimated 1985 debt ratios of 43% and 1985 estimated coverages of 4.4 times compared to electric companies which are, on average, 45% and 4 times, respectively.

Mr. Fleming testified that telephone utilities are beginning to be viewed by investors as having more of the business risks usually associated with capital-intensive industrial companies. The fixed income parameters of industrial companies rated D & P–2 through D & P–4 show that, with respect to fixed charge coverages, the distinction between capital intensive industries and utilities is narrowing.

(c) Commission Findings

The commission finds that the actual capital structure of the company shall be utilized for purposes of determining the company's overall rate of return in this proceeding.

The commission finds that it has the authority to adopt a hypothetical capital structure for rate-making purposes as it did in Re Northern States Power Co. (F–3382), Dec. 15, 1981, which decision of the commission was subsequently affirmed by the circuit court. The commission finds that while there is merit in staff witness Copeland's hypothetical capital structure recommendation, we decline to adopt it at this time. The commission finds that the company should be given more of an opportunity to realign its postdivestiture capital structure. In deciding the issue in this manner the commission finds that the whole capital structure issue will be closely examined in the next rate proceeding.

19. *Return on Equity*

(a) Staff Position

Staff witness Copeland derived his return on equity recommendation of 13.8% by applying discounted cash-flow ('DCF') theory. Mr. Copeland applied the theory to the NWB parent company, U S WEST, as NWB, being a wholly owned subsidiary has no direct access to equity capital markets. Mr. Copeland testified that appropriate return for U S WEST is not necessarily appropriate for NWB, but recommended that any consideration of these differences may be noted or adjusted for in the capital structure. Mr. Copeland then suggests that if the commission chooses not to adopt staff's recommended capital structure adjustment, it would be appropriate to authorize a rate of return at the low end of his range of reasonableness.

Mr. Copeland testified that the traditional approach to estimating the cost of equity utilizing the DCF theory focuses on deriving an estimate of growth at the margin (g). He further testified that principal methods of estimating the growth rate are (1) extrapolations of historical trends in earnings, dividends, or book value, (2) security analysts projections, and (3) independent 'fundamental analysis' that focuses on the underlying determinants of growth. Witness Copeland considers the third method the most reliable and subject to the least abuse. He then utilizes the 'sustainable growth rate' formula as his basis of analysis. Mr. Copeland testified that the formula can sometimes disclose trends that will allow one to project a future growth rate more in accord with investors' expectations than what could be accomplished through usage of an extrapolation of past growth rates. Mr. Copeland testified that the 'sustainable growth rate' formula requires three basic inputs: the dividend yield, the earnings retention rate, and the return on equity.

Witness Copeland testified that calculation of the dividend yield should be based on an average stock price from some recent period of time in order to avoid unusual highs or lows that would not prove to be representative. Mr. Copeland's analysis showed a recent rise in the U S WEST stock price attributable to an increase in the indicated dividend rate, and on that basis used a price of $74 in his calculation of the dividend yield. Witness Copeland also testified that the current dividend should be used in computing dividend yield. He demonstrated that many analysts argues that the dividend should be adjusted one year forward, but argued that such an adjustment is inappropriate as dividends are paid quarterly. Mr. Copeland's computed dividend yield is 7.7%.

Witness Copeland testified that because U S WEST has no past performance to make reference to, it is more difficult to identify the growth portion of the DCF formula. Mr. Copeland's growth formula, $g = br$, identifies b (retention rate) and r (return on equity) inputs for measuring a sustainable growth rate. Witness Copeland utilized security analysts' projections for the determinants of growth, whereby the estimates for the next four to five years for return equity ranged from 14% to 15% with a dividend payout of 55% to 60%. He then calculated a sustainable growth rate of 5.6% to 6.75% per year, which after being added to the current dividend yield of 7.7% produced a required return on equity in the range of 13.3% to 14.45%.

Mr. Copeland's analysis of the required return on equity was inclusive of a determination of an appropriate allowance for underpricing and flotation costs. Witness Copeland testified it is proper to make allowance only for newly issued shares. He then specified a formula to determine a rate of return sufficient to avoid dilution. Based on Mr. Copeland's analysis an allowance of .00012 or 1.2 basis points would adequately compensate for flotation and underpricing. Mr. Copeland then stated that through the process of rounding to the nearest one-tenth of 1%, the .00012 allowance does not have to be explicitly added to the return allowance.

Witness Copeland performed supplementary analyses to test for 'measurement error' in his estimate technique. ***464** His additional analysis focused on eight independent telephone companies plus the seven new Bell operating companies. Mr. Copeland used two separate techniques in performing the evaluation. The first method utilized the 'Goron' or 'constant growth model.' Mr. Copeland corroborated his initial recommendation in this exercise. For purposes of this analysis, Mr. Copeland used certain qualified data from Value Line. Mr. Copeland also used the Value Line data in his second supplementary analysis. This process estimated the cost of equity through the usage of a 'nonconstant' growth model. Witness Copeland testified that he does not consider the 'nonconstant' growth model to be more reliable for deriving cost of equity than the constant growth model, but performs this analysis in answer to criticism of the constant growth model. Witness Copeland employed a 'multistage' DCF model in his nonconstant growth model. Witness Copeland testified that his model differs from certain other models in that he includes an assumption of equilibrium, which requires cash flows be discounted based on growth in market price rather than dividend growth. Witness Copeland testified that where dividends, earnings, and prices grow at different rates, market expectations are based on projected price appreciation, not dividend growth. Mr. Copeland distiguishes this model from ones which use a simple internal rate of return calculation as this model finds the required return rather than the average expected return.

Witness Copeland testified that contrary to NWB witness Johnson's Opinion, it is not necessary to examine nonregulated companies when estimating the cost of equity, as the DCF approach is self-correcting and not circular. Mr. Copeland stated that this is due to the DCF being based on the market's evaluation of the firm's earnings.

Staff witness Copeland testified that Professor Johnson's growth rates are upwardly biased due to the historic period used. Mr. Copeland also made the distinction between expected and required returns, and criticized Professor Johnson's risk premium analysis. Mr. Copeland testified that investors are not requiring returns on equity that are substantially above bond yields.

(b) Company Position

Dr. Johnson testified that the market cost of equity for NWB is in the range of 15.25% to 16%, and that this level of equity return is necessary if the market price is to be equal to book value. Dr. Johnson also testified that in order to avoid dilution, the market price should be above book value. Dr. Johnson then recommends that an additional 50 basis points be added to the recommended equity return in order to cover underwriting costs. Dr. Johnson further recommends a single point cost of equity of 16%.

Dr. Johnson testified that rates of return on alternative investments rose dramatically during the 1970s and early 1980s, peaking in early 1982, and then decreasing through part of 1983. Dr. Johnson stated that 1984 saw increasing returns through the early part of the year, with some abatement in latter 1984.

Witness Johnson testified that in analyzing the cost of equity, it is important to begin with a 'ball park' estimate in order to more easily spot errors produced by more sophisticated processes. Dr. Johnson then established a yield of 12.75% on long-term, high quality utility bonds and maximum risk premium of 5.5% on high quality corporate bonds. NWB witness Johnson then concludes that a reasonable benchmark for return on equity is 18%. Dr. Johnson then assumes at this time a narrower, more conservative spread between bond yields and equity returns which brings his benchmark down to the 16% to 17% range. Dr. Johnson describes this range as very conservative given the current low inflation rate and higher degree of risk and uncertainty facing the telephone industry.

NWB witness Johnson identified unusual complications in developing the proper equity return for NWB. The first is NWB's subsidiary relationship to U S WEST. The second is recognition that U S WEST is a new entity whose stock has been traded for only a short period of time. He testified that further complications are due to uncertainty in the telephone business, regulatory uncertainty, and uncertainty due to competition.

Witness Johnson used the DCF as his basic method of analysis. Dr. Johnson then estimated the cost of common equity for a group of low-risk utilities and a group of low-risk nonutilities, and stated that the cost of equity for U S WEST is at least as high. Dr. Johnson stated that he tested the equity cost of nonregulated companies in order to avoid problems of circularity and resultant bias. Witness Johnson testified that it is also necessary to use nonutility companies because historical growth rates have been low for utilities, and usage of the low historical growth rates as a proxy for future growth will result in equity cost estimates that will be too low. He testified that his group of nonutility companies had historical growth rates whose past growth is more indicative of the utilities' probable future growth. Dr. Johnson then testified that the allowed rate of return should be set higher than the DCF cost of equity in order to avoid dilution on common stock issuances.

Dr. Johnson testified that the dividend yield is based on dividends to be paid in the following period as future cash flows are paid for in the current price. Dr. Johnson stated that the growth term is the growth rate in dividends expected by investors, and must be subject to estimates. Dr. Johnson testified that the most commonly used methods of estimating expected growth are historical measures, implied growth rates, and analysts' estimates of prospective growth. Dr. Johnson testified that growth arises from the internal investment of retained earnings. Dr. Johnson testified that the growth rate in book value, earnings, and dividends all are dependent upon the rate of return on book equity and pay-out ratio, and that when the net proceeds of a stock sale are different than book value, growth will be reduced or increased.

Dr. Johnson states that the expected growth rate estimate must evaluate all of these variables, and that there is no single best guide to estimate expected growth. Dr. Johnson testified that an average of several growth rates is objective and minimizes the possibility of error. Dr. Johnson determined 13 different growth rates for each company in his groups. These growth rates included loglinear historical growth rates, implied growth rates, and growth forecasts made by Value Line and Merrill Lynch. Dr. Johnson averaged these growth rates so no single growth rate was given heavy weight.

NWB witness Johnson's group of companies were selected on the basis of high earnings predictability, low risk, and inclusion by both Merrill Lynch and Value Line.

NWB witness Johnson's analysis based on a simple average procedure produced a growth rate of 10.57% for the nonutility group and 6.10% for the utility group, ***466** with resulting cost of equity estimates of 15.34% and 15.07%, respectively. Dr. Johnson's analysis based on the removal of outliers for the nonutility group's cost of equity yielded 15.49%, and for the utility group, 14.98%. Dr. Johnson concludes that the poor performance of the utility group over the period analyzed results in a downward bias. Dr. Johnson then states his estimate of the cost of equity to be between 15% and 15.5%.

Dr. Johnson testified that he performed additional analyses based on Value Line and Merrill Lynch forecasts, which produced market costs of equity of 15.38% and 15.3%, respectively. Dr. Johnson testified that this analysis implies a slight decrease in the return on equity, and performed an analysis for the latest 12-month period which produced returns on equity of 15.81% for the utility group. Dr. Johnson testified that this analysis dictates a range of 15.25% to 16% for the cost of equity.

Dr. Johnson performed a DCF analysis of U S WEST. Dr. Johnson testified that U S WEST would earn a return of 13.5% for its first year, a number which he considered low in view of debt costs. Dr. Johnson testified that U S WEST's dividend yield and implied growth rate for 1984 combined for a 14% equity return, which he termed too low, and concluded that an increase in the rate of return on equity is expected.

Dr. Johnson stated that due to uncertainty, investors will base their U S WEST growth expectations primarily on analysts' forecasts. Dr. Johnson averaged Value Line and Merrill Lynch forecasts of dividend and earnings growth to estimate a 15.6%

cost of equity. Dr. Johnson testified that the growth forecasts imply higher rates of return even though Merrill Lynch implies a 1988 U S WEST rate of return of 14.17%. Dr. Johnson testified that the Merrill Lynch forecast is conservative due to the current industry uncertainty. Dr. Johnson performs further analyses of U S WEST based on Merrill Lynch and Value Line which yielded a 14.85% and 14.95% return, respectively.

Dr. Johnson testifies that these results are not realistic given the higher level of risk and uncertainty prevailing in the telephone industry as compared to his test groups of companies.

Witness Johnson testified that the required rate of return is above the 15.25% and 16% range in order to account for and offset expected dilution when new shares are issued. Dr. Johnson testified that a 10% to 15% allowance for total underwriting cost is justified, but recommended a 5% allowance. Dr. Johnson then applies the 5% allowance to the dividend yield factor of 9%, resulting in an aoproximate .5% increase to the required rate of return. Dr. Johnson's range then moves upward from 15.75% to 16.5%, which his point estimate being 16%.

Dr. Johnson criticizes staff witness Copeland's reliance on forecasted U S WEST equity returns of 14% to 15%, and pay-out ratios of 55% to 60%. Dr. Johnson testified that Mr. Copeland's reliance on forecasted b and r was improper for usage in his continuous growth model. Dr. Johnson also testified that most analysts provide forecasted growth rates rather than forecasted b and r.

Dr. Johnson testified that staff witness Copeland's supplementary analysis is flawed due to his complete reliance on Value Line and errors in his constant and nonconstant growth models. Dr. Johnson stated that Mr. Copeland's constant growth model is in error due to measurement errors in the long-term growth rate, errors which bias the growth rate downward. Dr. Johnson testified that there is no reason to believe investors would ***467** rely on the one and only method used by Witness Copeland. Dr. Johnson testified that using Value Line's growth estimates and resultant earnings growth estimates delivered a growth forecase for the independent telephone companies which was 1% above Mr. Copeland's estimate. Dr. Johnson's average DPS growth calculated from Value Line was below Mr. Copeland's estimate. Dr. Johnson concluded that since pay-out ratios cannot continuously decline, in his opinion, investors would be more concerned about the earnings growth forecasts. Dr. Johnson testified that for the regional Bell holding companies, both the EPS and DPS Value Line forecasts were above Mr. Copeland's growth forecast. Dr. Johnson's comparison of Merrill Lynch forecasts with Mr. Copeland's forecasts also shows a higher return. Dr. Johnson testified that Merrill Lynch and Value Line growth estimates, in isolation, do not provide satisfactory growth estimates for the DCF.

Dr. Johnson also criticized Mr. Copeland's nonconstant growth model, stating that the method measuring the dividend flow is incorrect.

Dr. Johnson found fault with Mr. Copeland's allowance for underpricing and flotation costs because it is only tied to newly issued shares, and if adopted, will result in dilution and an effective discriminatory return.

NWB witness Fleming testified on risks facing the company. Mr. Fleming concluded that the level of risk currently existing on the telephone industry in general, and faced by NWB in particular, is substantially greater.

(c) Commission Findings

The commission finds the appropriate return on equity for NWB to be 14.35%. The commission finds this return to be above staff's proposed 13.8% return and below NWB's requested return of 16%, which is inclusive of a .5% allowance for underwriting expenses. The 14.35% is, however, within staff's range of 13.3% to 14.45%, albeit on the high end.

The commission finds that both staff and company utilized the discounted cash-flow (DCF) method of determining equity costs, and applied that theory to NWB's parent, U S WEST.

The commission finds that for the basis for determing in the dividend yield, the more recent price utilized by Mr. Copeland to be the better measure. The increased dividend reflected in Mr. Copeland's exhibits also represents more recent, representative data and therefore it too should be used in measurement. The result of these updates is a dividend yield of 7.7%.

The commission finds staff's method of determining dividend yield to be preferred over NWB's. The commission agrees that it is the current, rather than some future dividend that should be used in the computation. Mr. Copeland testified that the recent increase in the indicated dividend has, in some part, led to an upward trending in stock price. The commission agrees. The stock price used in calculating dividend yield should be representative, which staff's is. NWB's calculation was based on the August through October of 1984 average stock prices, a number which no longer reflects reality.

Both staff and NWB went to some length to justify timing of dividends that are to become part of the DCF formula. The commission finds staff witness Copeland's method to be preferred. Mr. Copeland's reasoned approach reflects the actual circumstances. When one purchases stock there is an assumption, under normal conditions, that dividends will be paid quarterly. It makes little sense to assume that one must wait a year to receive a dividend. Generally, utilities increase dividends from time to time. The industry very rarely reduces dividends. Therefore, it would appear that assuming an increased dividend at some future date accomplishes little, except to perhaps alter the dividend yield portion of the DCF formula to reflect something other than investor expectations.

Most of the return on equity discussion centers on the growth component of the DCF formula. There are several unique challenges to be faced in this case when measuring the cost of equity. Two of the more significant are (1) the lack of historical data because of the recent AT&T divestiture, and (2) the analysis of equity costs must apply to NWB's parent, U S WEST, rather than to NWB directly. NWB witness Johnson presented an analysis that examined both a utility and nonutility group of companies in addition to U S WEST. Staff witness Copeland's supplementary analysis included eight independent telephone companies and the seven new Bell operating companies.

The commission finds that staff witness Copeland's analysis does not suffer from a circularity problem. That particular problem as articulated in staff's reply brief, is related to a comparable earnings analysis. The commission finds that the market is self-correcting for regulatory error, a correction that will be reflected in the stock price. Such an outcome, in a free market, is intuitive and correct.

NWB witness Johnson's analysis included both historical and forecasted growth measures. Staff witness Copeland relied on Value Line's current and projected factors of growth.

The commission finds NWB witness Johnson's analysis hinges, in large part, on his reliance on nonutility and utility companies whose risk he perceives to be lower or equal to that of U S WEST. We don't feel that U S WEST is a riskier proposition, from an investor's viewpoint, than either group. There is simply little reason to believe the past will not be indicative of the future in terms of risk. Certainly there have been various institutional changes and increasing competition, but just as certain is the protection of regulation, a capital structure that is not indicative of weakness, and other considerations that point to the relative low risk of U S WEST.

NWB witness Johnson criticized staff witness Copeland's reliance on Value Line, and more specifically criticized Mr. Copeland's failure to use direct growth estimates.

We feel Mr. Copeland properly ignored projections that appear to have no basis in fact. Mr. Copeland's analysis reviewed, for his sustainable growth rate formula, expected returns on book equity and the earnings retention rate. In light of all the evidence, Mr. Copeland's analysis proves most reliable.

The commission finds staff witness Copeland's criticism of NWB witness Johnson's historical growth estimates to correctly point out the inherent upward bias due to the economic factors of the period studied.

Both witnesses as well as this commission have and must take into account the lack of historical data with regard to U S WEST. The investing public must do the same. It follows entirely that the services provided by organizations such as Value Line and Merrill Lynch will be relied on by many when making an investment decision. The record clearly shows that the direct projections of growth made by the investment services are not well-supported. We find NWB witness Johnson's analysis suffered from usage of such growth rates.

***469** The commission finds that the supplementary analysis performed by staff witness Copeland provides meaningful support for his determined cost of equity.

Both witnesses supported their recommendations with analyses that included both a constant and nonconstant growth approach. These tests, as applied, reflect the differences of the two witnesses in timing of dividend and usage of estimates. The commission has found Mr. Copeland's interpretation and application of these two issues to be correct. It follows that his analysis based on Value Line and Merrill Lynch better measures equity costs than does NWB witness Johnson's.

NWB witness Johnson performed a specific analysis of U S WEST based on Merrill Lynch and Value Line implicit future rates of return and pay-out ratios. This analysis yields results reflecting a return requirement of less than 15%. Mr. Johnson dismisses this result as not consistent with reality. The commission disagrees. The commission finds the so-called ‘risk premium’ theory advanced by NWB witness Johnson to be unconvincing. The commission finds no basis of support for Mr. Johnson's contentions, and further finds staff witness Copeland's analysis of risk premium a more reasoned attempt to quantify what risk premium, if any, is required by investors.

The commission finds that no allowance should be made for underwriting costs. Staff witness Copeland testified that such an allowance should be made for newly issued shares only, and that projections show little increase in shares outstanding. Mr. Copeland's adjustment to cover such costs is virtually lost in the rounding process. The commission finds that NWB witness Johnson failed to support his recommendation to increase the return on equity by 50 basis points to cover such costs. The commission simply will not arbitrarily increase the required equity return to such a degree based on a few bare assertions. The burden of proof clearly was not met. The commission finds staff witness Copeland's reasoning to be more conclusive.

The commission has been requested by company to allow an equity return of 16%, while staff has recommended a return on equity of 13.8%. NWB witness Johnson's recommended range of 15.75% to 16.5% included a .5% allowance for underwriting costs and a dividend yield component which reflected outdated data and also reflected, incorrectly in our opinion, incorrect timing of dividend flows. If updated, corrected amounts are reflected in the company's dividend yield, and if the underwriting cost allowance is eliminated, we find the company's return on equity requirement to be near staff's recommendation. We find this calculation further supports staff's recommendation.

Nonetheless, we must note that U S WEST, as a corporate entity, is entering into a new era in the provision of telephone service. The subsidiary, NWB, and more specifically, the South Dakota operations of NWB, is subject to our regulation. While we feel Mr. Copeland's analysis fully justifies his recommendation, we note that his analysis establishes a proper equity return. It is the duty of the commission to ensure the public receives adequate and reliable service at the lowest possible cost. In our opinion, this goal will best be served by allowing a return on equity of 14.35%, an amount that is reflected in the equity return range of Mr. Copeland.

IV.

Rate Design

***470 (a) Staff Position**

Staff witness Best agrees with company's proposal to reduce the rate groups from five to two. Regarding conserver service, staff witness Best recommends if there is an increase in rates combining the two classes of conservers service, Basic Pac and Value Pac, at a rate of $8 per month with $2.50 per month usage allowance. Staff witness Best agrees with the implementation of a time-of-day discount for residence measured service customers. If there is a decrease in rates as staff recommends, there should be a corresponding decrease in residence and business flat rate service.

(b) Company Position

Company witness Lehner offered testimony recommending reducing the number of rate groups from five to two groups. These two groups would consist of measured and nonmeasured exchanges. Regarding conserver service, Lehner recommended increasing Basic Pac from $5 to $7 per month and change the 30-call allowance to a $2/month usage allowance. Value Pac would remain as currently priced at $10 per month with a $5/month usage allowance. Lehner proposes to implement a time-of-day discount for residence measured service customers that parallels the intrastate long-distance discounts already available for business measured customers.

Company witness Lehner further testified that residence and business flat rate service should be increased corresponding to the increase sought by company in this application. Regarding hotels and motels, Lehner recommended a charge for the long-distance trunks running between inns, motels, hotels, and AT&T, and the trunks used for local service. Witness Lehner states that because of the apparent practice of driving prices toward costs, there is no longer any justification for the innkeepers to receive a costly service for free when others do not.

As relates to semipublic rates, Lehner proposes that the rates for this service be the same as that for local flat business service with a 25¢ charge for calls placed to directory assistance. Lehner further proposes to increase the directory listings charges to those customers who utilize discretionary directory services of nonlisting, nonpublished, extra line, foreign listing, alternate listing, and additional listing. For directory assistance, Lehner proposes to increase the per call charge from 30¢ to 40¢ while reducing the per call allowance from three to two calls per month. Lehner recommends the elimination of all exemptions from the directory assistance plan with a modified exemption for the physically and mentally impaired. This modified exemption will permit an allowance of 100 calls per month for this group.

In the selective class of call screening, company witness Lehner proposes to lower the installation charges from a fixed amount to a range based on cost and proposes to increase the monthly rate. Company witness Lehner also recommends increasing operator charges for calling card calls, station-to-station calls, person-to-person calls, busy verification, and busy line interrupt. Regarding private-line rates, company witness Lehner recommends increasing those rates that are below cost.

(c) Intervenor Position

Intervenor Johnson stated in his letter of intervention that additional revenue, if needed, should come from AT&T in the form of additional long-distance rebates, and not from line charges applied ***471** to motels and hotels. Mr. Johnson expressed concern on the high cost of obtaining equipment to measure telephone service. The inequity of two different levels of charges for the same service, dependent on location of residency was also discussed by Mr. Jonson as was the overall detriment to hotel and motel operators caused by increased telephone service costs.

(d) Commission Findings

The commission finds that in light of the fact that it is ordering a rate increase in this case, staff's rate design recommendation to combine the two classes of conserver's service, Basic Pac and Value Pac, should be adopted at a rate of $8 per month with $2.50 in usage allowance. The commission finds that the combination of these two classes is revenue neutral. The commission further agrees with a time-of-day discount for residence measured service customers and finds that this discount should be implemented.

The commission finds that the residence one-party service should be increased by a $1.25 per month and that business one-party flat rate service should be increased by a $2.30 per month based upon the increase approved by the commission in this application. The commission finds that semipublic rates should be increased to the business rate with a 25¢ charge for calls placed to directory assistance.

The commission finds that a rate should be implemented for hotels/motels. This rate shall be $25 per trunk including a $5 call allowance in measured exchanges and $25 per trunk with a 6¢ per message usage charge in nonmeasured exchanges for the long-distance trunks running between inns, motels, hotels, and AT&T, and the trunks used for local service.

The commission finds that the company's position should be adopted for directory listings, directory assistance, selective class of call screening private line, busy verification, and busy line interrupt. The commission finds calling card calls should be increased to 55¢, station-to-station calls should be increased to $1.25, and persons-to-person calls should be increased to $3.25.

The commission finds that the five rate groups should not be combined at this time.

Conclusions of Law

I.

The commission has jurisdiction over the subject matter and the parties to this proceeding pursuant to SDCL Chaps 49–3, 49–10, and 49–31.

II.

The commission's decision herein establishes the basis for just and reasonable rates for NWB and fully comports with the provisions of SDCL Chaps 49–3, 49–10, 49–31, and all other statutory and constitutional requirements.

III.

The rate schedules and related tariff sheets filed in this case by NWB should be rejected in their entirety.

IV.

The motion to compel production of documents and other related relief is determined by a separate order to compel. The requested rates for those items covered in the motion to compel—i.e., consolidated tax accruals, U S WEST Direct financial data, and U S WEST allocation of shareowner costs data—shall be approved, subject to refund as set forth in the order to compel production of documents.

***472 V.**

All pending motions and objections not heretofore ruled upon should be denied. It is therefore

Ordered, that the proposed tariff sheets filed by NWB as part of its application on February 1, 1985, be, and the same hereby are, rejected in their entirety; and it is

Further ordered, that NWB shall submit revised tariff sheets consistent with this decision and order, effective for service rendered on or after August 1, 1985; and it is

Further ordered, that to the extent the commission's decision and order in the matter of the application of Northwestern Bell Telephone Co. for an increase in this intrastate rates in docket F–3442 is reversed or modified by the South Dakota supreme court on the issues of average cash balances in working capital and inflation adjustment, the commission will allow that adjustment in the rates herein from the date of that decision.

EISNACH, commissioner, dissenting:

Inflation Adjustment

I respectfully dissent from the decision and order of the majority on the issue of inflation adjustment. On all other issues, I fully concur with the majority decision.

I would allow the company to recover the amount of its proposed inflation adjustment in this case. Inflation is a legitimate adjustment even through the rate of inflation may vary over the various test periods used in rate making. The South Dakota supreme court South Dakota Pub. Utilities Commission v Otter Tail Power Co. (SD Sup 1980) 291 NW2d 291, found that a reasonable inflation adjustment is necessary. The commission has likewise used the one-half times the CPI increase proposed by company in this case as a reasonable inflation adjustment in electric utility cases.

Similarly, I dissented on this issue in Re Northern Bell Teleph. Co. (F–3442), Nov. 10, 1983. There was not any additional evidence presented in this docket. I would therefore allow company to recover this amount.

Dated at Pierre, S.D., this 29th day of July, 1985.

End of Document

1979 WL 461903 (S.D.P.U.C.), 32 P.U.R.4th 1

Re Minnesota Gas Company

(F–3302)

South Dakota Public Utilities Commission

September 26, 1979

Before Klinkel, Fischer, and Stofferahn, commissioners.

By the COMMISSION:

On the twenty-sixth day of March, 1979, Minnesota Gas Company, hereinafter Minnegasco or company, filed with this commission an application to increase its retail gas revenues by appproximately $1,597,000. This represented an overall increase of 8.35 per cent affecting 35,500 customers in South Dakota.

Thereafter, the commission entered orders of suspension and granted motions to intervene filed by South Dakota ACORN and John Morrell and Company. Procedural dates were scheduled and hearings on Minnegasco's rate increase application were held by the commission commencing on the fourteenth day of August, 1979, and concluding on the seventeenth day of August, 1979. Thereafter, briefs were ordered by the commission to be filed by the parties.

The commission has carefully reviewed the entire record in this proceeding and hereby enters the following:

Findings of Fact

I.

1979 Plant in Service

(A) Staff Position:

Staff points out that Minnegasco's proposed adjustments included a number of items based on expenses to be incurred in 1979 that were related to projected 1979 plant in service. Staff recommends that the commission reject those adjustments. Staff contends that they are not known and measurable changes and effectively represent a 1979 projected test year.

Staff points out that Minnegasco proposed four adjustments to rate base, each of which consisted of increasing the average 1978 balance to year-end 1978 levels and adding an amount which reflects the change in the average balance for the 1979 proposed additions.

Staff witness Brown testified that this type of adjustment should not be allowed to the test year. She testified to the enormity of the task that would confront the commission if these types of adjustments, based entirely upon estimates, were routinely allowed. Staff witness Brown pointed out that examining all of the assumptions which go into such adjustments would as a practical matter be impossible. Further, staff witness Brown testified that even if Minnegasco, commission staff, intervenors, and the commission were to reach an agreement upon the reasonableness of all of the assumptions, the estimates may not materialize exactly as projected and, thereby, Minnegasco would thus be either overcollecting or undercollecting through rates established by reliance on estimates. She further stated that this violates the fundamental regulatory principle that consumers' rates should be based on actual costs adjusted for only known and measurable changes.

Staff recommends that an average actual test year adjusted only for known and measurable changes be employed. Staff contends that this avoids the burdens as well as risks inherent in the proposed adjustments made by Minnegasco which are based upon estimates. Staff further points out that the commission's past precedent fully supports *3 utilization of an average actual test year adjusted only for known and measurable changes that will occur within twelve months after the end of an historical test year. Staff points out that each such adjustment for a known and measurable change must be accompanied by corresponding adjustments to assure that costs and revenues continue to match. Staff points out that the matching requirement is a basic principle in proper rete making and should not be violated. Staff recognized a number of adjustments which were known and measurable as a labor increase which will not occur until as late as October, 1979, a full nine months beyond the end of the test year utilized by all parties in this proceeding.

Staff notes that company contends its adjustments are known and measurable and should be allowed on that basis. However, staff points out that company's proposed adjustments are based upon historical trends, projections of new customers, experience of its personnel, and other estimates. Staff contends that Minnegasco's proposed adjustments require a great deal of judgment, as opposed to any methodology, in deriving its estimates and projections. Staff points out that Minnegasco's construction budget was utilized for a number of items in its proposed rate base adjustments. Staff notes that the budget is prepared in August or September of the prior year and is not subsequently revised in order to reflect current conditions. Staff contends that such a basis is speculative and not subject to confirmation, serious analysis, or verification. Staff further points out that further difficulties occur when attempting to classify construction in terms of expenditures related to customer or revenue growth. Specifically, staff notes that work orders can easily be erroneously classified which will totally distort the projections and estimates for rate making. Additionally, simply because an item appears in a budget, that does not assure that it will actually be constructed. Staff further contends that Minnegasco's approach is tantamount to suggesting that if some type of change, however great or small, may occur, Minnegasco is entitled to arbitrarily attempt to quantify the change. Staff points out that this is the antithesis of the sound rate-making principle of recognizing known and measurable changes, and not speculative estimates and projections. Staff concludes that Minnegasco's proposed adjustments do not constitute in any sense known and measurable changes and, consequently, should be rejected accordingly.

(B) Company Position:

Minnegasco contends that its proposed adjustments to 1979 plant in service should be adopted. Minnegasco witness Petersen testified that the adjustments are known with reasonable certainty and measurable with reasonable accuracy. Company witness Petersen testified that the first part of each adjustment involves an increase of the average 1978 level to year-end 1978. Company witness Petersen testified that this is known and measruable as an absolute certainty and that it is based on actual 1978 end-of-year balances. Company witness Petersen further testified that the second part of the adjustment reflects 1979 additions which in his opinion are reasonably known and measurable. The 1979 proposed adjustments are based upon forecasts and use of historical data *4 for replacements coupled with existing and current information for labor purchases and related components. Company witness Petersen further testified that matching occurs in that the adjustment of revenues and expenses for the same number of additional customers have been proposed by Minnegasco.

Commission Findings

The commission finds that staff's recommendation should be adopted for the reasons set forth in (A) above. The commission finds that Minnegasco's proposed adjustments include a number of items based on expenses to be incurred in 1979 that were related to projected 1979 plant in service. The commission finds that those adjustments are not known and measurable changes. Further, the commission finds that Minnegasco's filing in this regard represents a 1979 projected test year. The commission finds that not only is a projected test year impossible to fully evaluate and scrutinize, but moreover, a projected test year based upon estimates is in total contravention of the rational and sound rate-making principle of utilizing a test year adjusted for known and measurable changes. The commission finds that utilization of an average actual test year adjusted for known and measurable changes avoids the impossible task of evaluating the reasonableness of all of the assumptions, predictions, projections, and estimates involved in such a test year as well as lessens the possibilities of overcollection or undercollection by Minnegasco during the period the rates in this proceeding will be in effect.

The commission further finds that the fundamental rate-making principle of matching is violated by Minnegasco's poposed adjustments. The commission finds that Minnegasco's construction budget is an unreliable basis for establishing rates in this proceeding. The flaws of such an approach have been glaringly pointed out in this proceeding.

II.

Average Plant Balance

(A) Staff Position:

Staff witness Rislov recommended two adjustments to the plant in service. The first adjustment was for the inclusion of a January 1, 1978, figure in the calculation of average plant in service during 1978. Staff contends that without such an adjustment, an average monthly plant in service does not include any average amount for the month of January, 1978, and does not accurately represent the average plant over the whole year. Staff contends that the principle is the same as that used in calculating the average of plant in a single month, which would involve taking and dividing by two the amount of plant at the beginning and end of the month or averaged to compute the average amount over the period. Staff notes that Minnegasco utilized this well-accepted 13-month balance method in portions of its application. Staff further notes that Minnegasco witness Petersen did not argue with the position of Mr. Rislov, but rather only disputed Mr. Rislov's calculation which has been revised by staff accordingly. As to company's criticism of staff's deletion of the acquisition adjustment from accumulated depreciation, staff has ***5** provided company with a revised calculation incorporating company's acquisition adjustment.

(B) Company Position:

Company contends that while the revised calculation by staff is satisfactory, staff has, nonetheless, been inconsistent in its handling of the gas plant acquisition adjustment for computing the January 1, 1978, balance. Company contends that Mr. Rislov's revised calculation reflects the 1978 acquisition adjustment as a deduction in arriving at the January 1, 1978, plant-in-service balance. Company notes that the related accumulated depreciation applicable to the gas acquisition adjustment was not deducted from the January 1, 1978, accumulated depreciation balance by Mr. Rislov. Company contends that this inconsistency is erroneous and should not be allowed.

Commission Findings

The commission finds that staff's recommendation regarding average plant balance should be adopted for the reasons set forth above. The commission finds that staff's inclusion of a January 1, 1978, figure in the calculation of average plant in service during 1978 is totally proper. The commission finds that without such an adjustment, an average monthly plant in service would not include any average amount for the month of January, 1978, and, consequently, would not accurately represent the average plant over the entire test period. The commission finds that this is absolutely necessary when matching test-year revenues. The commission further finds that commission staff has made the revisions necessary to comply with valid company concerns. The commission further finds that staff's final recommendation incorporates said revisions and should be adopted accordingly.

III.

Exclusion of Construction Work in Progess

(A) Staff Position:

Staff witness Rislov testified that construction work in progress should be excluded from rate base. Staff witness Rislov testified to the general principle that ratepayers should only be required to pay for plant from which they derive benefit; i.e., plant that is used and useful to those ratepayers should be allowed in rate base. Staff notes that Minnegasco does not dispute the principle that CWIP should be excluded from rate base but rather that as a practical matter there was no CWIP in 1978. However, staff points out that the basis for staff witness Rislov's calculation excluding average monthly CWIP is related to Minnegasco's use of Account 107, CWIP, and to Minnegasco's admission that there was CWIP in 1978. Staff points out that based on Minnegasco's representations that this plant was used and useful within thirty days, staff witness Rislov acknowledged that Account 107 included plant in service and recommended including a portion of this plant in rate base. Staff witness Rislov's calculation estimates the amount of time that the projects included in Account 107 are underway before they go into service and is based on the very general information provided by the company which indicated that all 1978 CWIP was completed in less than thirty days. Staff ***6** witness Rislov determined the average CWIP additions per month and in so doing estimated that an average Account 107 expenditure would take fifteen days to become used and useful. He then excluded the resulting amount in an average month from rate base.

Staff contends that Minnegasco's own testimony substantiates staff witness Rislov's conclusions. Staff notes that company witness Petersen indicated that certain items in Account 107 were used and useful when purchased but that others, such as new distribution mains, can take from one to two weeks up to thirty days. Staff notes that Mr. Petersen also pointed out that in a different period than 1978 there may be some projects that would take up to sixty days and that he knew of two projects budgeted for 1979 that would take thirty days or a little longer. Staff contends that Minnegasco has fully substantiated staff witness Rislov's adjustment and that to fail to make that adjustment would provide Minnegasco the ability to rely upon vagaries and nuances created by its own administrative and accounting procedures. Staff concludes that staff witness Rislov's adjustment, while relatively small, properly represents the amount which excludes construction work in progress from Minnegasco's rate base.

(B) Company Position:

Company contends that staff witness Rislov's adjustment should be disallowed. Company contends that it had no construction work in progress in South Dakota during 1978. Further, company contends that general plant additions are used and useful when purchased, that most construction is completed within a day or two, and that new main construction can take up to thirty days but usually lasts from one to two weeks. Consequently, company contends that staff witness Rislov's adjustment is without merit and should be rejected.

Commission Findings

The commission finds that staff's recommendation regarding exclusion of construction work in progress should be adopted for the reasons set forth in (A) above. The commission finds that ratepayers should not be required to pay for plant from which they derive no benefit. The commission finds that only plant that is used and useful to those ratepayers should be allowed in rate base. The commission finds that Minnegasco's accounting methods may not be utilized to avoid the elimination of monthly construction work in progress and that commission staff's determination of the construction work in progress existent in 1978 and the exclusion thereof from rate base is totally proper. The commission finds that Minnegasco's own witness has fully confirmed the reasonableness of the amount of construction work in progress which was recommended for exclusion by staff.

IV.

Working Capital

(A) Staff Position:

Staff contends that Minnegasco's requested inclusion in rate base of $226,509 for cash working capital was inappropriate. Staff witness Rislov, after analysis and evaluation of Minnegasco's application and upon adjustments made *7 to Minnegasco's lead-lag studies, indicated Minnegasco had a negative need for cash working capital from investor-supplied funds of $315,629. Staff points out that as a result of funds being held prior to the time they have to be paid out, Minnegasco was more than compensated for the lag between the time expenses were incurred and the time Minnegasco received payment. Additionally, staff witness Rislov rejected several bank balance items that Minnegasco claimed were necessary and that Minnegasco had included in its cash working capital calculations. Staff notes that excluding its claimed cash balance requirement, Minnegasco also found a negative need for working capital of $166,963.

Staff witness Rislov took account of the payment lags for long-term debt interest and preferred stock dividends. Staff witness Rislov testified that this was mere recognition of the fact that these funds are available to Minnegasco once they have been received for use to cover working capital requirements even though ultimately they will be paid out as interest or dividends. Staff notes that company maintains the funds accounted for monthly as dividends and interest in the same bank account as the rest of Minnegasco's cash. Staff points out that while interest on long-term debt and dividends on preferred stock will ultimately be transferred to bond and shareholders, company retains the funds pending the quarterly or semiannual payment dates and company can thereby make use of those funds. Staff notes that if this were not the case, Minnegasco would be inefficiently and improperly managing its funds.

Staff summarizes Minnegasco's position as being that only stockholders and bondholders should be allowed to benefit from funds that are being temporarily held by Minnegasco prior to being disbursed and distributed to those shareholders and bondholders. Staff contends that this is erroneous. Staff notes that the funds are in no way legally segregated and payment is not required until periodic payment dates. Additionally, staff points out that it could be contended that the return associated with long-term debt and preferred stock already contains an increment to compensate bondholders and preferred shareholders for the lag or delay in payment of the interest or preferred dividends. Staff notes that if the interest and dividends were to be paid at an earlier date, investors would have been willing to accept a lower rate of return taking into consideration the time value of money.

Staff further points out that a proper matching of costs requires that the delay in payment to bondholders and preferred shareholders be reflected in the cash working capital determination. Without such consideration, consumers would pay for that cost twice; i.e., once in the form of higher embedded costs of long-term debt and preferred stock and again in the form of a return on a working capital requirement already supplied by the customers. Staff contends that Minnegasco's refusals to include these temporarily available funds in its lead-lag study overstates the amount of additional working capital needed and places an additional burden on consumers while giving a windfall to common shareholders.

Staff witness Rislov also rejected several of the expenses proposed by Minnegasco as either inappropriate, or not shown to be necessary expenses. The first item staff witness Rislov disallowed *8 was cash balances required in lieu of service charges to the bank. Staff witness Rislov testified that if Minnegasco must maintain minimum bank balances due to avoid service charges, Minnegasco must demonstrate both the net amount required and that the costs to consumers of such a requirement are less than service charges avoided. Staff notes that system-wide, Minnegasco would have had to pay $110,230 for bank service charges in 1978 with South Dakota's portion being $7,352. However, Minnegasco did not pay any of this amount because it maintained $1,660,000 system-wide in bank accounts with South Dakota's portion being $110,722. Company witness Petersen testified that maintenance of these bank balances is Minnegasco's form of payment for bank services. However, staff notes that Minnegasco might well have maintained balances in this amount regardless of whether the banks would treat them as payment for service charges. Staff witness Rislov stated that it has been staff's position and has support in commission precedent that it is Minnegasco's burden of proof to demonstrate that these costs are actually incurred and, if so, to establish that the revenue requirements associated with the maintenance of minimum balances are less than those associated with service charges. Accordingly, staff witness Rislov requested Minnegasco to demonstrate that maintaining the balances was a true cost and that he only desired to carefully examine the circumstances behind the balances in order to ascertain whether they were true costs. After hearing in this matter Minnegasco provided data to staff witness Rislov sufficient to establish that the company did maintain cash balances in lieu of bank service charges. Staff has agreed to allow $7,352 representing service charges, as it is the most economical alternative available to the company, and staff's recommendations to the commission reflect that inclusion.

Staff contends that Minnegasco should not be allowed to recover in rate base the compensating balances related to company's line of credit. Staff points out that company witness Petersen testified that the credit was not used in 1978 except in the first quarter to pay a previously outstanding debt and was not used during the first part of 1979. Staff further points out that while company's 1978 construction budget system-wide was $19 million, the line of credit amount of over $25 million was untouched. Staff further notes that Minnegasco's construction will continue to be principally short-term installation of mains and services and meters, and represents small construction expenditures. Consequently, staff contends that the costs of maintaining these balances have not been shown to be necessary and that the size of the line of credit maintained is entirely out of line with Minnegasco's current needs. Further, staff points out that Minnegasco never reconciled the amount maintained with Minnegasco's actual short-term borrowing needs and also failed to show why some other form of short-term notes would not be a less expensive alternative. Staff points out that approximately 40 per cent of residential consumers are on Minnegasco's budget plan and that this should go a long way towards evening out the seasonal cash-flow needs of Minnegasco thereby lessening the need for credit. Staff notes that company witness Petersen concurred that the need for a line of credit would drop if all customers went on a budget plan yet nowhere did *9 Minnegasco indicate whether more customers could be expected to change to a budget plan or even the effect of the current budget plan customers on the need for a line of credit.

Staff witness Rislov testified that a further reason for disallowing the cost of compensating balances for lines of credit is that credit is normally associated with construction costs and, consequently, should be excluded from rate base and capitalized as a part of the allowance for funds used during construction. This is the method utilized by FERC to allow recovery. Finally, staff points out that it is incorrect to allow recovery in rate base when the company has shown construction expenditures are made every year, and will be increasing in the future.

Staff witness Rislov disallowed Minnegasco's three-day allowance for cash collections on hand and in process of transfer purportedly reflecting the time lag between receipt of checks and other items and the time when money is credited to Minnegasco's bank accounts. Staff witness Rislov testified that the amount should be disallowed because Minnegasco did not provide the related analysis of positive float; i.e., extra money available to Minnegasco due to the lag between the time it writes checks and the time they are cashed. Staff contends that company did not substantiate its three-day allowance for cash collections on hand and in process of transfer and, accordingly, it should be disallowed. Staff witness Rislov pointed out that Minnegasco has precisely calculated a figure it wants included for treatment in this proceeding out totally dismisses a float calculation to determine the necessity for its claimed allowance. Subsequent to the hearing, company did calculate positive float. Staff contends that the positive float, along with the use of month-end receivables, which would tend to overstate the revenue lag, would offset the three-day lag and allow the company adequate cash balances.

Staff witness Rislov disallowed an amount for imprest accounts in South Dakota because there was no showing that maintenance of this amount was an actual and necessary expense. Staff contends that Minnegasco did not show that the amounts were required to be expressly maintained by Minnegasco and would not have been kept in the bank, in whole or in part, regardless of the service charge, and has not shown that the amount claimed avoided service charges. Further, staff notes that Minnegasco has not evaluated whether the net cost of a possible service charge might have been preferable. Staff concludes that Minnegasco has simply failed to show the actual size or necessity of the expense and the amount should be disallowed, particularly in light of their previous showing that service charges can be more economical.

Staff witness Rislov also recommended disallowance of the cashier working funds. Staff has stated that such amounts are already included in working capital as operation and maintenance expenses. Staff contends that Minnegasco uses these funds for operation and maintenance expenses, and to allow this amount in this fashion would be double counting. Consequently, staff contends that the amount should be excluded.

Finally, staff makes several recommendations regarding future filings. Staff contends that Minnegasco should be required in future cases to furnish information sufficient for staff to perform an independent revenue lag study. In this proceeding, staff witness Rislov was *10 forced to rely on Minnegasco's revenue lag data. Staff points out that Minnegasco's method of calculating revenue lag relies entirely on average month-end balances and does not incorporate any information about actual individual customer behavior. It is the position of staff that Minnegasco should furnish information for all customer classifications on the time between meter reading and billing and between billing and payment. Staff points out that since Minnegasco's bills are computerized, this should not be a difficult endeavor and that other utilities in South Dakota routinely provide the information in the recommended format. Staff notes that company witness Petersen felt that keeping track of the customer accounts on a monthly basis would be extremely expensive, and, accordingly, staff recommends that Minnegasco should, at a minimum, be required to supply information on a statistically significant number of customer accounts for each customer class in order to avoid expense but to provide a basis in its future filings for independent analysis.

(B) Company Position:

Company contends that staff's adjustments regarding cash working capital are erroneous. Company witness Petersen testified that cash balances are required and are necessary for use at local offices and banks as working funds, because three days' receipts are always in transit, and because average collected balances must be on deposit to support activity charges and lines of credit. Company witness Petersen testified that staff's basis for disallowance was incorrect and described the manner in which the lead-lag study fails to recognize cash balance requirements. Company witness Petersen pointed out that the time frame from payment of bills to local office to deposit in a principle bank and that bank's collection of the funds averages three days. Company witness Petersen testified that positive bank float is very short and that 78 per cent of disbursements have a zero float. He further testified that bank service charges are like any other expense in that the only difference is in the method of payment. As a result, balances are maintained by Minnegasco to compensate the banks for the bank's services to Minnegasco. Company witness Petersen further testified that the compensating balances for lines of credit are required and that only the amount for establishment of the credit line is included. He noted that none was for actual borrowings. Further, company witness Petersen testified that the company's documentation establishes the need for credit lines and the actual maintenance thereof.

Company contends that since there was no construction work in progress in 1978 in its view, staff's recommendation that compensating balances should be recovered through the AFUDC rate will simply not work. Company contends that the need to maintain cash balances has been fully established and the Minnegasco must be compensated for this facet of its cash working capital.

Company disputes staff's inclusion of payment lags for long-term debt interest and preferred stock dividends. Company contends that staff ignores the fact that a return on these items is due Minnegasco at the time service is rendered and that the cash funds available from this lag belong to the stockholders.

In sum, Minnegasco urges adoption of its recommendation and rejection of commission staff's determination.

11 *Commission Findings

The commission finds that staff's recommendation regarding working capital should be adopted for the reasons set forth in (A) above. The commission finds that as a result of funds being held by Minnegasco prior to the time they have to be paid out, company has been more than compensated for the lag between the time expenses were incurred and the time Minnegasco received payment therefor. Additionally, the commission finds that certain items have been shown not to be necessary and, as a result, should be excluded from Minnegasco's cash working capital requirements.

The commission finds that payment lags for long-term debt interest and preferred stock dividends must be considered. The commission further finds that this recognizes the fact that these funds are available to Minnegasco once they have been receibed for use to cover working capital requirements even though ultimately they may be paid out as interest or dividends. The commission funds that Minnegasco maintains these funds in the same bank account as the rest of Minnegasco's cash. The commission finds that while the interest on long-term debt and dividends on preferred stock will ultimately be transferred to bond and preferred stockholders, Minnegasco clearly retains the funds pending the quarterly or other payment dates and Minnegasco thereby has the opportunity to make use of those funds. If Minnegasco did not efficiently and properly manage those funds, the commission finds that that is no basis for Minnegasco attempting to require the ratepayers to compensate for such inefficiency. The commission further finds that the returns associated with long-term debt and preferred stock may already contain an increment to compensate bondholders and preferred shareholders for the lag or delay in payment of the interest or preferred dividend. Accordingly, the commission finds that if the interest and preferred dividends were to be paid at an earlier date investors would retionally be expected to accept a lower rate of return taking into consideration the time value of money. Further, the commission finds that a proper matching of costs requires that the delay in payment to bondholders and preferred shareholders must be reflected in the cash working capital determination. Absent such matching, consumers would be required to pay for the cost twice; once in the form of higher embedded costs of long-term debt and preferred stock and once again in the form of a return on a working capital requirement already supplied by the customers themselves. The commission finds that this cannot and should not be allowed.

The commission finds that staff's allowance of service charges in lieu of cash balances required by the bank is proper and should be permitted. The commission finds that the documentation supplied as a posthearing exhibit provides support for and substantiation of the propriety of allowing service charges.

The commission finds that staff's treatment of compensating balances related to Minnegasco's line of credit is proper. The commission finds that the credit was not used in 1978 except in the first quarter to pay a previously outstanding debt and was not used during the first portion of 1979. The commission finds that while the company's 1978 construction budget system-wide was $19 million, the line of credit amount of over ***12** $25 million was undrawn upon. The commission finds that Minnegasco's construction will continue to be principally short-term installation of facilities which represent small construction expenditures. The commission finds that, consequently, the costs of maintaining the balances have not been shown to be necessary and that the size of the lines of credit maintained is entirely inconsistent with Minnegasco's current needs. The commission further finds that Minnegasco has never reconciled the amount maintained with the actual short-term borrowing needs of Minnegasco and has also failed to establish why some other form of short-term financing would not be a less expensive alternative. The commission rejects Minnegasco's low revenue during the summer argument in that Minnegasco has failed to take into account the increasing number of customers utilizing the budget plan which allows equal payments throughout the year commencing in July, and which approximately 40 per cent of Minnegasco's residential consumers are utilizing. The commission further finds that the cost of compensating balances for lines of credit is normally associated with construction costs and, as a result, if such costs are shown to be necessary, such costs should be capitalized as a part of the allowance for funds used during construction.

The commission finds that the disallowance by staff of Minnegasco's three-day allowance for cash collections on hand and in process of transfer is proper and should be adopted. The commission finds that any requirement to cover cash collection on hand and in process of transfer is met, in part, with float. The commission further finds that Minnegasco's method of calculating revenue lag relies on average month-end accounts receivable balances. The commission finds that the overstatement explicit in Minnegasco's averaging method has not been measured and, consequently, the revenue lag utilized by company and staff must be regarded as approximate only. In light of this, the commission finds that the average being utilized is already overstated and that any further allowance for cash allegedly needed to account for the delay between the receipt of revenues by Minnegasco and the processing of those receipts—i.e., the purpose of the allowance—is totally unwarranted.

The commission finds that staff's disallowance of an amount for imprest accounts in South Dakota for failure to show that maintenance of said amount actually occurs and that the expense is actually necessary is proper. The commission finds that Minnegasco has not established that the amounts were required to be expressly maintained and would not have been kept in the bank, in whole or in part, regardless of the service charge. The commission finds that Minnegasco has not shown whether other claimed balances would overlap, and that Minnegasco has not shown that the amount claimed avoided service charges. Further, the commission finds that Minnegasco has not evaluated whether the net cost and the service charge may be preferable. The commission finds that disallowance of an amount for imprest accounts in South Dakota is totally proper and is hereby adopted.

The commission finds that disallowance of the cashier working funds is fully supported and should be adopted herein. The commission finds that there was no proof that the amount claimed was representative of normal operations ***13** and that Minnegasco has already received treatment in the lag study as these amounts represent operation and maintenance expenditures. As a result, the commission finds that the exclusion is entirely proper.

The commission has reviewed the positions of Minnegasco and staff regarding future rate filings. The commission finds that Minnegasco and commission staff should arrive at a mutually satisfactory arrangement whereby Minnegasco could supply information on a statistically significant number of customer accounts for each customer class in order to avoid expense and, concurrently, provide a basis in Minnegasco's future filing for independent analysis.

V.

Deferred Cost of Gas Purchased from Northern Natural Gas Company and Deferred Supplemental Gas Costs

(A) Staff Position:

Staff contends that Minnegasco should not be permitted to recover twice for the lag in payment for gas purchased from Northern Natural Gas Company. Staff points out that there are two issues presented by Minnegasco's method of presenting its deferred costs for gas purchased from its supplier, Northern Natural, which it calls unbilled cost of gas. Staff contends that unless its recommendation is followed, the cost will be recovered once in the working capital allowance and once again as a prepayment. The second issue raised by staff is whether Minnegasco properly should treat this cost as part of its working capital study as staff recommends or, alternatively, as a prepayment.

Staff notes that the deferred natural gas cost represents the cost of gas purchased from Northern Natural on a monthly basis but not yet billed to Minnegasco's customers. Due to the fact that Minnegasco has 21 different billing cycles, recovery of the cost of any month's gas purchased from Northern Natural takes more than a month; e.g., some of the bills to customers will not be sent until almost a month after the cost is incurred. Staff contends that in Minnegasco's filing, Minnegasco double counted the amount in Minnegasco Exh C–1. Company witness Petersen testified that the lead-lag study accounted for actual recovery of gas costs. However, staff contends that from the manner Minnegasco filed its case in this proceeding, double counting occurred.

Staff points out that a combination of recommendations of staff witness Rislov and Brown would rectify the double counting and provide Minnegasco with recovery of its costs. Staff contends that the unbilled cost of gas included by Minnegasco as a prepayment should be removed from the rate base since any lag in recovery is accounted for by the cash working capital calculation. Staff witness Brown recommended deleting the total deferred gas costs from the rate base. Staff witness Rislov's cash working capital analysis was based upon Minnegasco's with certain revisions and adjustments. Like Minnegasco, staff witness Rislov fully accounted for the unbilled cost of gas in his working capital recommendation. Staff points out that Minnegasco does not have a permanently deferred unbilled cost of gas. The amount paid to Northern Natural for gas in any one month is billed out and those bills are paid. Both company witnesses Swetman and Petersen testified to this ***14** circumstance. Staff notes that it is only the overlap caused by the fact that it takes more than a month to bill and receive payment for a month's gas cost that causes an amount o be unbilled gas cost at all times. However, it is not always the same amount since gas use and gas costs vary seasonally. Minnegasco is free to maintain records of this variable amount in an informational account if it so wishes. The unbilled cost of gas is part of the lag in recovering costs and is primarily offset by Minnegasco's own lag in paying Northern Natural for the gas. To the extent that the amount has not been fully recovered, this fact is reflected in the working capital determination.

Consequently, staff recommends that it is inappropriate for Minnegasco to treat this delay in payment as a permanent deferral. Staff witness Rislov testifies that it is more properly considered a timing difference because the amount turns over every month. Further, the timing difference is easily accounted for in the cash working capital study. Staff concludes that its recommendation which would incorporate these costs in the working capital determination is clearly preferable to a prepayment treatment, and to include these costs in both the prepayments and cash working capital would be double counting.

Staff further recommends that, rather than including the amount of deferred supplemental gas costs in Minnegasco's rate base, Minnegasco should be required to include the carrying charges caused by deferred recovery of cost as part of the costs of gas in its purchased gas adjustments. The situation regarding deferred supplemental gas costs exists because Minnegasco has to purchase propane gas above and beyond the amount included in the base rate for peak shaving. The additional costs related thereto are not billed to the customers until they are included in the rate through a PGA. Minnegasco only files a PGA once a year and once filed, Minnegasco begins to recover the costs of the previous year's supplemental gas. Hence, Minnegasco may not recover costs of supplemental gas associated with the past period for up to a year. Minnegasco desires to be compensated for the lag in payment by including the amount as part of deferred gas costs in its rate base. Staff witness Brown, however, recommends that the amount not be included in rate base because it is too speculative. Staff witness Brown points out that the amount Minnegasco will spend on supplemental gas and the amount of time it will take to recover costs associated therewith, depend on a number of factors including weather, costs of supplemental gas, and the terms of Minnegasco's currently effective PGA. Staff witness Brown notes that the company has not even attempted to make adjustments to this amount for various changes which may occur and that the future levels of supplemental gas costs is uncertain. She concludes that an error in estimating the typical deferred amount may result in over- or undercompensation for Minnegasco for associated carrying charges.

Staff witness Brown proposes a simple method which would include a cost component for the carrying charges by applying the overall allowed rate of return to the actual deferred cost balance when Minnegasco files its PGA. Staff further notes that the additional calculations required are not at all complex and that Minnegasco is in no manner penalized by utilizing staff's recommended ***15** method. Staff concludes that its recommendation will be far more precise than an attempt to forecast the balance and include in rate base that amount.

(B) Company Position:

Company witness Petersen testified that South Dakota deferred gas costs represent the commodity cost of supplemental gas supplies used for peak shaving and natural gas which have been purchased and delivered to customers but are unbilled at the end of each month and, consequently, are not reflected in revenue. Company witness Petersen stated that deferred income taxes on these deferred gas costs have been offset against the prepaid amounts. Company contests staff's elimination of the entire amount from prepayments in this proceeding and staff's recommendation that the carrying cost on all deferred gas costs be recovered as part of company's PGA. Company further contends that staff's treatment of unbilled cost of natural gas as being part of the lead-lag study is erroneous. Company maintains that it is entitled to recover carrying costs on both components of deferred gas costs and to do so most appropriately through inclusion as prepayments. Minnegasco contends that it would be simpler to include carrying charges on deferred gas costs in a general rate proceeding than in the PGA because of the additional complexities the carrying charge calculation would add to the PGA. Minnegasco contends that it has fully established that deferred unbilled costs of natural gas represent a permanent deferral due to the use of cycle billing and that those deferred costs are not reflected in the lead-lag study. Minnegasco urges inclusion of deferred gas costs as a prepayment in rate base and contends that its treatment of supplemental gas supply costs should, likewise, be allowed by the commission.

Commission Findings

The commission finds that staff's recommendation regarding deferred cost of gas should be adopted for the reasons set forth in (A) above. The commission finds that the cost will be recovered once in the working capital allowance and once again as a prepayment unless staff's recommendation is adopted. Additionally, the commission finds that the deferred cost of gas is properly treated as part of Minnegasco's cash working capital study and should not be treated as a prepayment.

The commission recognizes that due to Minnegasco's billing cycles, recovery of the cost of any month's gas purchased from Northern Natural takes more than a month. However, the commission finds that in Minnegasco's filing, Minnegasco has double counted that amount. Minnegasco witness Petersen testified that the lead-lag study performed by Minnegasco had accounted for actual recovery of gas cost. However, the commission finds that since Minnegasco also included this amount as a prepayment, double counting has occurred.

The commission finds that the unbilled cost of gas included by Minnegasco as a prepayment should be removed from prepayments since any lag in recovery is accounted for by the working capital calculation. The commission finds that both Minnegasco and commission staff fully accounted for the unbilled cost of gas in their respective working capital recommendations. The commission finds that it is only the overlap ***16** caused by the billing circumstance which creates an amount of unbilled gas cost at all times; however, it is neither the same amount since gas use and gas costs vary seasonally. The commission finds that the unbilled cost of gas is part of the revenue lag in recovering costs but is primarily offset by

Minnegasco's own lag in paying Northern Natural for that gas. To the extent that full recovery has not occurred, the remainder of the cost is reflected in the working capital determination. The commission finds that this issue is more properly considered a timing difference rather than a permanent deferral and, consequently, incorporation of those costs in the cash working capital determination is clearly preferable to treating same as prepayments. The commission further finds that staff's recommendation regarding proper treatment of supplemental gas costs should be adopted. Since Minnegasco has to purchase propane gas above and beyond the amount included in the base rate for peak shaving and in light of the delayed recovery of those costs through inclusion in Minnegasco's PGA at year-end, the commission finds that the amount should not be included in rate base but rather should be reflected as a cost component in the PGA. The carrying charges associated with these deferred supplemental gas costs will be recovered by applying the overall allowed rate of return to the actual deferred cost balance and including same as part of Minnegasco's PGA. The commission finds that Minnegasco's proposal to include the amount as part of a deferred gas cost in its rate base is too speculative since the amount involved will depend upon a number of factors including weather, costs of supplemental gas, and the terms of Minnegasco's currently effective PGA. The commission further finds that staff's recommendation serves to compensate Minnegasco for the delay in recovery of its supplemental gas costs and that the calculations required are not complex and will not cause any undue burden upon Minnegasco whatsoever.

VI.

Flow Through Versus Normalization

(A) Staff Position:

Staff witness Brown has recommended that, consistent with prior commission precedent, Minnegasco should flow through the deferred income taxes related to capitalized payroll taxes and employee benefits. In its filing, Minnegasco has normalized the tax benefit of payroll taxes and employee benefits which are capitalized on Minnegasco's books because the related expenses are recognized in the future through depreciation. However, staff points out that for income tax purposes, the costs are deducted currently producing an immediate tax benefit because current expenses reduce current taxable income. The issue is simply whether current ratepayers should receive the benefit of the tax savings Minnegasco actually experienced or whether the rates should reflect a fictional tax calculated as if the tax deduction had to be spread over the life of the plant. Staff contends that its recommendation reflects the actual taxes paid or payable by Minnegasco related to payroll taxes and employee benefits capitalized and, consequently, the costs imposed on ratepayers fully match the costs actually incurred to provide service to those ratepayers. Staff notes that Minnegasco's normalization method does ***17** not provide for such matching and reflects in rates taxes the company did not actually pay in 1978.

Staff contends that Minnegasco's arguments regarding normalization are without merit. Staff points out that if Minnegasco continues to construct plant for expansion or replacement, Minnegasco can continue to defer new amounts and, under tax normalization, recover more for taxes in each year than it actually pays in that year. This would result over time in a utility being compensated for more federal income taxes than it ever pays out. Additionally, inflation of construction costs which serves to magnify each new deferral relative to previous deferrals increases this effect. Finally, staff notes that the same dollar amount of benefit to consumers now is more valuable than that amount to consumers years later. Further, staff points out that the tax normalization approach assumes the tax circumstances are constant. However, if tax rates change, tax normalization no longer returns to the consumers the same benefit the company derived; e.g., the recent tax change resulted in an overcollection at 48 per cent for tax expense that a utility will experience, if at all, at 46 per cent. Further, if ratepayers pay for expenses which are in fact continually deferred, those ratepayers are making a capital contribution to the utility which is the responsibility of stockholders.

Finally, staff contends that tax normalization presupposes that the costs of ongoing operations and the costs of construction can be completely separated. Staff notes that this is not the case in that customers are paying a rate presently including rate of return for capital secured both for construction and present operations.

(B) Company Position:

Company recommends that tax normalization be utilized. Company witness Swetman testified that staff's recommendation is erroneous in that tax normalization is the only technique which will match the tax benefit received with the related expense. Company contends that the amount involved is actually a timing difference and is not a permanent difference. Further, company contends that since future ratepayers will pay the expense of the capitalized payroll taxes and employee benefits in the form of depreciation, those future ratepayers should also receive the applicable tax benefit. Company points out that staff's recommendation deprives future ratepayers of a benefit to which they are entitled. Company contends that since the expense giving rise to the benefit is not being recognized currently in rates, flow through of those benefits to current ratepayers results in a mismatch of revenues and expenses. Company concludes that the commission should allow normalization of capitalized payroll tax normalization of capitalized payroll

Commission Findings

The commission finds that staff's recommendation regarding the flow through of the deferred income taxes ralated to capitalized payroll taxes and employee benefits should be adopted for the reasons set forth in (A) above.

The commission finds that, consistent with all prior commission precedent, the flow through of the deferred income taxes related to capitalized payroll taxes and employee benefits should be adopted. The commission finds that for income tax purposes, the costs are ***18** deducted currently thereby producing an immediate tax benefit since current expenses reduce current taxable income. The commission finds that current ratepayers should receive the benefit of the tax savings Minnegasco actually experiences. The commission finds that the actual taxes paid or payable by Minnegasco related to payroll taxes and employee benefits capitalized must be flowed through in order to provide proper matching of the costs imposed on ratepayers with the costs actually incurred to provide service to those ratepayers. The commission finds that normalization provides no such matching and would require inclusion in rates paid by present customers recovery of taxes Minnegasco did not even pay in 1978. The commission further finds that over time and due to a number of considerations such as construction of plant for expansion or replacement, Minnegasco can continue to defer new amounts and recover more for taxes in each year than it actually pays in that year under the tax normalization method. Further, the commission finds that over an extended period of time, Minnegasco may be being compensated for more federal income taxes than it will ever pay. The commission finds that inflation of construction costs serves to magnify this effect. The commission further finds that the benefit to consumers now is far more valuable than the benefit normalization would have to consumers in later years. Finally, the commission finds that tax normalization assumes that tax circumstances will remain constant and presupposes that the costs of ongoing operations and the cost of construction can be completely separated. The commission finds that both contentions are erroneous.

VII.

Postage and Computer Billing

(A) Staff Position:

Staff recommends that two of Minnegasco's three adjustments to actual 1978 expense for postage and computer billing be disallowed. Staff contends that an adjustment to reflect postage expense for the number of customers at year-end 1978 should be rejected. Minnegasco's adjustment would increase the expenses to year-end levels although the revenues would reflect an average number of customers; i.e., expenses would not be matched by revenues. Additionally, staff points out that the year-end number does not reflect variations in the actual number of customers served throughout one year. Staff notes that only actual expenses incurred would show the interaction between revenues and expenses. Staff contends that this adjustment proposed by Minnegasco destroys the matching concept.

Staff also disallowed an adjustment to postage expense for 1979 projected new customers. Staff witness Petersen testified that it is not a known and measurable change and, accordingly, should not be permitted. Staff disallowed all aspects of both predicted increased expenses and predicted increased revenues flowing from the 1979 customer growth estimate.

Staff did allow an adjustment for increased postal and computer service rates in that it was a known and measurable change and the corresponding revenue effect, being zero, was accordingly taken into account.

(B) Company Position:

Company disputes staff's rejection of *19 two adjustments relating to annualization of the increase in expenses for customers added in 1978 and the increase in expenses for customers added in 1979. Company contends that customers at year-end 1978 will be billed in 1979 at a known cost per month. Company contends that this is a known and measurable change occurring within twelve months of the end of the test period and is appropriate. Company points out that it has properly annualized postage and computer billing expense for those customers. Company notes that this aspect of the adjustment is the minimum which the commission should reinstate.

Company contends that the other aspects of the disallowed expenses for new customer additions in 1979 should also be allowed. Company contends that it has established the minimum number of new customer additions it expects in 1979, and that that minimum is a known change which is measurable with reasonable accuracy. Company urges allowance of both adjustments rejected by staff.

Commission Findings

The commission finds that staff's recommendation regarding disallowance of two of three adjustments made by Minnegasco to actual 1978 expense for postage and computer billing should be adopted for the reasons set forth in (A) above. The commission finds that the adjustment to reflect postage expenses for the number of customers at year-end 1978 should be rejected because the expenses will not be matched with revenues. Further, the commission finds that the year-end number does not reflect variations in the actual number of customers served throughout one year. The commission finds that only actual expenses incurred would establish the interaction between revenues and expenses to obtain the necessary matching. The commission further finds that the mismatch of revenues and expenses would overestimate expenses and that staff's utilization of actual customer figures would eliminate such overstatement since the actual takes into account the higher year-end number.

The commission finds that staff's disallowance of an amount for postage expenses for 1979 adjustment for new customers is proper because the adjustment does not constitute a known and measurable change and, accordingly, should not be permitted. The commission finds that all aspects, both predicted increased expenses and predicted increased revenues, should be disallowed from the projected 1979 customer figure in that such predictions are unreliable and speculative. The commission finds that staff's allowance of an adjustment for increased postage and computer service rates constitutes a known and measurable change that will be in effect all during 1979, and that the corresponding revenue effect, albeit zero, accordingly being taken into account is totally proper and should be adopted.

VIII.

Property Tax Expense

(A) Staff Position:

Staff recommends that the proposed adjustment for increased 1979 property tax expense should not be allowed. Staff witness Petersen recommended exclusion of this adjustment because it is inconsistent with staff's rate base treatment. Staff points out that the 1979 property tax evaluation is based on property valuations as of January 1, 1979. Hence, this is essentially a year-end 1978 figure and the 1979 property tax valuation will include all of the improvements, additions, and other increases in value as well as all retirements that exist at the end of 1978. Additionally, staff's treatment of property tax expense matches the 1978 tax expense to the 1978 test year. The additional expense relates to a year-end rate base and not to the average 1978 rate base utilized by staff to determine rate base, expenses, and revenues for the test period. Staff notes that including the proposed adjustment without corresponding adjustments to revenues and rate base figures violates the matching principle and overstates expenses accordingly.

Staff contends that a distinction is to be made between Minnegasco's proposed adjustment which results from a change in the quantity and value of property and a property tax expense adjustment that might occur if the tax rate were changed. Changes in tax rates are not affected by difficulties of accurately matching the time frame of revenue, expense, and rate base measurements. The adjustment staff has rejected in this proceeding is one which directly relates to year-end plant and does not in any manner match tax expense with the test year.

(B) Company Position:

Company contends that its property tax adjustment is proper. Company points out that it is based upon actual January 1, 1979, property values as reported to the state department of revenue and reflects only the 1979 property tax increase that arises from increased taxable property values. Company contends that if inconsistency with rate base is the issue regarding staff's disallowance, it is equally true that staff's use of the unadjusted property tax expense for 1978 is not consistent with staff's rate base recommendation. Company points out that the tax for 1978 is based upon Minnegasco's property in service on January 1, 1978, and not the larger average property in service during 1978 reflected in staff's recommended rate base. Indeed, company contends that consistency with rate base should not be at issue in any event. Company contends that property tax is an expense, as is any other expense, and the additional tax to be incurred within twelve months of the end of the test period is known with reasonable certainty. Company maintains that the additional expense will be incurred regardless of the manner in which rate base is determined in this proceeding and that Minnegasco's adjustment should be allowed accordingly.

Commission Findings

The commission finds that staff's recommendation regarding the proposed adjustment for increased 1979 property tax expense should be adopted for the reasons set forth in (A) above. The commission finds that the exclusion of Minnegasco's adjustment is necessary because it is inconsistent with the commission's rate base determinations herein. The commission finds that the 1979 property tax evaluation is based on an evaluation as of January 1, 1979, and utilizes a year-end 1978 figure which is inappropriate for rate-making purposes. ***21** The commission finds that the additional expense related to the proposed adjustment is inconsistent with the average 1978 rate base approved by the commission and that such an adjustment would distort the matching of rate base, expenses, and revenues for the test period. Further, the commission finds that Minnegasco made no attempt whatsoever to make corresponding adjustments to revenues and rate base figures which totally violates the matching principle and overstates expenses accordingly. The commission finds that Minnegasco's adjustment does not involve the change in tax rates which would not necessarily distort the matching of revenue, expense, and rate base determinations. The commission further, and more importantly, finds that the treatment accorded property taxes herein matches the 1978 tax expense to the 1978 test period.

IX.

Depreciation and Amortization Expense

(A) Staff Position:

Staff contends that the company's adjustments to 1978 test year for depreciation and amortization should be disallowed. Staff contends that the adjustments would include a full year's depreciation for all plant in service as of December 31, 1978, and a predicted depreciation for plant added during 1979.

Staff witness Petersen testified that staff is utilizing an average 1978 rate base and that a portion of the proposed adjustment restates depreciation and amortization at year-end levels. Witness Petersen noted that use of a year-end level of depreciation and amortization would be inconsistent with staff's use of average rate base and would, consequently, violate the matching principle. The portion of the adjustment relating to the 1979 projected expenses is in staff's view not known and measurable, and rejection of this portion of the adj stment is required for consistency with staff's rate base.

(B) Company Position:

Company contends that its adjustment is proper and that staff witness Petersen's recommendation does not recognize depreciation expense which Minnegasco will incur during 1979. Company witness Swetman testified that the depreciation adjustment disallowed by staff is in fact necessary to properly match revenues and expenses. The depreciation adjustment includes two portions: one required in company's view to reflect a full year's depreciation on actual plant in service at the end of 1978, and one to reflect depreciation on 1979 net additions to plant. Company maintains that the first portion of the adjustment is clearly known and measurable. Further, company contends that the second portion, depreciation expense related to net plant additions in 1979, is known with reasonable certainty since the depreciation expense is merely a calculation utilizing actual depreciation rates. As a result, company maintains that its adjustment is proper and should be allowed by the commission.

Commission Findings

The commission finds that staff's recommendation regarding depreciation and amortization expense should be adopted for the reasons set forth in (A) ***22** above. The commission finds that the adjustments would allow inclusion as additional costs a full year's depreciation for all plant in service as of December 31, 1978, and a predicted depreciation for plant added during 1979. The commission finds that as a result of the commission's rate base determinations herein, staff's recommendation fully matches depreciation expense and plant in service and properly reflects plant-related costs. The commission further finds that that portion of the adjustment relating to the 1979 projected expenses is not a known and measurable change. As a result, 1979 projections and estimates should be disallowed.

X.

Uncollectible Accounts

(A) Staff Position:

Staff contends that company's proposed adjustment for uncollectible accounts expense should be disallowed. Staff points out that the proposed adjustment represents Minnegasco's prediction that increased revenues resulting from the aggregate of four other proposed adjustments normalizing actual 1978 figures would result in a proportionate increase in uncollectible accounts expense. The four proposed adjustments thus incorporated in the uncollectible accounts adjustment are normalization of 1978 weather, reduced sales due to conservation, annualization of current rates, and predicted increase in customers. Consequently, in order to accept the uncollectible accounts ajustment, the commission must also accept all of these adjustments on which the uncollectible accounts adjustment is based.

Staff witness Petersen recommends not allowing the adjustment to uncollectible accounts because it is too speculative and is not a known and measurable change. Staff witness Petersen testified that no fixed relationship between the amount of revenues and uncollectible accounts has been established by Minnegasco. Staff cited, for an example, that the increased revenues produced by an increased number of customers might not lead to the same amount of uncollectible accounts as increased revenues due to increased usage per customer under increased rates. Staff witness Petersen indicated that other factors might affect the uncollectible accounts amount such as changes in customer income and the availability and use of assistance programs for fuel bills by customers. Additionally, staff contends that the adjustment is not known and measurable in that it is based in part on other proposed adjustments which are not known and measurable such as the conservation adjustment and the predicted customer growth.

Staff points out that company witness Swetman attempts to justify the adjustment in that the amount of increased uncollected accounts will be at least equal to the amount included in Minnegasco's proposed adjustment. Staff notes that Minnegasco has attempted to utilize this argument in certain of their other adjustments and it should be rejected. If an adjustment is not known and measurable, it should not be allowed because it is speculative and not subject to verification. Minnegasco's contention that if attempts to estimate and project are made by Minnegasco, the adjustments resulting therefrom should be allowed. Staff finds this to be utenable and erroneous.

***23 (B) Company Position:**

Minnegasco contends that its adjustment for uncollectible accounts expense should be allowed Company witness Swetman testified that in 1978, the relationship between uncollectibles and revenues was .314 per cent. The uncollectible accounts adjustment was calculated utilizing the same factor applied to the increase in test-year revenues based only upon present rates.

Company contends that staff witness Petersen's disallowance of the adjustment because it is not known and measurable is improper and incorrect. Company witness Swetman explained in detail the historical information upon which he based his adjustment and that his analysis of past year's experience establishes the sharply increasing trend for uncollectible accounts. As a result, company contends that its adjustment is conservative and, like its inflation adjustment, reflects a known minimum amount of losses which will occur. Accordingly, the company urges the commission to adopt its adjustment and reject staff's disallowance.

Commission Findings

The commission finds that staff's recommendation regarding uncollectible accounts should be adopted for the reasons set forth in (A) above. The commission finds that Minnegasco's proposed adjustment represents Minnegasco's prediction that increased revenues resulting from the aggregate of four other proposed adjustments normalizing actual 1978 figures would result in a proportionate increase in uncollectible accounts expense. The commission finds that the adjustment is too speculative and is not a known and measurable change. The commission finds that Minnegasco has not established any fixed relationship between the amount of revenues and uncollectible accounts. The commission finds that other factors may affect the uncollectible accounts amount such as changes in customer income and the availability and use of assistance programs for fuel bills by customers. The commission finds that the adjustment is not known and measurable and that it is based in part on the other adjustments which this commission has hereinafter found to also be not known and measurable. The commission finds that Minnegasco's contention in this and other areas regarding its adjustment as being a minimum although not being known and measurable is without merit. The commission finds that an adjustment that is not known and measurable and not subject to verification is speculative and should not be allowed.

XI.

Advertising Expense

(A) Staff Position:

Staff recommends that Minnegasco's claimed expense for institutional and promotional advertising should be disallowed. Staff witness Jorgensen testified that these types of advertising were designed to increase revenues, primarily benefit the stockholder and not the consumers, and, consequently, stockholders rather than consumers should pay for such expenses. Staff witness Jorgensen permitted Minnegasco to include in its cost of service the expenses relating to conservation and safety advertising. Staff contends that ***24** Minnegasco's basic approach to advertising and advertising expense is erroneous. Staff notes that company witness Swetman contends that promotional advertising does not benefit Minnegasco at all. Staff finds this to be an untenable position since advertising causes increased revenues which are a clear benefit to Minnegasco. Further, staff notes that company witness Swetman could not offer a definition of promotional advertising even though he utilized that terminology in his presentation.

As to the February, 1979, Department of Energy letter that company contends supports its position, staff notes that it is directed toward attracting new heating customers while company's advertising is not addressed to attracting new heating customers but rather to encouraging the use of small gas appliances. Additionally, staff notes that the saturation level in areas served by Minnegasco is already in the upper 90 per cent range.

Staff points out that company witness Swetman and staff witness Jorgensen do not have disagreement over there being no significant difference between what Minnegasco had classified as load factor advertising and what Minnegasco had classified as promotional advertising. Consequently, staff contends that staff witness Jorgensen's reclassification of load factor advertising as promotional advertising is totally appropriate. The advertising in question was intended to encourage retention of gas appliances and encourages purchases of new gas appliances. Staff witness Jorgensen noted that while under certain circumstances increased usage might improve load factor, it would also and in every case tend to increase revenues. In light of the wide dissemination of such advertising, staff witness Jorgensen found that this would be a certain benefit to shareholders and, consequently, those shareholders should pay the related expense associated therewith.

Staff further points out that there is a question regarding the seriousness with which Minnegasco actually views the need to improve its load factor. Staff notes that Minnegasco has not added any large industrial interruptible customers in several years as a matter of principle and as a result of a gentleman's agreement among Northern distribution groups not to serve such industrial customers. Further, company witness Schroedermeier testified that it was not Minnegasco's policy to encourage consumers to use more gas in the summer than in the winter.

Staff also notes that Minnegasco did not present any specific information about its load factor, the goals that it set for improving its load factor, or how the denominated load factor advertising would serve to achieve those goals. Staff contends that this establishes that the claimed benefits to load factor from such advertising are even less certain and may not materialize.

Finally, staff contends that institutional advertising aimed at informing the public about Minnegasco and about natural gas, likewise, does not contain any message that concretely benefits consumers. Consequently, consumers should not be required to pay for advertising aimed merely at encouraging and fostering an image and a general public awareness of Minnegasco. Staff concludes that the disallowances it recommends are necessary in that they are not related to the provision of adequate, reliable, and safe gas service.

***25 (B) Company Position:**

Company contends that staff witness Jorgensen's adjustments are improper. Company contends that Miss Jorgensen improperly reclassified load factor advertising to promotional advertising and thereafter disallowed the entire amount. Company witness Swetman testified that load retention was an appropriate subject for load factor advertising. Company classified as such the type of advertising designed to maintain gas service and replace old gas appliances with new appliances. Company notes that staff witness Jorgensen concurred. Company witness Swetman further testified that encouraging customers to purchase gas appliances initially and replace existing appliances with gas appliances were two primary ways of maintaining or improving load. Company contends that while Miss Jorgensen disagrees with Mr. Swetman's analysis, the example Miss Jorgensen utilized of appropriate load factor advertising was erroneous and inappropriate.

Company maintains that staff witness Jorgensen was either unfamiliar with the nature of load factor advertising or was merely predisposed to disallow such advertising.

Company also disputes the disallowance of the other portion of promotional advertising and the disallowance of institutional advertising Company witness Swetman testified that promotional advertising is beneficial to customers because it informs them that natural gas is currently the most cost efficient fuel available. Further, company witness Swetman testified that institutional advertising is a necessary prerequisite to the effectiveness of all other advertising done by Minnegasco. As a result, company maintains that the evidence clearly establishes that Minnegasco's advertising serves to benefit its customers and is in the public interest. Minnegasco urges the commission to allow the entire amount of its requested advertising expense.

(C) ACORN Position:

South Dakota ACORN contends that staff's position should be adopted by the commission regarding disallowance of certain advertising expenses.

Commission Findings

The commission finds that staff's recommendations regarding Minnegasco's claimed advertising expense should be adopted for the reasons set forth in (A) above and on the basis of South Dakota ACORN's recommendations set forth in (C) above. The commission finds that staff properly determined the amount of advertising expenses which were expended upon advertising designed to increase revenue and to benefit stockholders, not ratepayers. The commission finds that staff's inclusion of load factor advertising into the classification of promotional advertising is totally proper. The commission finds that all such promotional advertising is of benefit primarily, if not entirely, only to shareholders and that, as a result, those shareholders should be required to pay the related expenses associated therewith. The commission finds that promotional advertising benefits Minnegasco and that Minnegasco's contention to the contrary is totally without merit. The commission finds that, additionally, institutional advertising aimed at informing the public about Minnegasco and about the natural gas ***26** industry does not serve to benefit consumers. The commission finds that consumers should not be required to pay for any advertising aimed merely at encouraging and fostering an image and a general public awareness of Minnegasco.

The commission finds that any claimed benefit to consumers that Minnegasco asserts as a result of its institutional and promotional advertising either does not exist at all or is so tenuous and speculative that those consumers should not be required to pay for such advertising. Minnegasco has provided this commission with absolutely no substantiation or proof of benefits to consumers accruing from any of its institutional and promotional advertising. The commission finds that all such advertising is not necessary or required for the rendition of safe, adequate, and reliable gas service.

On the other hand, the commission finds that staff's allowance of advertising expenses relating to conservation and safety do benefit consumers and, consequently, should be borne by the consumers. The commission finds that the allowance of such expenses in consumers' rates is proper in that there is direct benefit to consumers from such advertising.

XII.

Dues

(A) Staff Position:

Staff contends that the commission should not allow inclusion of the expenses associated with Minnegasco membership in the American Gas Association and in other organizations. Staff witness Jorgensen testified that AGA's basic orientation is toward activities that benefit the gas industry and do not necessarily benefit consumers. Staff witness Jorgensen noted that while only a small portion of lobbying expenses are reported under the federal lobbying laws, this fact establishes nothing regarding who benefits from the remainder of AGA's activities. Staff contends that AGA's informational and educational activities and its studies, analyses, and other information gathering activities are probably oriented toward promoting the gas industry. As to research, staff contends that no information was supplied regarding who controls the direction of research, how projects are chosen and funds are allocated, or who obtains the benefits from successful research results. Staff witness Jorgensen testified that the research may be used for promotion of the industry with no benefit to the consumer. Additionally, Miss Jorgensen testified that consumers pay for new technologies eventually when they come on line and are used and useful in rendering gas service.

Staff notes that its recommendation in no manner prohibits Minnegasco from participating in any AGA activities, but rather, merely requires those who benefit from such activities—i.e., Minnegasco's stockholder—to pay for those activities.

Staff contends that other dues expense for other organizations should also be disallowed. Staff notes that these dues are for memberships primarily in Minnesota organizations and have not been shown to in any manner be necessary for the rendition of safe, adequate, and reliable service to South Dakota consumers. Staff notes that company witness Swetman did not know or have knowledge of how many meetings the ***27** Employers Association of Greater Minneapolis had had, or who from the company had attended such meetings. Further, company witness Swetman had never personally received information from the Upper Midwest Council. Staff concludes that while the amounts involved are small, the benefits to South Dakota consumers are so speculative and unsubstantiated that they should not be borne by the ratepayers.

(B) Company Position:

Company points out that both staff and company agree that the $87 expended by the AGA for federal lobbying should be excluded as an allowable expense. Company disputes staff witness Jorgensen's disallowance of the remaining AGA dues. Company witness Swetman testified regarding the activities of AGA and provided in company's view detailed information of why AGA's research and other activities benefit ratepayers. Company contends that staff witness Jorgensen's total disallowance of AGA dues is arbitrary and unfounded. Company maintains that the AGA dues claimed in its filing are necessary, reasonable, and prudent in Minnegasco's gas utility business and provide a direct benefit to consumers. As a result, the dues should be included.

Company points out that in its Minnesota rate proceeding presently on rehearing before the Minnesota Public Service Commission, the Minnesota energy agency responsible for encouraging thrift in the use of energy and maximizing energy-efficient systems testified that there were overall ratepayer benefits accruing from AGA research.

As to other dues, company contends that they are appropriate and should be allowed. Company witness Swetman testified that specific benefits to South Dakota customers accrue from the memberships in these organizations. Further, company witness Fleer testified that Minnegasco's management function is system-wide and any savings achieved at the corporate level are shared proportionately in each of Minnegasco's state jurisdictions. Company contends that the memberships in these various organizations are beneficial to South Dakota ratepayers and should be allowed.

(C) ACORN Position:

ACORN contends that staff's position should be adopted. It is the position of ACORN that company should not be permitted to impose upon its customers charges arising out of memberships to various organizations. ACORN contends that there has been no showing that membership expenses are in any manner used and useful in providing safe, reliable, and adequate natural gas service to customers.

Commission Findings

The commission finds that staff's recommendation regarding dues should be adopted for the reasons set forth in (A) above and on the basis of South Dakota ACORN's recommendation set forth in (C) above. The commission finds that staff's disallowance of American Gas Association and other organization dues is entirely justified and is proper. The commission finds that AGA's basic orientation is toward activities that benefit the gas industry and do not necessarily benefit consumers. The commission finds that while only a ***28** small portion of lobbying expenses as reported under federal lobbying laws exist, this fact establishes nothing regarding who benefits from the remainder of AGA's activities. The commission finds that the informational and educational activities and AGA's studies, analyses, and other information gathering industries are probably oriented toward promoting the gas industry as opposed to benefiting consumers in any direct or concrete manner. The commission finds that with respect to research, Minnegasco has failed to provide any information regarding who controls the direction of research, how projects are chosen and funds are allocated, or who obtains the benefits from successful research results. The commission finds that research may be used for promotion of the industry with no benefit to the consumers. Additionally, the commission finds that consumers ultimately pay for new technologies when they come on line and are used and useful in rendering gas service to those consumers. The commission finds that Minnegasco is in no manner precluded from participating in any AGA activities, but rather, may not recover for the dues associated therewith from its ratepayers since the ratepayers have no benefit from such expenditures.

The commission finds that the other dues expense disallowances recommended by staff are totally proper. The commission finds that those dues are for memberships primarily in Minnesota organizations and have not been shown to in any manner be necessary for the rendition of safe, adequate, and reliable service to South Dakota consumers. The commission finds that Minnegasco was uninformed regarding the purpose and functions of many of the organizations it attempted to have ratepayers pay for in this proceeding. The commission finds that the benefits to South Dakota consumers are so speculative, unsubstantiated, remote, or not existent, that those expenses should not be borne by ratepayers.

XIII.

Contributions

(A) Staff Position:

Staff contends that commission should disallow expenses related to charitable contributions made by Minnegasco. Staff notes that the expenditures are not part of normal business expenses. Minnegasco is in the business of providing distribution of natural gas and in staff's view is not in the business of upgrading the level of social services by making involuntary collections from its customers. Staff notes that while company witness Swetman testified that communities practically demand contributions to be made, company witness Swetman would not say whether Minnegasco would make the contribution if it were not reimbursed for same in the rates it charges to customers. Staff contends that while company witness Swetman attempted to establish the minimal effects such contributions have on ratepayers, the aggregate amounts contributed provide significant support to the organizations it selects. Staff notes that these organizations may very well be organizations objected to by certain individual or groups of ratepayers. Staff contends that this is discriminatory and should not be permitted. Additionally, staff contends that such contributions are not necessary in the provision of adequate, reliable, and safe gas service.

***29 (B) Company Position:**

Minnegasco contends that its contributions should be allowed in the rates set in this proceeding. Minnegasco witness Swetman testified that communities place an obligation on business for support, communities benefit in general and those communities are the customers of Minnegasco, and all products a consumer purchases include a portion for contributions by any firm. Company witness Swetman testified that a committee of the board of directors makes the decision on which organizations will receive Minnegasco contributions. Company witness Swetman testified that the committee generally does not authorize contributions to special interest organizations such as neighborhood groups or local churches but rather to organizations with communitywide support such as United Way. Company witness Swetman noted that these organizations with wide support eliminate involuntary contributions by ratepayers in that that support is broad based and across the board. Company witness Swetman testified that consumers benefit as a result of the community environment wherein Minnegasco operates. Minnegasco argues that its charitable contributions expense should be allowed and is beneficial to ratepayers.

(C) ACORN Position:

ACORN recommends that commission staff's position be adopted. While ACORN recognizes that contributions to organizations within communities are beneficial to those communities, ACORN contends that that in no manner establishes that the expenditures are used and useful for the provision of natural gas service that is both safe and economical. Further, ACORN points out that certain consumers may very well be offended at the types of organizations selected by Minnegasco for contributions and the expenses related thereto should not be borne by any consumers.

Commission Findings

The commission finds that staff's recommendation regarding charitable contributions should be adopted for the reasons set forth in (A) above and on the basis of South Dakota ACORN's recommendation set forth in (C) above. The commission finds that these expenditures are not part of normal business expense and that Minnegasco is in the business of providing distribution of natural gas and has a monopoly over such distribution. The commission finds that as a result, ratepayers should not be required to pay the expenses associated with the organizations selected by Minnegasco to receive its beneficence and that any such expenses should be provided by Minnegasco's own largess, not through involuntary collections from its ratepayers. The commission totally rejects company's position that because the contributions reflect a minimal amount paid by each ratepayer over the course of the year the ratepayers should provide for such expenses in their rates. The commission finds that the aggregate amounts contributed by Minnegasco to particular organizations provide significant support to those organizations it selects. Further, such organizations may well be organizations objected to by certain individuals or groups of ratepayers. The commission finds that this is discriminatory and should not be permitted. Further, the commission finds that such contributions are not necessary for the provision of adequate, safe, and reliable gas service to consumers. Finally, the commission finds that simply because the cost to each consumer is minimal, this fact in no manner justifies inclusion in Minnegasco's cost of service a provision for any expenses which are not otherwise justified or proper.

XIV.

Inflation Adjustment

(A) Staff Position:

The commission staff recommends that Minnegasco's proposed general inflation adjustment be disallowed in that it is not a known and measurable change. The inflation adjustment proposed by Minnegasco is based upon company witness Swetman's estimated 1978 inflation rate at 8 per cent and 1979 inflation rate of 12 per cent. Staff contends that contrary to Mr. Swetman's position, the 1979, inflation adjustment is calculated at 12 per cent, not 6 per cent. Staff notes that the calculation of the 6 per cent amount is applied throughout 1979. Hence, the proposed adjustment as calculated reflects an average of 6 per cent over the year 1979; i.e., an inflation rate of 12 per cent for the year. Staff contends that this is contrary to the national policy regarding anti-inflation goals which company witness Swetman invoked in portions of his testimony.

Staff witness Petersen recommended the adjustment be rejected because it is not known and measurable. The company presented two types of purported bases as justification. First was a list of 60 assorted items purchased in early 1978 and again in late 1978. Secondly, reference was made to the consumer price index and the producer price index. However, Minnegasco in staff's view has not been able to relate the expenses actually incurred and included to the proposed justifications for its inflation estimates.

Staff points out that in Minnegasco's 60-item list, the inclusion and selection were based entirely on the criteria of whether Minnegasco happened to buy the items one in early 1978 and once again in late 1978. Company witness Swetman was not able to provide information as to what part of the total these items represented. Company witness Swetman testified that he did not know whether discounts from quantity purchases were reflected in the list and company made no effort to show that the list was statistically representative of items whose expense the list was supposed to demonstrate. Further, Minnegasco did not show that the list was representative or accurate for other major expense items covered by the proposed adjustment.

Staff witness Petersen testified that the consumer price index and the producer price index are not useful to measure the impact of inflation on a utility operation. Both indexes are fixed-weight indices of particular prices paid by a specific population for a particular bundle of goods and services. Both the 8 per cent inflation figure for 1978 and the 12 per cent for 1979 are presented as the result of an estimation of inflation for the periods described. Staff contends that this type of judgmental approach to an inflation adjustment which could be approached more precisely and exactly is not acceptable in that it does not in any manner constitute a known and measurable ***31** change. Staff points out that Minnegasco has the opportunity to reflect changes in its costs by specifically identifying cost increases or decreases in its pro forma adjustments rather than attempting to lump all expenses together and applying indices which are not even applicable to utility operations.

(B) Company Position:

Minnegasco contends that its inflation adjustment is reasonable and conservative. Minnegasco points out that it has thousands of small purchases and transactions which cannot be individually tracked. For those particular transactions, Minnegasco has estimated the expected rise in the general level of prices and applied that to the total of the miscellaneous yet numerous items. Minnegasco contends that the assumptions and empirical data upon which it relied in making this estimate reflect a known minimum increase in prices which will most definitely be experienced. Minnegasco contends that disallowing such a known, minimum level of inflation is illogical and contrary to established test-year principles. Minnegasco recognizes that the exact dollar amount of inflation cannot be adjusted for, but contends that its inflation adjustment reflects a minimum known change. Minnegasco contends that the commission should allow its adjustment accordingly.

Additionally, Minnegasco contends that its inflation adjustment is not based upon the consumer price index, but rather is based upon actual experience in 1978 and a reasonable projection of the average level of inflation Minnegasco will experience in 1979. Minnegasco contends that its witness Swetman provided a representative sample of goods and services purchased by Minnegasco in early 1978 and again in late 1978. Minnegasco points out that the overall weighted net increase in prices for these items was 8.7 per cent which compared favorably with the level of increase in both the consumer price index and the producer price index. Minnegasco contends that its adjustment is based upon Minnegasco's actual experience in 1978 and that allowance of such an adjustment is fully consistent with South Dakota judicial precedent.

Commission Findings

The commission finds that staff's recommendation regarding Minnegasco's general inflation adjustment should be adopted for the reasons set forth in (A) above. The commission finds that Minnegasco's proposed inflation adjustment is contrary to the national policy regarding anti-inflation goals. The commission finds that Minnegasco's adjustment is not known and measurable. The commission further finds hat the two purported bases for justification advanced by Minnegasco are without merit. The commission finds that the list of 60 assorted items purchased in early 1978 and again in late 1978 do not constitute a representative list and do not in any manner provide a reliable standard or guideline by which this commission can evaluate the reasonableness of company's general inflation adjustment. The commission further finds that the second justification based upon the consumer price index and the producer price index have little, if any, merit.

The commission finds that Minnegasco's 60-item list was based entirely on the criteria of whether Minnegasco happened to buy the items once in early 1978 and once again in late 1978. ***32** Further, the commission finds that Minnegasco was not able to provide any information as to what part of the total these items represented in its general inflation adjustment.

Minnegasco was unable to supply the quantities purchased during the test year for any of the 60 items. Additionally, Minnegasco did not know whether discounts for quantity purchases were reflected in the list and made no effort to establish that the list was statistically representative of all items whose expense the list was supposed to demonstrate. Finally, the commission finds that Minnegasco did not establish that the list was representative or accurate for other major expense items covered by the proposed adjustment.

The commission further finds that the consumer price index and the producer price index are not useful to measure the impact of inflation on a utility's operations. The commission finds that both indexes are fixed-weight indices of particular prices paid by a specific population for a particular bundle of goods and services not necessarily related to utility operations. The commission finds that the 8 per cent inflation figure for 1978 and the 12 per cent inflation figure for 1979 are presented as a result of an estimation of inflation for the periods described. The commission rejects Minnegasco's contention that its 6 per cent rate for 1979 and finds that it actually represents a 12 per cent rate for 1979. The commission finds that this type of judgmental and estimated approach to an inflation adjustment which could be approached more precisely and exactly if Minnegasco had so desired is not acceptable in that it does not in any manner constitute a known and measurable change.

The commission finds that it will recognize known and measurable changes which will occur to Minnegasco but the commission refuses to accept speculative, unsubstantiated, and arbitrary inflation adjustments which in no manner relate to, or are representative of Minnegasco's actual experience or to Minnegasco's operations. The commission finds that Minnegasco failed or refused to specifically identify in its pro forma adjustments any such known and measurable changes but rather merely attempted to lump all expenses together and apply indices and criteria which are unrepresentative or inapplicable to its utility operations.

XV.

Adjustment for Current Federal Income Tax

(A) Staff Position:

Staff reconstructed interest expense per books to include only that portion related to investment and compared that to pro forma interest expense related to investment to derive the income tax effect of interest expense annualization. Company witness Swetman criticized staff's methodology. Staff contends that that criticism is without merit and is unjustified. Company witness Swetman proposed an income tax adjustment for interest expense annualization which represents the difference between pro forma interest related to investment and the total interest expense appearing on the company's books. Staff contends that the booked expense includes not only interest on long- and short-term debt but other interest expenses such as interest on customer deposits and customer refunds. Staff noted that company witness ***33** Swetman agreed that the purpose of the interest adjustment was to adjust to an interest figure based upon investment in South Dakota utilizing the interest rate that is in Minnegasco's filing. However, staff contends that interest items other than interest on long- and short-term debt are unrelated to this purpose. As a result, the income tax adjustment for interest expense annualization should be based upon staff's method of comparing pro forma to actual interest on only long- and short-term debt and should not be based upon Minnegasco's method.

In developing the investment base from which pro forma interest was derived, staff included construction work in progress not included in staff's average rate base. Minnegasco was critical of such inclusion of CWIP contending that it should not be utilized without a corresponding provision for deferred income taxes. Staff, however, notes that inclusion of CWIP in the investment base is appropriate and compatible with its flow-through recommendations and that not utilizing CWIP in the calculation would result in Minnegasco normalizing the tax benefit of interest expense.

(B) Company Position:

Company concurs, in principle, with staff's adjustment for interest expense annualization, but contends that the adjustment contains errors. Company witness Swetman testified that staff included staff's proposed CWIP figure with its average rate base in its calculation, the effect of which is to improperly give current ratepayers the tax benefit of an interest cost which will be borne by future ratepayers. Further, company witness Swetman testified that staff failed to use the proper actual interest expense figure as found in company's filing. As a result of these asserted erros, Minnegasco urges adoption of its recommendation.

Commission Findings

The commission finds that staff's interest expense adjustment is proper and should be adopted for the reasons set forth in (A) above. The commission finds that the booked expense includes not only interest on long- and short-term debt but other interest expense such as interest on customer deposits and customer refunds. The commission finds that interest items other than interest on long-and short-term debt are unrelated to the purpose of the interest adjustment which is to establish an interest figure based upon investment in South Dakota. The commission finds that, as a result, the interest adjustment proposed by Minnegasco should be based upon staff's methodology of comparing pro forma to actual interest on long- and short-term debt. The commission finds that staff's recommendation of including CWIP in the investment base from which pro forma is derived flows through the tax benefits experienced by the company to current ratepayers. The commission finds that this is the identical issue relating to the propriety of flowing through deferred income taxes related to capitalized payroll taxes and employee benefits. The commission finds that current ratepayers shojld be given the ratepayers should be given the avoided by Minnegasco.

XVI.

Weather Normalization

***34 (A) Staff Position:**

Minnegasco proposed a weather adjustment to its 1978 actual figures to adjust to normal levels of gas usage. Staff agrees in principle that such an adjustment is appropriate, however, staff contends that Minnegasco has made a serious error in its method of calculating normal weather. Minnegasco excluded all actual 1978 weather data in calculating its 20-year normal. Staff witness Black testified that the normals should be based upon the most currently available data and utilized in his weather adjustment a normal including 1978 figures.

Staff contends that company witness Pooler could not adequately explain the justification for Minnegasco's exclusion of the 1978 data. Staff contends that Minnegasco clearly had sufficient and ample information to determine the 1978 weather normal figure if it had made any effort whatsoever to do so.

Staff contends that the fundamental difficulty with Minnegasco's position is that Minnegasco apparently excluded 1978 data simply becau e it was colder than normal. Staff notes that Minnegasco's exclusion was not based upon any question of accuracy of raw data or of sampling technique but merely was based upon the fact that 1978 was a colder than normal year. Staff further notes that while Minnegasco maintains that it would act in the same manner regarding an abnormally warm year, the record reflects that a rate increase in Minnesota filed in October of 1977 was justified in part by lower revenues due to abnormally warm weather in 1977. Consequently, staff contends that it is clear that Minnegasco's policy appears to be one of including abnormally warm years in its normal and excluding abnormally cold years in its normal for rate case filing purposes. Staff contends that this is neither reasonable nor acceptable for adjusting the weather to normal.

Staff contends that its revised weather normal should be adopted. Staff witness Black testified that a number of related adjustments flow from the change in the weather normal. Hence, for purposes of consistency, all adjustments proposed by staff for weather normalization, annualized purchased gas costs, annualized revenues, and annualized LPG expense should be, accordingly, adopted.

(B) Company Position:

Minnegasco recognized the unusually cold weather existent in 1978 and therefore normalized test-year weather by decreasing revenues accordingly. Minnegasco contends that its use of a 20-year normal ending prior to the commencement of the test period is based upon logic, judgement, years of forecast experience, and the best basis of a 20-year normal available. Minnegasco contends that its adjustment should be approved by the commission.

Commission Findings

The commission finds that staff's recommendation regarding weather normalization should be adopted for the reasons set forth in (A) above. The commission finds that on the basis of this record, some type of adjustment to recognize normal levels of gas usage should be made. The commission finds that Minnegasco's exclusion of all 1978 weather data in calculating its 20-year normal is arbitrary and wholly unsupported. The commission finds that the ***35** normals should be based upon the most currently available data in deriving the normal and that staff's recommended weather adjustment including 1978 data is totally proper and presents a representative level of gas usage. The commission finds that Minnegasco's attempt to exclude cold years in providing a normal and its record including warm years in deriving its normal is not only unwarranted but verges on incredulity.

The commission further finds that no circulatity of statistics would result by using the 1978 actual weather conditions simply because of the 1978 test year selected by both staff and Minnegasco.

The commission finds that staff's adjustments which are based upon its normal are proper and should be adopted. The commission finds that staff's weather normalization, annualized purchased gas costs, annualized revenues, and annualized LPG expense are properly determined and should, accordingly, be adopted.

XVII.

Conservation Factor

(A) Staff Position:

Staff recommends that the commission disallow company's adjustment for increased conservation of 3.5 per cent because it is not known and measurable. Minnegasco's proposed adjustment predicts lower usage per customer in 1979 due to added conservation with the consequent need for obtaining revenues for increased rates. However, staff witness Black found that Minnegasco failed to make any serious attempt to quantify the impact of conservation in the twelve months following the test period. Staff points out that Minnegasco's method for deriving the 3.5 per cent figure was simply to note a historical decline in usage per customer of 3.5 per cent for 1978 over the previous year and to merely assume that that rate would continue. Staff contends that Minnegasco made no attempt whatsoever to examine the causes or mechanisms of conservation and provided no information, historical or otherwise, re arding a consistent trend.

Further, commission staff finds that Minnegasco's purported linear regression equation is unsubstantiated and without foundation because of use of varying a data base. Staff points out that there are finite steps consumers can take to conserve gas such as replacing inefficient applicances, adding insulation, and turning thermostats down a certain number of degrees. Staff notes that at some point, most consumers will have done all that is possible and a saturation point has or will be reached. Without an evaluation of the various types of customer activities that produce conservation, it is staff's view that Minnegasco cannot accurately predict how much future conservation will occur.

Additionally, staff contends that the accuracy of the 3.5 per cent estimate is highly questionable in light of the historical declining rate of conservation. Staff concludes that Minnegasco has simply not adequately supported its estimated conservation adjustment and, therefore, the adjustment should be rejected by the commission.

(B) Company Position:

Minnegasco contends that the 4.5 per cent reduction in heating gas used per residential customer for the calendar ***36** year 1978 and the 4.4 per cent reduction in annual consumption for firm gas customers between 1977 and 1978 support its claimed adjustment in this proceeding. Minnegasco contends that the trend is continuing and that its requested 3.5 per cent adjustment is conservative and should be allowed. Company contends that staff witness Black did not do an independent determination of the effects of conservation and did not form a valid conclusion regarding such conservation. Minnegasco contends that staff's recommendation fails to adjust for a known minimum and that staff's disallowance should be rejected by the commission.

Additionally, Minnegasco contends that staff relied upon incorrect data to support staff's position that the effects of conservation were declining and, consequently, Minnegasco's adjustment was unsupported. Minnegasco claims that the correct data establishes that there is a definite and consistent trend and that that trend is far in excess of Minnegasco's 3.5 per cent adjustment.

Commission Findings

The commission finds that staff's recommendation regarding disallowance of Minnegasco's adjustment for increased conservation of 3.5 per cent should be adopted for the reasons set forth in (A) above. The commission finds that Minnegasco failed to make any serious attempt to auantify the impact of conservation in the twelve months following the test period. The commission finds that Minnegasco's method for deriving the 3.5 per cent figure was simply to note a historical decline in usage per customer of 3.5 per cent for 1978 over the previous year and to merely assume that that rate would continue. The commission finds that Minnegasco made no attempt whatsoever to determine let alone examine the causes or mechanisms of conservation and that Minnegasco provided no information, historical or otherwise, regarding a consistent trend. The commission finds that Minnegasco's purported linear regression equation is unsubstantiated and without foundation because of Minnegasco's use of varying data bases and improper methodology. The commission finds that there are a finite number of steps consumers can take to conserve gas and that at some point most consumers have done all that is possible. As a result, a saturation point has or will be reached and absent an evaluation of the various types of customer activities that produce conservation, the commission finds that there is no way to accurately predict how much future conservation will occur. The commission finds that Minnegasco's 3.5 per cent estimate is not only not a known and measurable change but highly questionable in light of historical declining rates of conservation. The commission finds that Minnegasco has wholly failed to support its estimated conservation adjustment and, accordingly, that adjustment should be rejected. The commission finds that Minnegasco's failure to quantify the effects in conjunction with a delineation of the type of conservation the adjustment purports to measure renders Minnegasco's adjustment without merit.

The commission finds that such quantification is necessary to determine the degree of energy saving equipment currently in existence on Minnegasco's system and the degree to which its present customers have already achieved a level of gas usage reflecting conservation. ***37** The commission finds that staff's contention that conservation adjustments are a relatively recent phenomenon and that no witnesses, be it for commission staff or utilities, have and much experience in dealing with such an adjustment has merit. This is confirmed in this proceeding by both staff witness Black having to eyeball the data as well as company witness Schroedermeier having to secure his information through Kiwanis and church meetings. The commission finds that there can be no serious question regarding the failure of Minnegasco to provide any substantiation or justification for its conservation factor.

XVIII.

Customer Growth

(A) Staff Position:

Staff contends that Minnegasco's proposed adjustment for customer growth should be disallowed because it is not a known and measurable change. Staff points out that Minnegasco's primary basis for deriving its customer growth adjustment is to estimate new housing starts by talking to bankers, construction officers, and others. However, company witness Schroedermeier did not participate in any survey and did not derive any information about South Dakota and its situation. Merle Jansen, Minnegasco's South Dakota manager, prepared a report in August of 1978 which was the basis for company witness Schroedermeier's determination. However, and inexplicably, company witness Schroedermeier changed the South Dakota office's estimate and made numerous reductions including four new large and small volume interruptible customers. Staff notes that company witness Schroedermeier did not point to any documentations establishing how Minnegasco had derived its estimate of 825 new residential housing starts for 1979 from either 900 or 880 as an overall estiamte for firm customers. Additionally, staff criticizes Minnegasco's linear regression analysis for inadequate data.

Staff further notes that Minnegasco has been inconsistent regarding customer increases between the present rate filing and the proceeding in PUC Docket F–3237 wherein Mr. Bjorklund, a witness for Minnegasco, testified on May 21, 1979, that new connections would be at the same level, companywide and in South Dakota as in 1978 which was approximately 1,000. The PUC Docket F–3237 dealt with elimination, in whole or in part, of master metering in South Dakota.

Further, staff contends that further uncertainty and doubt is cast upon Minnegasco's customer growth estimate when predicted and actual customer growth is compared. Minnegasco forecast fewer customers for January, 1979, than were actually on-line at December 31, 1978. Staff notes there were similar underestimates in subsequent months. Staff notes that company witness Pooler provided information which points out the errors and the company characterizes them as de minimus. However, a 50 per cent underestimation of 300 customers a month for five months, particularly in the first portion of the year when most of Minnegasco's sales are made, must represent a large portion of the total claim by Minnegasco in this adjustment.

Staff further contends that the estimate of customer conversion, another aspect of the new customer estimate, is ***38** also speculative. Staff notes that while the saturation of gas heat in the immediate area served by Minnegasco is very high, staff witness Black indicated that a survey by telephone he had conducted regarding number of customers who heat with fuel oil indicated the potential conversions might be substantially greater than that estimated by Minnegasco.

(B) Company Position:

Company contends that its adjustment for new customer additions in 1979 should be allowed. Company contends that it is absolutely proper to base this adjustment on the informed judgement of somebody having years of experience in the field. Company contends that company witness Schroedermeier has had responsibility for Cengas operating budgets since 1955 and is responsible for the adjustment ultimately included in this filing. Company witness Schroedermeier utilized historical data and experienced judgement to arrive at the projected increase in 1979 customers. Further, company witness Pooler testified that he and his staff had substantiated company witnessSchroedermeier's estimate using linear regression equations, one of which proves statistically significant. That particular equation verified company witness Schroedermeier's customer estimate in Minnegasco's view.

Company contends that staff witness Black's criticism that Minnegasco ignored conversions is invalid. Company points out that company witness Schroedermeier testified that about 25 conversions were included in the estimate of new customer additions for 1979.

Minnegasco further argues that this is a known and measurable change and should be accordingly allowed. Company contends that it is known with reasonable certainty and measurable with reasonable accuracy that a minimum of 880 new customers will be added in 1979. Accordingly, company concludes that the adjustment should be allowed by the commission and that its denial would be unfair and improper.

Commission Findings

The commission finds that staff's position regarding Minnegasco's proposed adjustment for customer growth should be adopted for the reasons set forth in (A) above. The commission finds that Minnegasco's primary basis for deriving its customer growth adjustment is to estimate new housing starts by talking to bankers, construction officers, and others. The commission finds that Minnegasco did not participate in any survey and did not derive any information about South Dakota and its situation through such contacts. The commission finds that, in any event, such contacts were a poor, if not irrelevant basis, to determine customer growth. Further, the commission finds that company's witness responsible for the customer growth adjustment not only did not have any studies or contacts with individuals in South Dakota in the banking and other housing-related industries, but took the South Dakota manager's estimated report of customer growth determined in August of 1978 and made numerous unsupported reductions thereto. The commission finds that not only did the company's witness lower in the case of residential customers or ignore in the case of industrial customers the estimates provided by its regional manager, but those estimates provided by the regional manager are speculative in any event. Hence, the commission finds that this is a situation where company's witness who had no information or basis for determining customer growth in South Dakota reduced or ignored customer growth as determined by South Dakota's manager whose determination, while speculative and not subject to verification, at least had some idea of the circumstances existent in South Dakota. The commission finds Minnegasco's linear regression analyses to be based upon inadequate data and undeveloped methodology. As a result, the commission finds no reliance can be placed thereon.

The commission further finds that in other proceedings dealing with other subject matters, Minnegasco has advised the commission of higher customer growth than Minnegasco has provided for in this proceeding.

The commission further finds that uncertainty and doubt is raised by Minnegasco's estimate of customer growth relating to Exh S–3 which shows predicted customer growth compared to the increases actually experienced. The commission finds that there were underestimates of customer growth in several months for which actual increases were known.

Finally, the commission finds that the estimate of customer conservation, another aspect of the new customer estimate, is speculative and unsupported. Additionally, the commission finds that little or no consideration or recognition of possible conversions were utilized in estimating customer growth. The commission finds that there are a number of present Minnegasco customers in South Dakota that could switch to natural gas for heating in face of the rising fuel oil prices this winter. Minnegasco failed to consider such factors in attempting to estimate the switch to natural gas for heating by its present customers. The commission finds that this failure is unfortunate in that Minnegasco's own reports indicate it is only losing customers in the residential and commercial classes without heating.

XIX.

Rate of Return

(A) Staff Position:

Staff recommends a return on common equity of 12.3 per cent and an overall rate of return of 10.16 per cent for Minnegasco based upon testimony of Dr. Gordon Taylor and upon the record in this proceeding. Staff witness Dr. Taylor adjusted the capital structure of Minnegasco to reflect staff's actual test-year approach. However, Dr. Taylor recognized and permitted Minnegasco's reduction of its long-term debt component by one-half of the amount of the 1979 sinking-fund requirements.

Staff witness Taylor provided a discounted-cash-flow analysis which utilized data relating to companies having similar risk characteristics to Minnegasco. Staff witness Taylor testified that the rate of growth in dividends actually paid by Minnegasco is the best measure to use in estimating the expected growth in dividends Minnegasco will pay in the future. He testified that investors would primarily form their expectations of the future rate of growth in Minnegasco's dividend payments on the growth in dividends that have actually ***40** been paid by Minnegasco. Staff witness Taylor did not find that earnings would be a reliable factor to be used in his DCF model since Minnegasco's earnings vary so much from year to year due, in part, to weather conditions. Consequently, staff witness Taylor examined Minnegasco's dividends over the past nine-year period and found that Minnegasco's policy is to maintain a steady, constant historical growth in dividends. He pointed out that Minnegasco has accomplished this by varying its pay out ratio.

Staff witness Taylor utilized both the continuous model and the annual model. The continuous model uses the dividend currently being paid for estimating the dividend yield. The annual model uses the dividend yield expected in the twelve months after the stock was purchased. Dr. Taylor testified that the continuous rate is always lower due to the fact that the continuous rate does not have the advantage of interest being paid on interest throughout the year which exists with respect to continuous compounding. Further, since dividends are paid quarterly, the continuous model tends to underestimate the required rate of return and the annual model tends to overstate the required return. Staff witness Taylor found that while the two models produce a range of reasonable values, quarterly compounding is closer in value to continuous compounding. Dr. Taylor utilized the most recent 12-month period for which stock price data was available and found that the average dividend yield for the continuous model was 8.73 per cnet. Dr. Taylor utilized the current dividend yield plus one-half of the estimated growth in dividends during the next twelve months for the dividend yield figure in his annual model.

In estimating the growth factor, Dr. Taylor used a five-year time frame to estimate investors' expected rate of growth in dividends. Dr. Taylor testified that the five-year period is proper in that investors primarily focus on the post-OPEC embargo performance of energy-related firms and that the five-year period he utilized is the period in which major changes occurred in the business environment for energy-related industries. Dr. Taylor noted that since 1974, Minnegasco's annual dividend payment has increased by six cents per year. He found that the best statistical estimate of the expected dividend growth for Minnegasco based on the five-year period from 1974 to 1978 is that Minnegasco would increase the dividend by another six cents each year. In utilizing the average of the next two years' growth rates in the annual model, Dr. Taylor concluded that the rate of return for Minnegasco would be 12.13 per cent. Dr. Taylor proceeded to use an exponential curve fit assuming a continuous compound growth rate in dividends in estimating the expected rate of growth in dividends for Minnegasco. This statistical method resulted in a 3.56 per cent dividend growth rate.

Dr. Taylor determined that the estimates of dividend yields and dividend growth for both the continuous and the annual models results in a range of 12.29 per cent for the continuous model to 12.51 per cent for the annual model. Dr. Taylor testified that 12.3 per cent was the most appropriate return on equity for Minnegasco in that quarterly compounding is more realistic and it would be closer to the continuous model estimate. Further, Dr. Taylor testified that 12.3 per cent would satisfy all legal requirements.

***41** Dr. Taylor also utilized two other factors in his analysis: the opportunity cost to investors of investing in Minnegasco compared to Minnegasco's required rate of return, and a possible flotation cost adjustment. Dr. Taylor testified that it was necessary to consider the expected opportunity cost to investors in forfeited returns from comparable risk firms before arriving at a final recommendation. Dr. Taylor selected a group of gas distribution companies that had relatively similar risks to Minnegasco. The group of firms were selected on the basis of seven specific criteria which established comparability to Minnegasco. Dr. Taylor developed a median rate of return required by investors as an indication of their opportunity cost with respect to the companies selected. For the continuous model, the median is median return is 12.32 per cent. For the continuous model, the required rates of return range from 10.49 per cent to 14.97 per cent. For the annual model, the range is from 10.59 per cent to 15.55 per cent.

Dr. Taylor found that the 12.3 per cent derived for Minnegasco fell in the middle of these ranges and confirmed the reasonableness of his DCF analysis.

As for the flotation cost, Dr. Taylor found that no additional return was required since there has been no indication that Minnegasco expects to issue additional common stock in the near term. Dr. Taylor testified that an allowance for fictitious flotation costs is not warranted and that Minnegasco's adjustment should, accordingly, be rejected.

Staff contends that company witness Dr. Johnson's criticisms of staff witness Taylor's analyses are without merit. Staff points out that the crucial aspect of a proper analysis of Minnegasco's growth factor is expected growth in dividends since there is no other factor which investors can rely on with any degree of predictability with regard to Minnegasco. Staff points out that Dr. Taylor set forth the wide swings in Minnegasco's earnings and its pay out ratios in order to point out the difficulty any investor faces in determining a trend from this information. As a result of the wide variations in both earnings and pay out ratios, staff points out that Dr. Taylor was fully justified in his conclusion that investors base their expectations of growth in dividends primarily on Minnegasco's dividend payment policies. Staff notes that Dr. Johnson acknowledged that Minnegasco's earnings were not stable. Minnegasco attempts to maintain more stability in dividends than in earnings by changing its pay out ratio from year to year. Staff contends that this stabilizing policy of Minnegasco is exactly what confirms the propriety of Dr. Taylor's determination that the growth in dividends is the factor on which investors focus.

Staff further contends that Dr. Johnson's criticisms of Dr. Taylor regarding Dr. Taylor's calculation of the dividend yield is without any foundation or substance. Dr. Taylor pointed out that the proper dividend payment figure to use for calculating the dividend yield in the continuous DCF model is the indicated dividend which is the latest quarterly dividend paid or announced multiplied by four since the DCF model utilizes an estimate of the total yield expected by investors over the coming twelve months plus the expected yield from growth in dividends. Staff notes that either the expected indicated dividend must be used in the continuous ***42** DCF model or the expected indicated dividend with the addition of one-half of the annual expected growth in dividends must be used in the annual DCF model. Staff points out that Dr. Johnson has acknowledged that, in the application of the DCF formula, yield is properly calculated by dividing the dividend to be paid in the next year.

Staff contends that Dr. Johnson utilizes a single spot dividend figure at one point during the year. However, Dr. Yaylor testified that the dividend yield figure for Minnegasco changes significantly when a spot dividend figure is employed, particularly when the calculations are first made the day before and the day after Minnegasco's announcement of its annual dividend. Consequently, Dr. Taylor recommends utilization of an average of monthly yields.

Additionally, staff points out that Dr. Johnson purports to have updated certain of Dr. Taylor's data with resultant increases in the cost of capital. Staff contends that Dr. Johnson's changes consist of a substitution of certain of Dr. Johnson's elements with other elements in staff witness Taylor's DCF formula that relate to a different time period. Dr. Taylor testified that the dividend yield and dividend growth estimates must be compatible and that Dr. Johnson is in error in attempting to utilize one aspect of the formula and replace it with another from a different time span. Dr. Taylor further testified that the dividend yield and the dividend growth are inextricably tied together and any attempt to substitute unrelated factors is improper. Consequently, staff contends that any results derived therefrom are without merit.

Dr. Johnson testified that Dr. Taylor's method assumes a continued low pay out ratio. Staff points out, however, that Dr. Taylor's analysis of the pay out ratio is based upon the assumption that Minnegasco will vary it in the future as it has in the past. As previously noted, Minnegasco varies the pay out ratio in order to maintain steadily growing dividend payments.

As for Dr. Johnson's general criticism of Dr. Taylor's growth estimates, staff contends that that criticism is shown to be without merit in the context of the market's reaction to the announcement of an increase of ten cents per share in Minnegasco's annual dividends in July of 1979. Staff points out that if Dr. Johnson's growth estimate were correct, the ten-cent per share increase should have resulted in no change in the market price of Minnegasco's stock. However, Dr. Johnson has acknowledged that the price of Minnegasco's stock increased. The increase commenced immediately with the dividend announcement although, as Dr. Taylor testified, the stock market, including utility stocks, was declining. Staff contends that the increase in the market price can be explained in terms of the growth estimate anticipated by investors and that investors had a perception of a lower growth rate in dividends than Dr. Johnson's estimate which caused the price of the stock to be bid up by investors when the perception was changed by the announcement of the higher dividend. Dr. Taylor found that the increase in Minnegasco's stock price is objective evidence that a lower growth rate closer to his estimate was expected by investors.

Staff contends that Dr. Johnson's recommendations are flawed and should not be relied upon. Staff points out that ***43** Dr. Johnson averages together the results of four different estimates of dividend growth rather than relying on Minnegasco's previous dividend performance. Dr. Johnson utilized implied growth, Value Line estimated growth, earnings growth, and dividend growth. Staff points our that rather than utilizing actual 1978 earnings, Dr. Johnson utilized Value Line's estimate even though the actual data was available. Dr. Johnson provided no explanation regarding why investors whould use an estimate of 1978 earnings when the actual figures were available. Staff further contends that Dr. Johnson utilized data which was inflated by 25 per cent in measuring historical dividend growth. Additionally, staff contends that Dr. Johnson's sample companies are not comparable to Minnegasco and that there has been no showing of comparability. Staff notes that Dr. Johnson utilized company witness Fleer's selection without any independent substantiation of comparability.

Staff also contends that Dr. Johnson's risk premium analysis is not a proper basis for determining a fair rate of return. Staff contends that the methodology is not sufficiently developed to be reliable. Staff points out that utilities like Minnegasco are not as risky as investments in nonregulated firms and that no accurate risk measure has been derived.

Finally, staff contends that Dr. Johnson's mixing of multiple approaches in deriving his recommendation is erroneous. Dr. Taylor testified that use of multiple approaches in deriving the growth factors is improper in that the only data base stable enough for investors to utilize in making estimates regarding Minnegasco is dividends. Staff contends that Dr. Johnson's use of four completely different estimating approaches and the averaging thereof is unreliable and provides an improper basis for evaluating Minnegasco.

Staff further points out that changes have occurred in the natural gas industry since 1978 which serve to enhance the prospects for companies engaged in natural gas distribution. Dr. Johnson himself stated that, while he was not too familiar with the Natural Gas Policy Act, he understood that the act would serve to increase the availability of gas supplies. Staff contends that such developments in the industry vividly establish the fact that the industry is in a stable and increasingly favorable condition.

Finally, staff contends that company witness Fleer's assertion that gas distributors should earn from 1.50 per cent to 2 per cent higher returns than electric utilities is erroneous. Staff points out that witness Fleer's study utilized companies not comparable to Minnegasco. Further, witness Fleer's sample contains firms whose percentage of total revenues attributable to gas distribution operations is far less than the 100 per cent received by Minnegasco. Consequently, witness Fleer's sample is necessrily weighted toward the higher equity values. Staff also points out that Mr. Fleer's study utilizes a time period when the gas supply situation was very uncertain and unstable. Finally, staff contends that Dr. Taylor fully and explicitly considered the investors' needs in this regard and his recommendation should be adopted by the commission.

(B) Company Position:

Minnegasco presented two witnesses in support of its requested 11.21 per cent *44 overall rate of return to be applied to rate base. Company witness John W. Fleer, Minnegasco's chief financial officer, calculated all facets of the cost of capital using a 14.5 per cent cost of common equity which was at the lower end of the range recommended by company witness Robert L. Johnson. Company witness Fleer analyzed the return on common equity required for market price to equal book value for 24 Moody's electric utilities and for the 20 largest gas distributors. Company witness Fleer concluded that gas distributors must earn from 1.50 per cent to 2 per cent greater rate of return on common equity than electric utilities to sell at book value under the present market conditions.

Company witness Dr. Johnson utilized three methods to determine the cost of equity for Minnegasco; i.e., risk premium, discounted cash flow, and comparable earnings. On the basis of the risks premium method, Dr. Johnson testified that the minimum market cost of equity at this time was at least 14.4 per cent to 14.8 per cent.

In Dr. Johnson's discounted-cash-flow analysis, he estimated the growth factor utilizing several techniques to avoid the risk of serious error. Dr. Johnson studied implied growth rates, Value Line growth forecasts, and four historical growth rates in arriving at his growth determination. Combining the six growth estimates, Dr. Johnson arrived at a market cost of equity for Minnegasco of 14 per cent to 15 per cent. Dr. Johnson also performed a regression analysis which served to confirm this range of market costs.

Finally, Dr. Johnson found that, based on his comparable earnings analysis, the market cost of equity within Minnegasco's risk range would be between 14 per cent and 14.9 per cent.

Further, Dr. Johnson found that the market cost of equity for Minnegasco of 14 per cent to 15 per cent should be adjusted upwards to 14.8 per cent to 15.9 per cent to avoid dilution of stockholders' equity and earnings per share. Dr. Johnson's adjustment was made to allow for flotation costs, market pressure, and general market decline.

Minnegasco contends that staff witness Dr. Taylor's analysis is erroneous and that Dr. Taylor's recommended 12.3 per cent must be adjusted upwards to 12.78 per cent to meet his revised investors' expected opportunity cost analysis. Further, Minnegasco contends that Dr. Taylor's recommended 12.3 per cent must be adjusted upward to a minimum of 14 per cent to permit Minnegasco to sell at a market price equal to book value.

Minnegasco notes that Dr. Taylor utilized his investors' expected opportunity cost as a check on the reasonableness of the results of his DCF analysis. Minnegasco further notes that the median rate of return required by investors calculated from Dr. Taylor's 12 comparison companies was 12.13 per cent for the continuous DCF model and 12.32 per cent for the annual DCF model. As a result, Dr. Taylor ranked the data for his 12 selected companies and concluded that his recommended 12.3 per cent was reasonable in that it was in the middle of the two ranges of the opportunity costs to investors. Minnegasco contends that as a result of Dr. Taylor's revision of the dividend data for Piedmont Natural Gas Company, the median for his 12 companies must be raised to 12.64 per cent for the continuous DCF model and 12.88 per cent for the annual DCF model. Consequently, Minnegasco contends that the 12.3 per cent is now below the medians originally determined and should be adjusted upward. Minnegasco further contends that Dr. Taylor ignored the change in medians by revising his methodology from a 12-company comparison group to a 13-company group by including Minnegasco. Minnegasco claims that this is inappropriate and should be rejected.

Minnegasco also contends that staff witness Taylor's recommended 12.3 per cent is inappropriate because it will not allow market price to equal book value. Minnegasco points out that it has earned over 14.5 per cent on average book equity each year since 1975 and that its stock price is approximately equal to its book value. Further, Minnegasco states that its witness Fleer's analysis establishes that for the 20 largest gas distributors, earnings on equity of over 14 per cent are required to support a market price equal to book value and that of the 11 companies with earnings on common equity less than 14 per cent in the 20 largest gas distributors study, all such companies were selling at market prices less than book value. Finally, Minnegasco notes that of the natural gas companies examined by Dr. Johnson, with one exception, those companies were selling below book value where earnings of less than 14 per cent existed. Minnegasco contends that Dr. Taylor's position is untenable and does not recognize that investors require a higher rate of return on equity for gas distributors than for electric companies or for combination gas and electric firms. Minnegasco notes that it is strictly a gas distributor and that the rate of return allowed to it must be greater than that recommended by Dr. Taylor. Minnegasco further points out that company witness Fleer's study establishes that Minnegasco should be allowed between 1.5 per cet to 2 per cent higher return than electric utilities.

Minnegasco also criticizes Dr. Taylor's determination of the growth factor utilized in Dr. Taylor's DCF model. Minnegasco contends that Dr. Taylor's growth determination has no foundation or support in that Dr. Taylor's contention that investors' expected growth is based entirely upon historical growth in dividends over the 1974 to 1978 period. Company notes that Dr. Johnson's analysis establishes that investor expectations for growth are not formed entirely, or even primarily, by a determination of historical growth rates over any given period and that it is unusual to rely exclusively on historical growth over one period of time without making further analyses. Minnegasco criticizes Dr. Taylor's reliance on historical growth because pay out ratios of Minnegasco and of the gas industry in general declined during the period utilized by Dr. Taylor. As a result, Dr. Taylor's analysis is, in Minnegasco's view, understated as far as the expected future growth in Minnegasco's dividends. Further, Minnegasco claims that Dr. Taylor's gorwth determination is understated because of Minnegasco's ten-cent dividend increase made in July of 1979. Minnegasco contends that Dr. Johnson's analysis, which relies on several different methods in deriving growth estimates, is the proper analysis and should be adopted by the commission.

Finally, Minnegasco contends that its two proposed adjustments to capital structure—i.e., reducing long-term debt by one-half of its 1979 sinking-fund requirements and increasing average common stock equity by $2,172,500 to reflect ***46** the average increase from retained earnings projected for 1979—should be allowed. Staff witness Dr. Taylor concurred that the reduction in long-term debt proposed was appropriate and should be allowed. However, Dr. Taylor testified that the retained earnings adjustment was not known and measurable and should not be allowed. Minnegasco claims that on the basis of its 1974 to 1978 historical trend, its adjustment for retained earnings for 1979 should be allowed. Minnegasco contends that staff witness Taylor is not recognizing a very conservative known and measurable change and, as a result, has improperly recommended disallowance of the proposed adjustment.

Commission Findings

The commission finds that on the basis of the expert testimony and the evidentiary record herein, Minnegasco's return on common equity should be set at 12.3 per cent. The commission finds that staff witness Taylor properly utilized the discounted-cash-flow method. The commission finds that the rate of growth in dividends actually paid by Minnegasco is the best measure on the basis of the record herein to use in estimating the expected growth in the dividends Minnegasco will pay. The commission finds that an analysis of past earnings and dividends is usually proper in estimating dividend growth but, as Dr. Taylor notes, earnings experience is not reliable for Minnegasco. The commission consequently finds that on the basis of the record herein, earnings are not a reliable factor to be utilized in the DCF model for Minnegasco in that Minnegasco's earnings vary so much from year to year, in part, due to weather conditions. The commission further finds that Minnegasco's dividends over the past nine-year period are the result of Minnegasco's policy to maintain a steady, constant historical growth in dividends and that Minnegasco has accomplished this stability through utilizing varying pay out ratios. The commission finds that Dr. Taylor's use of the historical growth in dividends, and the time frame selected for measurement thereof, are proper in that they are representative of investor expectations.

The commission finds that on the basis of the record herein, Dr. Taylor's use of both the continuous model and the annual model utilizing the dividend currently being paid as the basis for estimating dividend yield and the dividend yield expected in the twelve months after the stock was purchased, respectively, is proper and provides a sound basis for evaluating a fair and reasonable rate of return. The commission finds that the continuous model tends to underestimate the required rate of return while the annual model tends to overestimate the required return due to the quarterly payment of dividends. The commission finds that while the two models produce a reasonable range of values, quarterly compounding is closer in value to continuous compounding. The commission further finds that Dr. Taylor's utilization of the most recent 12-month period for which data was available is proper and that, on that basis, the average dividend yield for Minnegasco was 8.73 per cent.

The commission finds that the five-year time frame utilized by Dr. Taylor is appropriate in determining the growth factor for Minnegasco. The commission finds that this time frame serves to best estimate investors' expected rate of *47 growth in dividends in that investors primarily focus on the post-OPEC embargo performance of energy-related firms. The commission further finds that this five-year time frame reflects the major changes occurring in the business environment for energy-related industries.

The commission finds that the estimates of dividend yields in the growth for both the continuous and annual models results in a range of 12.29 per cent for the continuous model to 12.51 per cent for the annual model and that the methodology utilized by Dr. Taylor in deriving his range is the only sound and supported methodology in this record. Dr. Taylor's recommendation that Minnegasco receive a return on common equity of 12.3 per cent is well within the range of reasonableness and is proper. The commission finds that a 12.3 per cent return will enable Minnegasco to attract necessary capital, remain financially healthy, and assure confidence in Minnegasco's financial integrity.

The commission finds that Dr. Taylor's opportunity cost to investors' analysis confirms the reasonableness of the 12.3 per cent return recommendation. The commission finds that Dr. Taylor's opportunity cost analysis, based upon a sample derived from seven specific and objective criteria for establishing comparability, is sound. The commission finds that Minnegasco's contention that Dr. Taylor's correction for a Value Line error in and of itself requires a revision to Dr. Taylor's conclusions is without merit. The commission finds that Minnegasco was properly included in the sample utilized by Dr. Taylor for evaluating the opportunity cost to investors of investing in Minnegasco. Further, the commission finds that Dr. Taylor properly determined the ranges of estimates of required rates of return from the lowest firm to the highest. The commission finds that the 12.3 per cent recommended return is in the middle of the two ranges developed in Dr. Taylor's analysis. The commission finds Minnegasco's emphasis on medians to be misplaced in that Dr. Taylor's opportunity cost analysis determined the ranges of reasonableness. His 12.3 per cent recommendation is whthin the range and his analysis fully confirms the reasonableness of his DCF results.

The commission further finds that Dr. Taylor's rejection of Minnegasco's flotation costs adjustment is fully supported and is proper. The commission finds that Minnegasco's proposed flotation costs adjustment is speculative and, in light of the record evidence regarding Minnegasco's intention to issue no new equity within the near future, should not be allowed.

The commission finds that Minnegasco witness Johnson's recommendation utilizing results of four different estimates of dividend growth rather than relying upon Minnegasco's previous dividend performance is inappropriate in this proceeding due to Minnegasco's corporate policies. The commission finds that Dr. Johnson's failure to utilize actual data, his uncritical reliance upon Value Line reports, his inaccurate and inflated measurement of historical dividend growth, and his uncritical reliance on, and incorporation of, Minnegasco's witness Fleer's comparable company selection without independent substantiation or justification causes the commission to find Dr. Johnson's recommendations to be unreliable.

The commission also finds that risk premium analyses are unreliable in that ***48** no accurate measurement has been developed for evaluating the risk premium. As a result, the commission finds that such analyses are not of assistance in setting a fair return.

The commission finds that changes that have occurred in the natural gas industry since 1978 have enhanced the prospects for firms engaged in natural gas distribution. Further, the commission finds that the Natural Gas Policy Act will serve to provide greater stability in, and greater availability of, gas supplies thereby reducing risks accordingly. The commission also finds that by providing Minnegasco with a purchased gas adjustment clause which allows automatic pass through of all increases or decreases in the costs of purchased gas to consumers, Minnegasco's business risks are substantially minimized.

Additionally, the commission finds that, in light of Minnegasco's substantially higher equity ratio and the consequent protection provided to equity holders as a result thereof, the 12.3 per cent return allowed herein is more than adequate for Minnegasco to attract necessary capital, to remain financially healthy, and to assure confidence in Minnegasco's financial integrity.

Finally, the commission finds that no witness performed a valid comparable earnings study. The commission finds this to be unfortunate in that such a study normally provides assistance in setting a fair rate of return. Nonetheless, the commission is fully satisfied that a 12.3 per cent return on equity is just and reasonable on the basis of this evidentiary record.

Further, the commission finds that such a return is well within the range of reasonableness as determined by the commission in past proceedings.

XX.

Rate Design

Two rate design issues which were raised and litigated in this proceeding have for differing reasons been resolved. Due to the inability of efficiently and economically implementing a system-wide late payment charge at this time, the commission will consider proposals for such a charge in future Minnegasco rate proceedings. Additionally, no party seriously disputes the propriety of consolidating the five firm rate schedules into one general firm rate schedule. The commission finds that this is proper and that as a result of said consolidation, Vermillion and Meckling customers should not be subject to any late payment charge prospectively. However, the commission finds that any costs associated with providing consistency to these customers by changing the billing in Minneapolis should not be permitted as an expense above the line in light of Minnegasco's responsibility for creating this situation.

Further, the commission finds that Minnegasco shall conduct and complete all studies required in PUC Docket F–3080 within six months from the date of the commission's decision and order entered herein. The commission finds that there has been no reasonable explanation or excuse presented regarding why Minnegasco has refused or failed to file such studies as were required and that the commission shall not condone any further unreasonable delay in the commencement and completion of said studies.

Disputed Issues

(A) Staff Position:

Staff witness Petersen recommended ***49** consolidation of the firm rates. Staff witness Petersen testified that the commission had been concerned at the time of Minnegasco's acquisition of Cengas in 1976 not to disturb the existing rate structure and that it was his opinion that, presently, sufficient time had passed that the movement to a uniform rate structure was appropriate and in order. While staff feels that Minnegasco has provided minimal support for its consolidation of the various rate schedules, staff contends that the potential long-term benefits of consolidating those schedules outweigh the temporary benefits that certain individual communities presently enjoy.

As to allocation of costs between customer classes, staff witness Black testified that staff had not arrived at a definite recommendation. Staff feels that neither Minnegasco nor John Morrell provided a thorough analysis of how various costs relate to customer classes although both Minnegasco and John Morrell provided general descriptions of why they allocated costs as each did. Staff points out that public policy is always a factor in determining the kind of allocation since allocations are inevitably arbitrary to some degree. Due to the lack of detail regarding what costs are related to which customer classes, staff considers policy to be a particularly important consideration in this proceeding.

Staff feels that it is inappropriate to refuse to consider Minnegasco's position on cost allocation on the theory that there has been a failure to sustain a burden of proof. Staff notes that the alternative proposal by John Morrell has not been shown with any more specificity or substantiation. Staff notes that John Morrell witness Brubaker weighted the customer costs for interruptible customers at ten times the cost of firm customers. Consequently, witness Brubaker assigned 8 per cent of customer costs to interruptible customers and 92 per cent to firm customers. Staff feels that the derivation of John Morrell witness Brubaker's weighting has not been demonstrated and that the formula is unexplained and arbitrary.

Staff points out that regulatory precedent exists for Minnegasco's position such as the allocation formulas utilized by the Federal Energy Regulatory Commission to allocate costs between firm and interruptible customers. Staff notes that FERC for a long period of time utilized a 50 per cent allocation of capacity costs to demand and 50 per cent to volumetric costs. More recently, FERC has adopted a somewhat different formula which allocates 75 per cent of the capacity costs to volumetric costs and only 25 per cent to the demand costs. Staff notes that John Morrell's recommendation would, accordingly, be even more contrary to recent FERC practice in this area.

Further, staff notes that John Morrell and other interruptible customers gained an economic advantage from using natural gas. Staff notes that one of the complaints raised by certain industrial customers is that they would like to be interrupted far less than is presently occurring. Staff concludes by contending that fairness, as well as recognition of the economic benefits to the interruptible customers, leads to adoption of Minnegasco's allocation in this proceeding.

(B) Company Position:

Company contends that its proposed rate design should be adopted in its entirety. Minnegasco witness Schroedermeier sponsored the proposed rate schedules and a comparison of impacts on average firm and interruptible customers. Company witness Schroedermeier testified that the four primary rate design objectives were to recover the revenue requirements of Minnegasco's South Dakota jurisdictional operations; to consolidate, simplify, and standardize both the firm and interruptible rates; to promote energy conservation by reducing the number of blocks and moving toward a more volumetric rate; and to recognize the cost incidence between firm and interruptible service. As to the latter standard, company witness Schroedermeier testified that the rates must reflect the cost of providing service to these two classes of customers. If one customer class is billed on rates that exceed the cost of serving it, the other classification benefits by paying a lesser rate. Therefore, company witness Schroedermeier testified that it is important that each class pay its own way.

Minnegasco included in its filing a cost-of-service study. The study established in Minnegasco's view the allocation of cost to be 81 per cent to firm customers and 19 per cent to interruptible customers. Company notes that it is this cost-of-service allocation which is the main dispute between company and John Morrell.

Minnegasco points out that both John Morrell and Minnegasco agree that a cost-of-service study cannot be absolutely precise. Minnegasco notes that such a study involves a high degree of judgement and is capable of many different methods to compute cost to customer classes. Minnegasco further points out that its method is identical to that used in its Minnesota rate increase proceeding.

The study performed by John Morrell and the study performed by Minnegasco differ in three respects. Minnegasco's division of demand costs between demand and commodity components recognizes the benefit interruptible customers receive from Minnegasco's purchase of contract demand. Minnegasco contends that by classifying all demand costs to only the demand component, this benefit is ignored as was done in Minnegasco's view by John Morrell's study. Minnegasco's division of customer costs between both the customer classification and the commodity classification recognizes that the investment in costs that follow large customers are much greater than for residential and small volume customers. Minnegasco notes that John Morrell's study does make an attempt at allocating 8 per cent of these costs to interruptible customers by utilizing a ten-to-one weighting of interruptible customers which is based strictly upon judgement.

Further, the allocation of distribution costs by Minnegasco is based upon the higher distribution costs associated with larger volume customers and that 50 per cent of those costs should be assigned to the commodity component. John Morrel allocated distribution costs on a 50–50 basis to the demand and customer classifications while Minnegasco utilizes the 50–50 allocation to the demand and commodity classification. Minnegasco contends that distribution costs are largely related to its investment in distribution mains and that the size of gas lines vary in different areas based on the size of customers located in those areas. Consequently, Minnegasco contends that distribution costs are more closely ***51** associated with the size of the required to deliver large volumes of gas and not to the number of customers. For this reason, Minnegasco chose to assign 50 per cent of distribution costs to the commodity classification.

Minnegasco contends that its study is based on a cost-of-service formula which fits its particular operation. Further, Minnegasco contends that no entity should receive a free ride in this regard.

Minnegasco contends that John Morrell is being treated fairly under the proposed rate designs of Minnegasco. Minnegasco points out that John Morrell is the customer in South Dakota which benefits most from the ten-cent seasonal rate decrease for usage over 1,000 Mcf per month. Minnegasco notes that the reduction is designed to lessen the impact of a volumetric rate design on those large volume interruptible customers who are heavily curtailed during the winter months. Minnegasco disputes John Morrell's recommendation that a larger sum reduction is in order because such a reduction would increase the rate to all other interruptible customers on the system, most of which represent space-heating loads.

Minnegasco concludes that its proposed firm and interruptible rate designs represent a fair and equitable treatment of all customers on the system and that they meet the needs of the system. Further, Minnegasco takes the position that the various goals of proper design of rates are accomplished by its proposals. Minnegasco views John Morrell's claims to be contrary to those goals and strictly based upon self-interest considerations.

Minnegasco further points out that customer understanding, simplicity, and ease of administration and other benefits will accrue from its rate structure proposal.

(C) John Morrell Position:

John Morrell contends that the existing rate structure has been effective and that no combination of interrutible rates should be made in this proceeding. John Morrell contends that the rate structure existent during the past three years has served well in accomplishing both revenue stability and rate stability. Additionally, John Morrell contends that the existing rate structure and interclass relationships accomplish three primary goals of sound rate design; i.e., revenue stability, rate stability, and efficiency of use. John Morrell notes that a review of Minnegasco's annual reports demonstrates a healthy financial picture with constant growth in both earnings and dividends over the past years. John Morrell points out that, at least in part, the cost-tracking ability of Minnegasco's existing rate schedules is responsible for such a good performance record.

John Morrell further argues that while simplification is a legitimate interest of Minnegasco, such simplification should only occur after adequate information and data in the nature of load studies, billing determinants, a definitive cost-of-service study by class, and other analytical studies are performed. John Morrell points out that both staff witness Petersen and John Morrell witness Brubaker have testified that without such analyses being performed, any rate design will be subject to question. John Morrell contends that Minnegasco's existent rate structure should not be changed without a deliberate approach and without sound data. Further, John Morrell contends that the consolidation ***52** of the existing interruptible schedules collects the quality of service factor in that John Morrell's interruptible status is the first type of customer to be interrupted on Minnegasco's South Dakota system.

John Morrell also disputes Minnegasco's allocation to the interruptible class. John Morrell points out that the rate proceeding before the commission deals with matters other than purchased gas costs. John Morrell notes that a major portion of those nonpurchased gas costs are construction costs incurred for new residential service. Consequently, John Morrell maintains that Minnegasco's proposal to allocate the requested increase in revenues so as to increase the nonfuel base rates of interruptibles by 80 per cent and the nonfuel base rates of firm customers, a substantial portion of which are residential customers, by only 26.7 per cent is completely contrary to experienced cost incurrence. John Morrell points out that company's own witnesses admitted that the increased revenue requirement in this proceeding has nothing to do with fuel cost increases which are covered by the purchased gas adjustment clause. John Morrell contends that its witness Brubaker's approach in allocating the increase on the same basis—i.e., revenues less purchased gas costs—is proper and that Minnegasco's rebuttal testimony merely avoided this reality. John Morrell points out that both Minnegasco and John Morrell made allocations to firm rates and interruptible rates only and neither made an allocation to John Morrell and Company.

Further, John Morrell contends that Minnegasco's emphasis on the need to consider the cost of alternate fuel in setting rates for interruptibles is without merit. John Morrell contends that the differences to Morrell between natural gas cost and the cost of oil is relatively minimal. Hence, Minnegasco's reliance upon this factor is ill-placed.

John Morrell points out that in company's presentation on allocation, Minnegasco emphasized the benefits that interruptible customers receive as a result of the contract demand obligation incurred so as to assure firm service adequacy. John Morrell notes that its witness Brubaker explained that the interruptible customer is basically a means which would allow Minnegasco to buy a lower contract demand and still serve the needs of all of its firm customers because Minnegasco could take part of its interruptible customers' load off in the winter.

John Morrell further points out that commission staff recognizes that the record does not support consolidation of interruptible rate schedules or company's proposed cost allocation. John Morrell notes that staff relies heavily upon the benefits theory which assumes that the interruptible customers enjoy the benefits of the contract demand level provided by the firm customers. John Morrell contends that it has totally established that the benefits flow both ways and that the presence of interruptible use allows Minnegasco to buy a lower contract demand in times of plentiful gas supply and in rate design, some capacity costs are allocated to the interruptible use which spreads the fixed costs over a greater number of Mcf.

John Morrell further contends that staff acknowledges there is no record support for the allocation of the increase, but ignores John Morrell witness Brubaker's position that the allocation of increased revenues should be assigned as ***53** a uniform percentage increase on the present revenues less revenues associated with purchased gas costs. John Morrell notes that regardless of whether the commission adopts, in whole or in part, consolidation of either firm or interruptible rate schedules, the allocation of the increase should be made pursuant to John Morrell witness Brubaker's recommendation in that the nonpurchased gas costs are the only reason for Minnegasco's rate increase request in this proceeding.

John Morrell concludes that the commission should adopt a rate design which does not allow any consolidation of interruptible rate schedules and which satisfies the following formula: present revenues per class less gas costs times percentage increase on base revenues excluding fuel revenues plus gas costs equals new revenues. John Morrell contends that this formula is the only formula of record which is uncontroverted and which is fully supported in the record.

(D) ACORN Position:

ACORN contends that company's proposed rate design should be adopted. ACORN points out that Minnegasco's proposal would assign 67 per cent of the required rate increase to the firm customers and 33 per cent to the interruptible customers while John Morrell's recommendation would require the firm customers to meet 96 per cent of the required rate increase and assign only 4 per cent of the increase to the interruptible customers.

ACORN takes the position that gas proceedings must be distinguished between electric proceedings in that problems have existed in the supply of natural gas which require a shift from pure costing methodology to cost determinations which are based upon judgement and policy considerations which may not exist in electric rate proceedings. ACORN points out that as a result of shortages commencing in the 1950's, a system of priorities was developed by the Federal Energy Regulatory

Commission and its predecessor wherein residential and small volume commercial gas customers were provided a favored position and other customers were placed in a category wherein service could be interrupted during shortages. Further, ACORN, as does commission staff, relies upon FERC precedent regarding proper allocation formulas between the demand and commodity components in determining a fair rate design. ACORN further contends that the Natural Gas Policy Act of 1978 attempts to ease the burden on residential and small commercial consumers resulting from the increases in prices to be granted to producers by the act. ACORN points out that the Natural Gas Policy Act of 1978, to a certain extent, requires charges for new gas and monthly inflation adjustments to be incrementally priced to industrial end users. ACORN notes a recent FERC rule-making proceeding wherein FERC is proposing to strike a balance between the two goals of maximizing flow through of incremental costs to industrial facilities and minimizing fuel switching. ACORN concludes that it is clear that the Natural Gas Policy Act represents a policy decision by the United States Congress and, as such, should be considered by this commission in adopting a rate design in this proceeding.

As for John Morrell's presentation, ***54** ACORN points out that John Morrell witness Brubaker neither performed nor directly relied upon any study from another case in reaching his recommendation in this proceeding. Rather, ACORN contends that John Morrell witness Brubaker's proposal is supported solely by his personal judgement and philosophy and not upon any empirical or other objective analysis. ACORN summarizes John Morrell witness Brubaker's recommendation as consisting of assignment of all capacity costs to firm customers, assignment of all of the natural gas demand charge to the interruptible class, division of the commodity cost between the two classes on a volumetric basis, assignment of 92 per cent of the customer costs to the firm customers, assignment of 91.8 per cent of the distribution cost to the firm class, and a shift from the strictly costing stage to objectives of rate design stage wherein witness Brubaker recommends that the commission exclude the cost of gas out of Minnegasco's total revenues at present rates and apply a uniform percentage increase to the balance. ACORN finds that John Morrell witness Brubaker's presentation has no empirical or other basis for justifying or substantiating any of his recommendations.

ACORN further questions the judgement exercised in arriving at John Morrell's recommendation. ACORN points out that it is reasonable to conclude from a historical perspective that estimates of the needs of large commercial users of gas were taken into consideration when building pipelines and plant capacity. Further, ACORN points out that it is clear and unequivocal that the interruptible class of customers benefit and use the capacity provided through fixed costs. ACORN further points out that it is equally clear that the interruptible customers benefit from other fixed costs such as the Northern Natural demand charge paid by Minnegasco. Consequently, interruptible customers are deriving a benefit from the use of capacity and it is only equitable that they fairly contribute toward those capacity costs.

Additionally, ACORN notes that John Morrell witness Brubaker's recommendation is totally contrary to the historical development of Federal Energy Regulatory Commission allocations between demand and commodity and is contrary to the purposes and intent of the Natural Gas Policy Act of 1978.

Commission Findings

The commission finds that Minnegasco's rate design proposal should be adopted for the reasons set forth in (B) above and on the basis of commission staff and South Dakota ACORN's recommendations set forth in (A) and (D), respectively. The commission finds that Minnegasco's proposals regarding rate design will provide for recovery of Minnegasco's revenue requirements as determined by this commission; will consolidate, simplify, and standardize both the firm and interruptible rates; will promote energy conservation by reducing the number of blocks in moving toward a more volumetric rate; and will recognize the cost incidence between firm and interruptible service. The commission finds that Minnegasco's cost-of-service study establishes that the allocation of cost to firm customers should be 81 per cent and to interruptible customers 19 per cent. The commission finds that while no cost-of-service study is absolutely precise, Minnegasco's is ***55** sufficient in this instance to justify and substantiate its proposed rate design.

The commission finds that Minnegasco's division of demand costs between demand and commodity components recognizes the benefit interruptible customers receive from Minnegasco's purchase of contract demand. The commission finds that John Morrell's attempt to classify all demand costs to only the demand component ignores such benefit received by interruptible customers. The commission finds that Minnegasco's division of customer costs between both the customer classification and the commodity classification recognizes that investment in costs that follow large customers are much greater than for residential and small volume customers. The commission notes that John Morrell's study allocates 8 per cent of these costs to interruptible customers but utilizes an arbitrary ten-to-one weighting of interruptible customers without any reasonable basis.

The commission further finds that the allocation of distribution costs by Minnegasco is based upon the higher distribution costs associated with larger volume customers and that 50 per cent of those costs should be assigned to the commodity component. The commission finds that Minnegasco's utilization of the 50–50 allocation to the demand and commodity classification is appropriate and that John Morrell's allocation of distribution costs on a 50–50 basis to the demand and customer classification is not justified. The commission finds that distribution costs are largely related to its investment in distribution mains and that the size of gas lines vary in different areas based on the size of customers located in those areas. The commission finds that distribution costs are more closely associated with the size of the main required to deliver large volumes of gas and not to the number of customers.

The commission finds that John Morrell, all other interruptible customers, and all firm service customers are being treated fairly under Minnegasco's proposed rate designs. The commission finds that John Morrell is the customer in South Dakota which benefits most from the ten-cent seasonal rate decrease for usage over 1,000 Mcf per month. The commission finds that this reduction is designed to lessen the impact of a volumetric rate design on those large volume interruptible customers who are heavily curtailed during the winter months. The commission further finds that John Morrell's that a larger sum reduction is in order because such a reduction would increase the rate to all other interruptible customers in the system, most of which represent spaceheating loads, is erroneous and is not substantiated. The commission further finds that Minnegasco's proposed firm and interruptible rate schedule consolidations represent a fair and equitable treatment of all customers on the system and such rate designs meet the needs of the system. The commission finds that such consolidation serves to enhance customer understanding, provides for simplicity, and leads to ease of administration and consequent cost savings as well as satisfying Minnegasco's revenue requirement.

The commission finds that while the evidentiary record in this proceeding is not as fully developed and detailed as it could be, the record fully supports the commission's findings herein. The commission finds that public policy considerations of fairness, equity, and recognition of economic benefits to interruptible customers mitigate toward adoption of Minnegasco's proposals. The commission further finds that the allocations adopted herein are in accord with Federal Energy Regulatory Commission precedent as well as this commission's past precedent. The commission finds that while the Natural Gas Policy Act of 1978 does not expressly apply to this proceeding, the commission's determinations herein are in no manner inconsistent with the objectives of said federal legislation.

Finally, the commission finds that the criticism by certain parties of John Morrell's participation in this proceeding is hereby expressly rejected. This commission has always and will continue to provide the opportunity for participation by any customer or group of customers. This commission believes that such participation fully enhances the rate-making process and leads to more informed judgments. While the commission may not adopt a certain intervenor's position in part or in whole, nonetheless, that participation raises issues which would not otherwise be addressed by this commission and, perhaps, never considered. The commission recognizes that all parties to all proceedings, before the commission have certain self-interests to be protected and that that is certainly no valid criticism to any party's participation before this commission.

XXI.

General Considerations

After reviewing the entire record in this proceeding, the commission finds that in future proceedings, more candor will be forthcoming when mutually agreed upon errors made by any party are discovered. This commission has never encountered a situation, other than in the instant proceeding, such total reluctance and, in certain instances, refusal, by an applicant to remedy errors which the applicant concedes exist and which all parties concur exist. Commission staff and most other utilities have never acted in such a manner before this commission and this commission will not tolerate such conduct in future proceedings.

The commission further finds that, normally, when a utility files a projected or future test year, that utility does not attempt to rationalize that estimates, projections, predictions, and other hypothecations are not what they are. The commission finds that Minnegasco is entitled to file the type of application it so desires as long as it complies with the applicable statutory provisions and with the commission's rules in form, but the fully projected test year utilized by the company is exactly that, a fully projected test period. The commission finds that the data utilized by company is based on multiple projections and estimates of many departments, individuals, and/or consultants that make up Minnegasco. As previously noted, it is this commission's finding that these adjustments are speculative since no one can project with certainty the outcome of the many issues related to a fully projected test period and their net effect on Minnegasco's revenues. For rate-making purposes, the commission finds that these projections should not be the basis for establishing rates for Minnegasco.

This commission has always in the past and has in this case found that the test period for rate-making purposes should be a known test period. The commission finds that staff's analysis set ***57** forth in its reply brief is absolutely correct that whatever the many relationships that are present in the incurring of costs, rate base, and service, the analysis of twelve months' data that are known will reflect these relationship. This commission has also recognized in the past, and has in this proceeding recognized, changes which are known and measurable. Unfortunately, certain of Minnegasco's recommendations contain a fundamental misunderstanding of the fact that known and measurable changes are recognized only in the context of the relevant test period. This misunderstanding serves to completely destroy the relationship between costs, revenues, and rate base reflected by an actual 12-month period. Again, the commission concurs with staff's analysis set forth in its brief that of fundamental importance in this proceeding and in understanding what this commission has found is the meaning of the terms known and measurable. Known and measurable changes do not relate to adjustments that cannot, by any standard or criteria, be said to be known and measureable today or at the time of Minnegasco's filing. Known and measurable changes are exactly that. The antithesis of known and measurable changes are adjustments that are based on estimates, projections, or predictions which may be totally arbitrary or only partially arbitrary. Known and measurable changes, on the other hand, are exactly that: known and measurable. The commission finds that Minnegasco's utilization of the phrase 'known minimum' in fact means 'estimated, projected, or predicted minimum.'

Finally, the commission finds that Minnegasco's attempt to create a year-end rate base must fail. This commission has found in the past and has found in this proceeding that the matching of revenues, expenses, and rate base is crucial for any rational and representative test period as may properly be adjusted for known and measurable changes not otherwise accounted for. While semantics are in the realm of form over substance, this commission refuses to recognize a fundamental distortion of a fundamental rate-making principle.

The commission hereby rules that all proposed findings of fact, conclusions of law, and orders submitted by the parties are hereby rejected.

Upon the foregoing findings of fact, the commission hereby enters the following:

Conclusions of Law

I.

That the commission has jurisdiction over the subject matter and the parties to this proceeding.

II.

That the commission's decision entered herein establishes just and reasonable rates for Minnegasco and fully comports with all statutory and constitutional requirements.

III.

That the suspension of Minnegasco's proposed rate schedules and related tariff sheets filed with Minnegasco's application is hereby terminated, and that said rate schedules and related tariff sheets are hereby rejected in their entirety.

***58 IV.**

That all pending motions and objections not heretofore ruled upon are hereby expressly overruled.

End of Document

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Re Northwestern Public Service Company

(F–3055)

South Dakota Public Utilities Commission

December 29, 1976

Before P. K. Ecker, chairman, and Jack Weiland and Norma Klinkel, commissioners.

By the COMMISSION:

Northwestern Public Service Company, hereinafter company, of Huron, South Dakota, a supplier of retail electric service to customers in South Dakota, on July 17, 1975, filed with the South Dakota Public Utilities Commission, hereinafter PUC ***292** or commission, new electric rate schedules proposing an annual rate increase of $8,450,000 to be placed into effect September 1, 1975.

The PUC received an attorney general's opinion as to whether or not the PUC had jurisdiction over the company's rate filing. In the opinion dated August 15, 1975, the attorney general of South Dakota concluded that the PUC could not accept the new rate schedules insofar as they were applicable to municipalities which had entered orders regarding prior company rate applications that were then and continue to be under appeal in South Dakota courts. On August 19, 1975, the company petitioned the South Dakota supreme court for a writ of mandamus requiring the PUC to take jurisdiction of, and act upon, the company's rate application. After hearing thereon on September 17, 1975, the South Dakota supreme court issued its order granting the prayer for relief requested by the company.

On September 29, 1975, the PUC issued its order of suspension suspending the new rate schedules, but pursuant to statute, permitted the company to implement the rate increases effective October 18, 1975, conditional upon the filing of a bond to assure consumers any refunds of amounts collected in excess of what ultimately be found to be just and reasonable herein. Pursuant to said order, the company began implementing the increased rates, under bond, in billing cycles to customers on and after October 18, 1975. By orders dated November 10 and November 13, 1975, the PUC directed the company to collect the increased rates only with respect to the actual service rendered by the company on and after October 18, 1975, and not billing cycles on and after October 18, 1975. This resulted in a refund by the company to its customers of the rate increases which were improperly obtained by the company because of its billing cycle, as opposed to its rendering electric service, method of collection.

Petitions to intervene in this proceeding were filed by the South Dakota Electric Consumers consisting of a consortium of seven municipalities in South Dakota, and by the Department of Commerce and Consumer Affairs, state of South Dakota. The PUC granted both petitions to intervene.

Thereafter, a procedural schedule was worked out which provided for the filing of testimony, the hearing thereon, and the briefing subsequent thereto. The PUC also scheduled a series of consumer input hearings in regard to the application of the company.

On the 27th day of September, 1976, the public utilities commission issued its decision and order in the above-entitled proceeding: On the 12th day of October, 1976, Northwestern Public Service Company appealed said decision and order to the circuit court, sixth judicial circuit, state of South Dakota. Thereafter, a hearing was conducted on the 27th day of October, 1976, before the Honorable Robert A. Miller concerning whether or not said appeal should be dismissed pursuant to, and in accordance with, the public utilities commission's motion to dismiss, and regarding whether a stay pending final disposition by the court should be entered. The court held that said proceeding should be remanded to the public utilities commission for rehearing upon the assertions made in the affidavit of Al Schmidt, president of Northwestern Public Service Company, submitted for the first time on appeal. Thereafter, specifications of error were filed by company, and the commission ordered that staff and intervenors reply ***293** thereto. Further, the commission ordered that company, staff, and intervenors reply to all said submissions of each to the other on or before the 7th day of December, 1976, and that each file and serve proposed findings of fact, conclusions of law, and order for commission consideration. Upon careful review and examination of the proposed findings of fact, conclusions of law, and order submitted by company, commission staff, and SDEC, the commission finds that the proposed findings and conclusions submitted by company and commission staff should be rejected. The commission further finds that proposed findings and conclusions submitted by SDEC are in substantial accordance with the commission's disposition of this proceeding and certain portions thereof have been incorporated in the commission's decision and order entered today.

Discussion and Analysis

I.

Rate Base

1. Year-end versus Average Rate Base

The company argues that the end-of-period rate base is a better predictive model for the future and that even the end-of-period calculations will understate actual investment while the proposed rates are in effect. The company further argues that inflation and attrition will have their effect and that the use of an end-of-period rate base is the best way to attempt to alleviate those problems. The company also states that the matching of revenues and expenses to rate base is not a regulatory necessity and that the company had computed revenues and expenses to match an end-of-period rate base. The company asserts that this would result in a small excess of revenues over expenses although no actual figures were ever provided by the company in this regard.

The staff and SDEC argue that the use of an average rate base is the only accurate method of properly matching revenues and expenses with rate base. South Dakota Electric Consumers further argue that customer growth and revenue growth are just as inevitable as investment growth; and that average test-year investment produces accurate test-year revenues. The staff argues that the company's failure to present a comprehensively normalized cost of service consistent with company's end-of-period rate base is sufficient, in and of itself, to preclude the use of end-of-period rate base.

In its specification of error upon rehearing and affidavit and exhibits of Al Schmidt, company assigns as error the PUC's adoption of an average rate base and rejection of a year-end rate base. The company therein advances no new evidence, but rather simply restates its previous arguments made to the commission. The commission finds that company has not sustained its burden of proof regarding this matter.

It is fundamental to a proper test year or test period that investment and operating costs and revenues match and be consistent each with the other. Unless costs and revenues match, the test year or period is not a proper one for fixing just and reasonable rates. The relationship between costs and revenues for the test period used and the validity of that relationship is one of the most crucial aspects this commission must consider in determining just and reasonable rates. The inclusion of costs without matching revenues will produce ***294** excessive rates, while the inclusion of revenues without matching costs will deny the utility just and reasonable rates.

This fundamental rate-making principle of matching costs and revenues applies whether an average or year-end rate base is used. Neither company, staff, nor intervenor deny the absolute necessity for matching costs and revenues.

The evidence adduced at hearing established that the average rate base previously adopted by this commission matches costs and revenues and that the matching principle has not been adhered to by the company in the year-end rate base it proposes in this proceeding. Company did not propose to roll into the test year increased sales levels that would be achieved through the use of an enlarged year-end plant. Company does not deny that it did not completely match costs and revenues, but it argues that its failures in this respect are insignificant. However, no evidence was ever introduced by company regarding this matter and company simply failed to sustain its burden of proof.

Company apparently argues that because its investment in plant is increasing, a year-end rate base methodology is warranted. However, steadily increasing investment in plant alone does not warrant the use of the year-end method. Again, a proper matching of costs and revenues is still required and necessary to avoid the distorting impact of large additions to plant.

The allegations contained in the affidavit of Al Schmidt and in the specifications of error upon rehearing that average rate base employed by the commission ignores company investment upon which company claims it is entitled to a return is without merit. The average rate base deprives the company of nothing to which it is entitled, but rather is the only method advanced in this proceeding which provides a proper matching of costs and revenues.

2. Depreciation Adjustment for Big Stone Plant

Both the staff and SDEC deducted from rate base the average of an estimated year's depreciation for Big Stone plant. The company argues that, since the Big Stone plant was actually not in service during most, if not all, of the test year, such an adjustment for depreciation deprives the company of the opportunity to earn a return on, and recover for, the amount included in said adjustment.

The staff argues that recognition of the Big Stone plant in rate base requires that such an adjustment for depreciation be made. The staff also argues that the logical conclusion of the company's theory would require that the entire Big Stone plant not be recognized in rate base at all.

South Dakota Electric Consumers argues that the failure to make an adjustment for depreciation would result in the ratepayer paying twice for such depreciation, once as an expense and once through a return earned by the company on rate base.

Because the Big Stone plant was not in service during the test period, under accepted regulatory practice, and investment in Big Stone could justifiably have been excluded from rate base in its entirety. However, because of the magnitude, timing, and operational impact of this new plant on Northwestern Public Service Company's system, staff and SDEC recommended that the investment in Big Stone be included in rate base as though it had been in service during ***295** the entire test period. In its decision and order, the commission adopted staff and SDEC's recommendation.

Company does not contest the inclusion in rate base of the investment it made in Big Stone plant, except to the extent that it objects to an average rate base, the same having been previously addressed above. The company asserts that the commission erred in reflecting in the provisions for accumulated depreciation a full year's depreciation expense for Big Stone plant. Company's position is untenable in that it is axiomatic that the inclusion of the investment in Big Stone in rate base requires that depreciation not be ignored. Company simply cannot have the investment included in rate base and depreciation associated therewith ignored. Moreover, if company's position were to prevail, it would totally violate the principle that requires matching of investments, revenues, and expenses in regulatory proceedings.

3. Allowance for Funds Used during Construction

The company argues that its allowance for funds used during construction, hereinafter AFUDC, calculation is a net of tax calculation and is determined by reasonable procedure. The company argues that any restatement of AFUDC is improper in that it would require a retroactive effect and would further require the company to restate in its books any resulting adjustments for all prior periods in question. The company further argues that there is no support in the record for the restatements of AFUDC proposed by the staff in the staff's briefs.

The staff argues that, if company is using a net of tax rate for its AFUDC calculations, flow through of the tax benefits associated with such construction is an incorrect procedure. The staff in its briefs, recalculated the company's AFUDC rates to what it determined to be a gross rate using proposed Federal Power Commission methods. The staff further argues that a net of tax rate for such calculations results in a disservice to the ratepayer. It is the staff's further position that the staff's calculations of a gross rate are the only proper calculations to be used in this proceeding.

South Dakota Electric Consumers argues that the company has not shown that it uses an aftertax rate in its calculations. South Dakota Electric Consumers further argues that if the rate is deemed inadequate by the company, it is within the company's power to change such rate accordingly. South Dakota Electric Consumers states that its witness established the capitalization rate as being arbitrary by the introduction of a 'plug figure' as the imputed cost rate of common equity in order that the company could attain a predetermined total. Further, SDEC contends that the company's witness, Mr. Walker, conceded that the company was using incremental costs to determine its AFUDC rate which would clearly result in double counting by the company.

Company contends that the interest rate it uses on borrowed funds to compute AFUDC is a 'net of tax' or 'aftertax' rate. In its specifications of error upon rehearing and in the affidavit of Al Schmidt, company assigns as error the commission's determination that the interest used by the company is not a 'net of tax' rate.

Company made the identical argument with respect to the AFUDC rate in two rate proceedings which were held by the SDEC consortium of cities when said cities had jurisdiction over electric retail ***296** rates prior to the 1st day of July, 1976. The cities rejected the company's claim in each of the two rate cases and company appealed same. On appeal to the respective circuit courts, the cities' decisions were affirmed in their entirety, including the determination that company's AFUDC rate was not a 'net of tax' rate. Company has persisted in this position in this proceeding, but clearly has not sustained its burden of proof in regard thereto.

Company's calculation of its alleged 'aftertax' AFUDC rate is a contrived rate at best. Although company was requested to provide extemporaneous work papers showing the manner in which the AFUDC rate had been originally established, company failed to do so. The evidence adduced at hearing discloses that company's after the fact calculation is arbitrary. For example, the imputed cost rate of common equity is a 'plug figure' which is introduced into the calculation at whatever stage is necessary in order to attain a predetermined answer.

Company witness Walker admitted on cross-examination a fatal deficiency in the alleged 'net of tax' AFUDC rate utilized by company. Said rate is based upon the incremental costs of new capital issuances each year. Inasmuch as those incremental costs are also included in the overall cost of capital on which the rate of return is computed, the effect of company's methodology is to account for the same costs twice. Hence, there is a double counting effect in regard to the company's methodology, and this simply cannot and will not be allowed by this commission.

4. Construction Work in Progress

The company claims that it is unable to earn a proper return on construction work in progress, hereinafter CWIP, for which no AFUDC is claimed unless such CWIP is allowed in rate base. The company contends that accounting for such AFUDC, given the nature of the construction project, is not justified from a practical standpoint. Further, the company contends that the argument of the staff and SDEC that such property is not used and useful to the ratepayer is in error as such property is very likely to be in service while the new rates are in effect.

South Dakota Electric Consumers argues that this CWIP should never be included in rate base because such plant is not currently used and useful. South Dakota Electric Consumers further argues that whether or not the company charges AFUDC thereon is within the company's own discretion.

The staff argues that SDCL 49–34A–19 precludes the recognition of any type of CWIP in rate base.

Company proposed to include in the rate base CWIP on which the company had elected not to capitalize AFUDC. The commission excluded all CWIP from the rate base whether or not AFUDC was capitalized thereon. Company has assigned as error the exclusion from the rate base of CWIP on which no AFUDC was capitalized.

The commission adheres to its exclusion of CWIP. Construction work in progress is excluded because the property is not in service; i.e., is not used and useful in serving current ratepayers. The fact that AFUDC has not been taken on some of the CWIP has no relevance in regard to this issue. The decision not to capitalize AFUDC on certain CWIP is company's decision. There is no prohibition to capitalizing AFUDC on all CWIP. Company has the right to make the choice, but it may not *297 thereafter attempt to have the ratepayers pay a return on investment by company that is not devoted to rendering electric service to the ratepayers as a consequence of company's aforementioned decision.

The issue of whether CWIP should be included in rate base has not been settled among regulatory commissions. However, this commission finds that the proper treatment is to exclude CWIP from rate base, and this commission adheres to that view in this proceeding. Exclusion of CWIP in no manner deprives the company of any property rights or of anything else to which it is entitled from the ratepayers. However, the inclusion of CWIP in rate base imposes unwarranted and excessive costs on the ratepayers.

5. Fuel Inventory

The company argues that it is necessary to reprice fuel inventories using the average quantity of fuel on hand multiplied by the price for such fuel at the end of the test year. It is the company's position that such a technique will best predict the company's investment in fuel inventories while the new rates are in effect in that fuel prices appear to be rising. Further, although such repricing results in a higher amount than the actual investments for the nine-month period following the test year, the company did not reprice materials and supplies because of the complexity involved. If such repricing of materials and supplies had occurred, the materials and supplies inventory of the company would have more than made up for the difference in the excess costs claimed by the company as a result of the repricing of its fuel inventory.

South Dakota Electric Consumers argues that the company should be allowed to earn a return only on actual investment rather than on replacement or current values.

The staff argues that the company should only be allowed a return on actual investment, not upon replacement value. The staff further argues that, to the extent increased fuel costs are recovered through the fuel adjustment clause, a double recovery would clearly result to the company.

Company included an amount for fuel inventory in the rate base based upon repricing of the average quantity of fuel on hand during the test year at fuel prices in effect at the end of the test year. The commission rejected the repriced fuel inventory and included fuel inventory in the rate base at the average of the actual investment in fuel inventory during the test year. The commission finds no reason whatsoever for changing its earlier findings in regard to this matter and rejects the company's assignments of error with respect thereto.

Initially, it is to be noted that the use of an amount for fuel inventory based on prices at the end of the test period is inconsistent and in conflict with the use of averages in determining other items of rate base.

Secondly, spot pricing or spot conditions are also inappropriate methods to be utilized for rate-making purposes. Spot pricing or spot conditions simply do not reflect the conditions that may prevail over a period of time.

Finally, company has in effect proposed a replacement value for fuel inventory. Since depreciated original cost—i.e., an actual investment—must by statute be the basis for this commission's determination, company's proposal is rejected.

298 *6. Construction-related Materials and Supplies

The company argues that there is no double counting for such materials and supplies because in a possible future rate case, such items would not appear in inventory but rather in plant in service. The company further argues that the withdrawal of an item from such inventory will probably result in replacement which would restore said inventory to its former level which is nothing more than additional investment, not double counting. The company also argues that the investment in such items is a continuing one and that the only practical way to compensate investors for the use of such capital is to include these items in rate base.

South Dakota Electric Consumers argues that it is not appropriate to include construction-related materials and supplies in rate base just as it is not appropriate to include any other construction work in progress in rate base. South Dakota Electric Consumers further argues that these materials will become a part of CWIP and will eventually earn a return as plant in service.

The staff argues that SDCL 49–34A–19 precludes rate base treatment of such construction-related materials and supplies in their entirety.

The commission previously ruled that construction materials and supplies are not properly included in rate base of company. In its specifications of error upon rehearing, company takes exception to this exclusion. The commission rejects company's assignment of error regarding this matter and again finds and determines that construction-related materials and supplies are to be excluded from company's rate base.

This issue concerns the appropriate working capital allowance for the materials and supplies component thereof which constitutes part of company's rate base. Working capital allowance is an allowance for operations, not construction. Consequently, only those items which are applicable to ongoing or continuous day-to-day operations of company are properly included in the materials and supplies component of working capital.

Materials and supplies used in the company's construction program are capitalized and become part of plant in service on which the ratepayers pay a return. If they were also to be included in working capital, which becomes a part of rate base, ratepayers would then be paying a return on the same investment in plant twice; i.e., once when the materials and supplies are included in rate base as part of working capital and again when those materials and supplies become part of plant in service. Hence, the commission concludes that it is totally proper and necessary to exclude such materials and supplies from rate base.

7. Three Per Cent Investment Tax Credit

The company argues that it has properly treated the 3 per cent investment tax credit through the use of normalization with subsequent amortization. The company further argues that, as shown in later legislation, the company's treatment of such tax credit amounts is the one intended by Congress.

South Dakota Electric Consumers argues that such amounts should be immediately flowed through to operating income on the basis that ratepayers should be charged each year only for income taxes actually paid by a utility. South Dakota Electric Consumers further argues that state commissions are ***299** not prohibited from flowing through such amounts immediately and that any subsequent action taken by Congress in regard to the flow through of such credits does not apply.

The staff argues that the company has failed to establish that such normalized taxes would ever be paid by the company. The staff emphasizes that the PUC does have discretionary authority to approve tax normalization if it is shown that a true tax deferral will occur as opposed to a permanent tax savings by the company. The staff concludes that the company has not proven that normalization would result in a true tax deferral.

The 1962 Revenue Act, 26 USCA §§38, 46 to 48, inclusive, provided an investment tax credit. The credit was in no sense a tax deferral but rather a complete tax break in the amount of the credit. Company charged the ratepayers with those taxes that would have been paid if there had been no such investment tax credit and reflected the actual tax savings in the balance sheet as unamortized investment credit. By charging ratepayers for federal income taxes that company has never paid and will never be required to pay, company has accumulated a balance of deferred investment tax credits. Said balance in the unamortized investment tax credit account represents ratepayer contributions resulting from the practice of collecting from ratepayers amounts which are never paid by company in taxes to the federal government. Neither investors nor the federal government has attributed any amount to the balance of said account.

Because the company is amortizing the balance in its deferred investment tax credit account over the service life of its property, the full amount of the current balance will eventually be credited to the ratepayers in the form of reduction in taxes charged to them. However, during the interim period, company has the use of the funds made available by ratepayers in the amount of the balance in the account in the form of plant investment. If the unamortized balance in the account is not deducted from the company's rate base, ratepayers will be required to pay a return on plant investment made with ratepayer-contributed funds. A comparable situation arises wherein the company issues debt securities and will eventually repay the amount of the indebtedness. However, unlike the treatment company proposes for the deferred investment tax credit account, in the area of debt securities, the obligation for company to repay the principle in no manner nullifies the requirement that company pay interest on the debt until repayment is made. The commission found and determined on the evidence before it that the unamortized balance of investment tax credits deferred under the 1962 Revenue Act should be deducted from the company's rate base. Company, in its specifications of error, assigns error to this ruling. The commission rejects this assignment of error by company.

Company has argued that the rate base reduction is contrary to good regulatory practice. The commission finds the opposite to be true. When the 1962 Investment Tax Credit statute was enacted, various regulatory commissions provided for the treatment of the credit in two manners. Several jurisdictions provided that the tax saving would be immediately 'flowed through' to operating income; i.e., that the ratepayer would be charged during each year only for income tax actually incurred by the utility.

Company has not implemented the ***300** 'flow-through' method. Rather, company has treated the tax saving under the other generally adopted method—i.e., 'normalization'—wherein the ratepayer is charged a fictitious tax expense and the excess tax charges are accumulated in a deferral account and flowed back to income over the period of the service life of the property giving rise to the credit.

Company also asserts that rate base reduction in the amount of the unamortized balance is contrary to the intent of Congress because of later congressional enactments; i.e., §203(e) of the 1964 amendment to the 1962 Revenue Act and the 1971 Revenue Act. However, the aforementioned 1964 enactment was applicable only to federal regulatory agencies, and the 1971 enactment does not address any regulatory matters related to the 1962 Investment Tax Credit provision. The commission finds that company's argument has no merit and reaffirms the commission's earlier decision that rate base deduction of unamortized investment tax credits is proper and is not in conflict with federal law.

8. Working Capital

The company argues that SDEC's working capital allowance is improper in this case. The company's basic argument in this regard appears to be that the formula relied upon by SDEC is one which already takes into account all factors in the cash working capital formula. Therefore, the consideration of any discrete items already taken into account by the formula, such as ad valorem taxes, results in double counting to the company's detriment. The company further argues that SDEC has failed to show that the accruals which it uses in the formula represent actual funds. The company also contends that if such an allowance is to be made, compensating bank balances must be taken into account and that by so doing, would result in a positive rather than a negative cash working capital allowance. Specifically, in its initial brief, the company cites four basic defects in SDEC's approach. The first defect cited by the company is that funds accrued for current liabilities are not a proper source for financing materials and supplies. Secondly, in the alternative, even if such financing were possible, SDEC has not made proper calculations in making its determination. Thirdly, that SDEC did not use a proper working capital formula in that it did not consider the cost of compensating bank balance requirements. Funds are not available to finance materials and supplies in that accruals do not necessarily represent funds available to the company.

South Dakota Electric Consumers argues that the 45-day formula is one that was developed prior to the age of computerized billing and is stacked in favor of the utility. South Dakota Electric Consumers therefore argues that available offsets should be used to reduce rate base whether the reduction be greater or lesser than the rate base inclusion for cash working capital.

The staff argues that the working capital approach taken by SDEC is incorrect because it fails to acknowledge the impact of the Big Stone plant on the cost of service. The staff further argues that the correct application of the effects of Big Stone plant would result in a negative working capital of approximately 50 per cent of that shown in SDEC's case.

In response to the staff's position, SDEC asserts that its calculation did include the effects of Big Stone plant and that the staff's development of a cash ***301** working capital allowance improperly included fuel and purchased power.

Neither the affidavit of Al Schmidt nor company's specifications of error upon rehearing delineate the exact assignment of error company claims respecting the commission's decision regarding working capital.

A working capital allowance is properly includable in company's rate base only to the extent that funds for the working capital requirement are supplied by investors because investors are entitled to earn a return on the funds they so supply for working capital purposes just as investors are entitled to a return on the funds they provide that are invested by company in plant used and useful in rendering electric service to company's South Dakota consumers.

Alternatively, if working capital funds are available to the company through ratepayer contributions, those contributions relieve investors of the necessity of providing additional working capital funds to company. To the extent that working capital requirements are met through ratepayer contributions, the working capital allowance is properly reduced by that amount. If the working capital allowance included in rate base were not reduced by such ratepayer contributions, ratepayers would be paying a return to company on funds that the ratepayers had themselves contributed.

When ratepayer contributions are in such amounts as to exceed the working capital requirement of company, not only is it proper to exclude any working capital allowance from rate base, but, in addition, it is proper to reduce the rate base by the amount that ratepayer contributions exceed the working capital requirement. This deduction in company's rate base is proper in that ratepayer contributions, to the extent that they exceed working capital requirements, relieve the investors of providing capital funds for investment in plant. If the excess over working capital requirements were simply ignored, ratepayers would again be called upon to pay a return on investment in plant derived from the ratepayers' own contributions.

Company's witness also recognized the propriety of ignoring or disregarding ratepayer contributions in determining whether a working capital allowance was needed, and if so, in what amount. However, company made no reduction in rate base for ratepayer contributed funds in excess of company's working capital requirements. Moreover, ratepayer contributed funds even exceeded the amount required for materials and supplies for working capital purposes. Yet, company erroneously failed to offset this working capital requirement for materials and supplies and further erroneously failed to give full effect to the ratepayer contributions.

The commission in its previously entered decision and order adopted the formula utilized by SDEC witnesses and the results thereof in determining the working capital requirement and allowance in light of ratepayer contributions made to company. South Dakota Electric Consumers' witness developed a cash working capital requirement utilizing an assumed 45-day lag between the payment of company costs and the collection of revenues from customers. Said assumption is a commonly utilized method in utility regulation in the absence of a lead-lag study performed by a particular utility. Moreover, usage of the formula proposed by SDEC is favorable to company in that it overstates the cash working capital requirements anyway.

***302** South Dakota Electric Consumers' witness also determined the amount of working capital available to company through ratepayer contributions resulting from the fact that company receives revenues from its ratepayers which reimburse company for certain costs long in advance of the time when company utilizes such funds to pay those costs. As noted by SDEC's witness, company collects from its ratepayers taxes—e.g., ad valorem, unemployment, and social security—substantially in advance of the time when such amounts collected must be used to pay those taxes.

The commission holds that company is entitled to include in rate base a working capital requirement, but only to the extent that it is not supplied by ratepayer contributions. In this proceeding, ratepayer contributions were properly used to offset both company's cash and materials and supplies working capital requirements.

II.

Increased Payroll and Pension Expense

The company argues that this adjustment is necessary in that it is an actual increase in costs to the company because, in order for an employee to become more productive, increasing capital expenditure and other costs are necessarily incurred by the company. The company further argues that the staff's Exhibit No. 9 actually shows an increasing labor cost for per kilowatt-hour of energy sales.

The staff argues that the salary increases resulted in increased productivity. The staff further argues that even if such increases did not result in increased productivity, the company's management should not have approved the increases initially. Further, the staff argues that any capital expenditures which result in increased productivity have already been recognized in the staff's rate base and rate of return recommendations.

South Dakota Electric Consumers only contested the amount of the increase and the company has recognized that it was in error in its original calculation. The company has accepted SDEC's calculation in regard thereto.

Company increased payroll and pension expenses to reflect a full year of wage and pension increases granted during and after the test-year period. In its decision and order, the commission disallowed company's adjustment. Company specifies the commission's ruling as error in its specifications of error upon rehearing.

Company claims that incurred increased payroll and pension expenses are allowable even though such increased costs have been offset by increases in productivity. This commission finds that it is proper to disallow test period adjustments for wage and salary increases on the basis of increased productivity where, on a unit of sales basis, the cost of labor has not increased despite increased wages and related expenses. The evidence before the commission fully supports this finding that increased productivity has, in fact, offset payroll and related increases. Accordingly, the commission rejects the adjustment proposed by company in regard thereto.

Moreover, as previously noted, part of the adjustment company would make to test-yeat wages and pension costs were incurred beyond the test period. The commission finds that it is improper to increase test-year costs on the basis of an out-of-period increase in costs without at ***303** the same time taking into account the revenue side of the equation which reflects increases in the post-test period. While costs may go up, so may sales and revenues. Without matching costs and revenues, the test period is improperly distorted. This commission will not allow such distortion.

III.

Advertising and Miscellaneous General Expenses

The commission found that the amounts spent by company for advertising were reasonable, but that miscellaneous general expenses as proposed by company included certain items which were not necessary for the rendition of electric service and which company conceded. Upon full review of the record and the subsequent submissions by company, commission staff, and intervenors, the commission finds that its previously entered findings regarding this matter are proper.

IV.

Regulatory Expense

The company contends a two-year amortization period for such expenses is proper given the company's recent history. The company further contends that the disallowance of excessive regulatory expenses by SDEC is improper in that the SDEC witness did not know the recent rate case experience of the companies he used for comparison purposes. Finally, the company contends that the SDEC witness failed to identify any specifically improper expenditure the company has made in regard to rate cases, and, hence, SDEC has failed to prove that any of the company's regulatory expenses are excessive.

South Dakota Electric Consumers argues that the company has not adequately supported its claimed expenses for regulatory cases and that based upon SDEC's comparisons, the company should be allowed a smaller regulatory expense than that proposed by the company.

The staff recommended a three-year amortization period, but did not argue for implementation of the same in its briefs.

The commission adopted the recommendation of SDEC for an annual rate case expense allowance of $50,172. The commission further found that amortization thereof should be made over a three-year period, said amortization period not having been proposed by SDEC in regard to its recommendation.

South Dakota Electric Consumers' recommendation of $50,172 was based upon a comparison of the regulatory expense level claimed by the company with the average regulatory expenses experienced by other electric utility companies and company was double the amount of said average. South Dakota Electric Consumers' witness testified that on the basis of the comparisons he had made and his experience in regulatory matters, company's claimed $230,257 was excessive. South Dakota Electric Consumers' witness went on to state that he was not proposing that the company not spend said amount, but rather that the ratepayers should not be charged for excessive expenditures by company.

Company, in its specifications of error upon rehearing, contends that the commission erred in disallowing the amortization of $223,533 of regulatory expense per annum and that amortization ***304** of the amount recommended by the SDEC over a three-year period was erroneous and in conflict with the amount recommended by SDEC.

The commission finds that the company's assignment of error regarding the level of rate case expense should be rejected. However, the commission finds that amortization of the amount recommended by SDEC was in error. The amount of $50,172 recommended by the SDEC witness and adopted by the commission is an annual amount. Hence, it is not appropriate for said amount to be amortized over a three-year period.

Secondly, the decrease to booked rate case expense of $167,081 shown on Attachment 1, Appendix E [omitted herein] of the commission's decision and order entered on the 27th day of September, 1976, should, accordingly, have been shown as $116,909 rather than the $150,357.

With respect to the allowance of $50,172, the commission finds that SDEC's evidence in regard thereto was the most credible, and that said amount was amply supported in the record before this commission. The commission finds that company's excessive rate case expenditures cannot and shall not be charged to ratepayers.

V.

Computation of Income Tax Allowance

The company argues that normalization of income tax expense for the income tax effect of interest and other overhead related to the company's construction program should be allowed. The company presented in its rebuttal testimony five basic reasons why flow through is improper and unsound. It has restated these arguments at pages 107 and 108 of its initial brief. The company further argues that the 'phantom tax' language used in regard to flow through is deceptive and that arguments based thereon merely are assertions that flow through should be applied because it will produce lower rates for the present. The company further argues that Order No. 530–B of the Federal Power Commission fully supports the company's view that normalization benefits both utilities and their ratepayers. Finally, the company argues that current ratepayers do not finance current construction, and consequently, said ratepayers should not receive the tax benefits related thereto.

South Dakota Electric Consumers argues that these deductions are available to the company in computing its federal income tax liability and that the company would have those deductions totally ignored and require ratepayers to pay an amount for federal income taxes which the company will not actually incur. South Dakota Electric Consumers also argues that, as stated above, the company has not shown that it uses an aftertax rate for AFUDC calculations. South Dakota Electric Consumers also states that the company's witness conceded that under the normalization method, additions to the deferral account each year will exceed withdrawals as long as the company continues to grow.

The staff argues that the same analysis as used by the staff for the investment tax credit equally applies to this issue.

Company proposes in this proceeding to obtain an income tax allowance in cost of service that is calculated without regard to the fact that company deducts construction overhead items and interest expense on indebtedness incurred in the construction program when filing its income tax returns. Company utilizes ***305** 'normalization' to describe its request for an income tax allowance in cost of service in excess of that which it will actually pay, notwithstanding the total lack of normality inherent therein. South Dakota Electric Consumers and the staff opposed the so-called normalization of the tax effect of these current tax deductions. South Dakota Electric Consumers' witness testified that normalization constitutes a deviation from the cost concept.

The commission rejected the company's position. Company contends that said rejection was error. The commission disagrees and reaffirms its previously entered findings in regard to this matter. There is ample authority for this commission's action, and the record before this commission establishes that 'normalization' is inappropriate in this proceeding.

The fallacy of company's position lies in company's failure to recognize that it is fully compensated for the use of its borrowed funds during the period of construction and that company's ratepayers pay that compensation. Under the Uniform System of Accounts, plant under construction is recorded as utility plant, although not as plant in service. This commission has found that construction work in progress is not properly included in rate base. However, all borrowed funds, whether or not used for construction, are included in company's capitalization in the development of a fair rate of return. The cost of debt in equity funds used for construction purposes is capitalized and accounted for as an investment in plant, as are capitalized construction overheads. When the plant does in fact become operational, it is accounted for as plant in service. From then on, depreciation expense in the capitalized construction funds is charged to the ratepayers. The entire amount of the capitalized fund is, thus, recovered by the company over the depreciable life of its property. Until the full recovery is made, a return is charged to ratepayers on the full undepreciated balance of these capitalized funds.

Construction overheads and interest deduction associated with borrowed funds for construction work in progress are available to the company as a deduction in computing its federal income tax liability. Moreover, company uses the interest deduction in current overhead costs in computing its federal income tax it would pay if the deduction were ignored. Company's position would require Company's position would require that these tax deductions be ignored and would require ratepayers to pay an amount in rates to company for federal income taxes which company will not incur; i.e., to pay an imputed income tax liability. The commission further finds that the benefit to the present ratepayers of the deductions will be lost entirely if said deductions are not given effect in the present cost of service because the same are available only in the year incurred.

The company argues extensively that the interest rate it uses on borrowed funds is an 'aftertax' rate and that the SDEC and staff treatment of the proposed income tax allocation results in 'double counting.' This position is untenable for three reasons. First, company's evidence does not establish that an 'aftertax' rate is used as has been previously discussed herein. Secondly, company, not SDEC or staff, decides the rate at which construction funds are to be capitalized, and it is within the discretion of the company to change the rate if it is deemed inadequate. Finally, company cannot rely on its own selection of ***306** an inadequate capitalization rate, if the same be such, to justify before this commission adoption of its position.

Even if company had to sustain its burden of proof regarding the rate at which it capitalizes its AFUDC as an 'aftertax' rate, which it has not done, that fact would not in itself be determinative of this issue. This commission finds that the proper treatment is to flow the tax deduction through to consumers in the year that the deduction is actually realized.

Company argues that 'normalization' provides future ratepayers the benefit of all tax deductions relating to capitalized interest and construction overheads. However, company's witness conceded that under normalization treatment, additions to the deferral account each year will exceed withdrawals therefrom so long as company remains a growing concern. Hence, the net effect is that the method results in an absolute tax saving for company, not merely a tax deferral, and the benefits therefrom are never attained in their entirety by either present or future generations of ratepayers. Moreover, as testified to by SDEC's witness, any reduction of rates to future ratepayers would not be a certainty, but would rather be dependent upon the filing of annual applications by company.

Finally, company relies on Opinion No. 11 of the Accounting Principles Board in support of its position regarding this issue. Accounting Principles Board No. 11 is, by its own terms, not relevant to the accounting to be utilized by a regulated public utility. Secondly, APB No. 11 expressly disapproves of the net of tax valuation that company purports to utilize.

This commission rejects company's proposed interperiod allocation of the tax effects of the deductibility of capitalized construction overheads and debt interest in that the same is contrary to acceptable regulatory practice.

VI.

Power Supply Costs

The company argues that the figure it presented on an estimated basis is the proper one to use in this proceeding. The company further argues that the figure used is vital because the proposed fuel adjustment clauses of both the staff and SDEC will not adjust the rates charged for all changes in purchased power costs. The company further states that the estimates of the staff the SDEC recommended in this proceeding are unreliable. Further, the company contends that the staff and SDEC defend their estimates by saying that they relied upon information obtained by the company. However, the company argues that the staff and SDEC should have arrived at exactly the same results that the company did, which the staff and SDEC clearly did not.

South Dakota Electric Consumers argues that its calculation is the proper one in that it is reasonable, and even conservative in favor of the company.

The staff argues that its calculation is the proper one and that the SDEC witness failed to consider market considerations applicable to the sale of surplus Big Stone capacity. The staff further argues that its witness conducted a detailed study of the power supply costs of the company which takes into account all factors, and therefore, that the staff's conclusions should be the ones adopted in this proceeding.

There is no dispute that the inclusion of Big Stone plant in the test period rate ***307** base requires an adjustment to operating income to reflect the fact that excess off-peak generation capacity will be available from the plant and that the company will be selling off-peak capacity and energy from Big Stone to other members of the MAPP Pool and even off-pool utilities. The controversy relates to the magnitude of this adjustment. The commission adopted SDEC's adjustment and company specifies this as error. The commission rejects company's assignment of error regarding this matter and affirms its prior ruling.

Evidence was adduced at hearing that in normal operation, the annual generation of Big Stone is expected to be 3,202,800 mwh. South Dakota Electric Consumers' witness testified that the company's 32.5 per cent share of said generation represents 1,040,910 mwh. South Dakota Electric Consumers' witness further found that based on company data, company would sell 568,002 mwh of energy to other members of the MAPP Pool. South Datota Electric Consumers' witness established the price of these intersystem sales at 11.0 mills per kwh, said price reflecting the average price to pool members at which company was selling surplus power during the latter months of 1975 as well as the total estimated cost to company to produce energy at Big Stone. The amount of revenue so generated was rolled into the company's pro forma operating income figures by SDEC's witness.

Company challenges the price at which the intersystem sales will be made and the level of energy sales to be made by company to MAPP Pool members. With respect to the average price of 11.0 mills per kwh, the commission finds that said price is amply supported by the evidence. Company's calculation of participation power averages to a cost of 13.76 mills per kwh and that company's weighted average cost to pool members of participation power and economy energy is 12.32 mills per kwh. With respect to the level of Big Stone economy energy sales, company offered evidence to establish that there is only a limited market for said sales within the MAPP Pool. However, company's evidence did not establish a realistic or accurate picture of the requirements of MAPP Pool members.

The level of expected generation from Big Stone for a normal year used by SDEC's witness was furnished by Big Stone's management. Obviously, an estimated level of generation means the existence of an equivalent energy market. The commission finds that Big Stone's management would not estimate a generation level that could not be utilized absent evidence to the contrary.

VII.

Ad Valorem Taxes Related to CWIP

The company argues that the bookkeeping burden of capitalizing such a small amount of ad valorem taxes is not justified. Consequently, recording such a current expense is a practical solution for a minor matter. The company also disputes the amount of CWIP SDEC claims is subject to said tax.

South Dakota Electric Consumers argues that capitalization of such amounts is allowed by the Uniform System of Accounts and should not be taken as a current expense.

The staff agrees with the SDEC position and further argues that the tax law does not allow expenses for such taxes to be currently taken.

The commission found and concluded that ad valorem taxes related to CWIP, ***308** which the company had expensed, should be capitalized. Company does not actually deny the necessity for capitalization of such taxes, but rather argues that capitalization of the amounts involved is not worth the effort. However, this commission cannot ignore the erroneous expensing of the ad valorem taxes and, therefore, rejects company's position.

VIII.

Fuel Adjustment Clause

The company has proposed a fuel adjustment clause which would be adjusted as the combined cost of fuel and purchased power varied from the base cost provided for in said clause. The company contends, that such a clause is required in that estimates are necessarily made in regard to purchased power costs until the Big Stone plant has been in service for a longer period of time than at present. It is further argued by the company that such a clause is the fairest to both ratepayer and the company. The company further argues that the fuel adjustment clauses presented by SDEC and the staff do not reflect the actual costs incurred by the company after the proposed rates in this case would become effective.

South Dakota Electric Consumers argues that its proposed fuel adjustment clause is more complete that that of the staff and that the clause proposed by the company is too general in that it contains virtually no information indicating the manner in which the adjustment factor is to be calculated or what fuel costs are to be taken into account. South Dakota Electric Consumers further argues that purchased power is not a proper component of a fuel adjustment clause.

The staff argues that the fuel adjustment clause proposed by the company would ignore revenues associated with surplus capacity from the Big Stone plant and would only allow the ratepayer the opportunity to realize the benefits of the Big Stone plant capacity by assuming all of the risks concomitant with same. The staff further argues that such an arrangement would take all of the risks associated with Big Stone plant from the shareholder and place them upon the ratepayer. The staff concludes that its fuel adjustment clause is the proper one to accept in this proceeding.

The commission reaffirms and readopts its previously entered findings regarding the propriety and validity of SDEC's fuel adjustment clause.

IX.

Rate of Return

The primary issue in this proceeding regarding rate of return relates to the fair rate of return on common equity. The commission found that 12 per cent is a fair rate of return on common equity and that the overall fair rate of return is 9.23 per cent. Company, in its specifications of error upon rehearing, contends that the rate of return on common equity and the overall rate of return are inadequate and are consequently unlawful.

Upon full consideration of the affidavit of Al Schmidt, the specifications of error upon rehearing filed by company, the subsequent responses by company, staff, and intervenors, and the entire record herein, the commission finds that the 12 per cent and 9.23 per cent are, respectively, the fair rate of return on common equity and the fair overall rate of return, and the commission hereby reaffirms its earlier determination in regard thereto.

***309** Company witness Monteau recommended a cost rate for common stock equity in the 15 per cent-16 per cent range. Staff witness Wilson recommended 12 per cent, that being the highest percentage within the 11 per cent to 12 per cent range which he found to be the zone of reasonableness. Staff witness Wilson testified that allowing a return on equity as low as 11.25 per cent was justified.

Company witness Monteau first analyzed the relationship between common stock market and book values and the rates of equity returns experienced by a large group of utility companies. He then made a discounted cash-flow analysis of investor assumptions and expectations. After applying a 7.5 per cent factor for the cost of financing and market pressure, Monteau concluded that the average of his discounted cash-flow calculations was 14.86 per cent. Without ever precisely stating the derivation of his recommendation, Monteau found a cost of equity to range between 15 per cent to 16 per cent.

South Dakota Electric Consumers established that Monteau had in this proceeding departed from the methodology he had utilized in proposing a rate of return when testifying in rate proceedings before the SDEC municipalities. In the earlier proceedings he had suggested a comparison-of-earnings approach on the ground that the best measure of the cost of common equity capitalized in the relationship of earnings to book value of representative utilities over a period of years. The average equity returns of his comparison companies, the same being utilized in this proceeding, were in the neighborhood of 12 per cent over a period of years. Hence, if the analysis Monteau had utilized in the municipality rate proceedings had been recommended by him in this proceeding, his recommended equity return allowance would not have been significantly higher than the 12 per cent found fair and reasonable by Dr. Wilson.

Staff witness Wilson started with a comparison of the equity earnings of comparable companies. He found that 44 comparison combination gas and electric companies earned from 10.5 per cent to 12.2 per cent on their equity during the five-year period 1970 to 1974, inclusive, and that 45 small electric utilities of the same general size of company averaged 10.9 per cent on equity in 1974 and below 12 per cent in most prior years since 1970. Wilson further found that 40 large utilities with operations of at least 75 per cent electric averaged from 11.4 per cent to 12.5 per cent on equity earnings during the same 1970 to 1974, inclusive, period, and that the same group of 40 with the elimination of subsidiaries of holding companies earned from 10.7 per cent to 11.9 per cent on equity in the same time period.

Wilson testified that circularity is inherent in viewing only comparison companies with earnings subject to regulatory determination. Wilson further testified that comparison-of-earnings test for utilities should not be the only standard in a study of the cost of common equity capital. Hence, Wilson next testified on earnings on proprietary capital experienced by a group of unregulated business firms. He noted that these companies are more risky than company because they, unlike company, do not have monopoly franchises. Wilson, however, found that such an analysis would be helpful in establishing guidelines concerning the cost of common equity capital. After compiling data for a large variety of manufacturing industries ***310** from 1961 through the first portion of 1975, Wilson found many unregulated firms with 11 per cent or less rates of return on book equity, including many highly successful firms in more risky industries. The all industry average for the 1961 to 1974 period was 11.4 per cent earnings on equity; and for the twelve months ended September 30, 1975, the average was 12 per cent.

On the basis of his comparison of utility and nonutility earnings, witness Wilson concluded that rates of return on common equity in excess of 12 per cent were not required to attract capital or to fairly compensate company's common equity holders for their investment.

Witness Wilson next proceeded to conduct a discounted cash-flow study. He stated that the discounted cash-flow methodology assumes the present value—i.e., what an investor is willing to pay in order to obtain a sum certain amount at some specified time in the future—can be ascertained by adding together the current dividend yield and the shares of common stock and the annual expected growth rate in dividends. Witness Wilson applied this discounted cash-flow test to groups of his comparison companies, and not to the stock of the company itself, in order to eliminate the effects of irregularities attendant with the market behavior of any one particular company's stock.

Witness Wilson found that the annual dividend yield of his comparison companies, calculated as the ratios of dividends paid during the year to average of high and low market prices for the year, were as follows: 44 combination companies, 9.93 per cent; 40 electrics, 9.9 per cent; 45 small utilities, 9.42 per cent. He developed serveral annual dividend gross rates for his groups of comparison companies for several growth periods—namely, 1973–74; 1972–74; 1971–74; 1969–74; and 1964–74—and witness Wilson found that rates of 2.55 per cent to 4.76 per cent in dividend growth were experienced during those various time frames.

On the basis of dividend yields and annual dividend growth rates, witness Wilson concluded that the costs of common equity capital were 11.25 per cent for the combination companies, 11.5 per cent for the large electrics, and 11.7 per cent for the small utilities. On the basis of all of his tests, witness Wilson concluded that the cost of common equity capital for company was in the 11 per cent to 12 per cent range, and suggested reliance on the top of the range to accommodate the company's thin equity ratio.

A critical explanation for the different result reached by Dr. Wilson in his discounted cash-flow study from the end attained by Mr. Monteau is that Mr. Monteau accorded equal weight to the historical experience of each of the ten years used in this study, whereas witness Wilson also made ten-year studies but accorded significantly greater weight to the data of the more current years.

Witness Wilson found fault with witness Monteau's methodology. Witness Wilson pointed out that the book values of the company's common stock is inflated as the result of retention of excessive earnings in past years in which typical regulatory lag operated to the detriment of consumers and by high prices at which company then sold its shares of stock.

In any event, the market price of utility company stock is related to many factors that are beyond the purview of this commission and are outside this commission's control. For example, witness Wilson called attention to a recent NARUC report on the relative efficiencies ***311** of electric utilities. Company was classified as relatively inefficient in this report. Although witness Wilson expressed no opinion on the accuracy or fairness of the NARUC study, he noted that the same was an example of a factor which might affect investors that could not be controlled by this commission. This commission finds that the more comprehensive studies conducted by witness Wilson provide a more reliable basis for establishing the fair rate of return on common equity, the same being 12 per cent.

The commission has found nothing in either the affidavit of Al Schmidt nor the specifications of error upon rehearing filed by company which in any manner warrant any change in the previously entered findings of this commission.

X.

End Result

Company argues in its specifications of error upon rehearing that the end result of the PUC's decision and order of September 27, 1976, is constitutionally unlawful. Company provides no specifics to support this allegation unless the specifics are contained in the company's assignments of error with respect to the components of the cost of service such as average versus year-end rate base, rate of return, and other issues raised in this proceeding.

If these are the specifics upon which the company bases its claim, company's claim is without substance. The end result test is not a disembodied test independent of the components that make up the cost of service which lead to the end result of the regulatory adjudication. If each element comprising the cost of service is properly determined, as this commission has found that they are, then the end result is likewise proper.

If the specifics of the company's end result argument rest upon the allegations of the affidavit of Al Schmidt wherein he asserts that the rate increase authorized by the commission does not provide sufficient coverage of preferred stock dividend requirements to permit the issuance of additional preferred stock the argument advanced by company still has no merit.

Company assumes that the coverage it computes, assuming, arguendo, its computations are credible and reliable, is attributable to the inadequacy of the rate increase authorized by the commission. The fact is, however, that the level of earnings is not determinative of the coverage level. A satisfactory level of earnings, which everyone would agree produces a fair return, does not mean that coverage will be at a satisfactory level. Company's witness conceded that declining coverages do not necessarily indicate an inadequacy of earnings. Any financially healthy company can be hard pressed to meet coverage requirements on occasion.

Coverage levels are primarily influenced by two factors. First, by the level of the interest costs; as it increases, coverage will decline. This result will obtain even though coverage in dollars may be substantially greater than in the past. The evidence before this commission so reflects this result. Secondly, and more importantly, is the debt ratio; as the debt ratio increases and the common equity ratio becomes thinner, coverage declines. It is company's low equity ratio, as a consequence of its high debt ratio, which has adversely affected the cost of both equity and debt, and coverage.

Company's witness conceded that company's common equity ratio was ***312** much lower than it should have been. In light of a long-term debt ratio of 57.88 per cent, company's witness further conceded that the financial community becomes alarmed when long-term debt ratio rises above the 50 per cent level. Finally, company's witness conceded that an equity ratio of 30 per cent is dangerously low, although company's equity ratio is only 27 per cent.

As the evidence unequivocally demonstrates, company's coverage is not attributable to the level of the revenue increase authorized by this commission. The relatively low coverage ratios are the result of company's own deliberate course of action and conduct in the issuance of debt securities. It is incumbent upon company to remedy its common equity ratio and to reduce its long-term debt ratio. This commission has fully considered company's coverage requirements in reaching its decision in this proceeding.

While coverage provisions of company's indenture and articles of incorporation are considered, such provisions, being the result of private agreements, and in many cases entered into in the distant past, cannot be permitted to dictate excessive rates and may not be utilized to, in effect, usurp this commission's regulatory duties and responsibilities.

This commission finds that the end result of our decision and order entered today is both constitutionally sound and establishes just and reasonable rates.

XI.

Affidavit of Al Schmidt and Exhibits Attached Thereto

The affidavit of Al Schmidt makes allegations about the effect of the commission's decision and order entered on the 27th day of September, 1976, and purports to rely upon the exhibits appended thereto for support of said allegations. However, if the exhibits were to accurately and clearly reflect the effect of the commission's previously entered decision and order, said exhibits would have to be based upon the principles adopted by the commission in said decision and order. It is obvious that the exhibits do not so reflect those principles. For example, the exhibits are based upon an end-of-period rate base whereas the commission found that an average rate base should be utilized in this proceeding. With respect to working capital, the exhibits do not appear to in any manner reflect the effect of the commission's decision and order. The exhibits reflect tax normalization which this commission rejected in its decision and order.

Exhibit No. 2 does not reflect the total earnings of the company, since it is confined to the company's electric it is confined to the company's electric operations. Earnings per share of common must, of course, be based upon the totality of the company's operations, including the effect of company's gas operations.

Exhibit No. 3 purports to show that the rate increase authorized by this commission in its previously entered decision and order produces inadequate preferred stock coverages and thereby does not permit the issuance of additional preferred stock. Exhibit No. 3 contains the same fallacy as did Exhibit No. 2 in that it does not give effect to the totality of the company's operations and earnings. Again, the ability to issue preferred stock is related to total company operations and revenues. Moreover, both said exhibits are based on budgeted figures and ***313** do not realistically represent the results of actual company operations. A further illustration of the unreliability of the profferred exhibits is that, contained therein, interest is shown on bank loans at 7 per cent whereas said interest on bank loans in 1976 has been reduced significantly below that percentage.

The exhibits are also based on a period which is not the test period advanced by the company in this proceeding. Moreover, the hearings before this commission on company's application were based upon said test period and this commission entered its decision and order on the 27th day of September, 1976, in regard thereto. Hence, the commission finds that its decision and order entered today as well as its previously entered decision and order must be evaluated in light of the evidenciary record before it which was based upon the test period advanced by company in this proceeding.

Many of the allegations contained in the affidavit of Al Schmidt are also misleading. For example, Par XII of the affidavit asserts that the company supported annual electric revenues of $31,978,549 whereas the commission's decision and order entered on the 27th day of September, 1976, resulted in annual electric revenues of $24,847,542, resulting in a reduction of revenues of $7,131,007. However, there was no reduction of $7,131,007 because the company did not file rate schedules to produce annual electric revenues of that magnitude. The annual revenue reduction from that filed for by company was approximately, $3,750,000.

At Par XVI, the affidavit of Al Schmidt alleges that Exhibit No. 4 demonstrates that the company has not been able to earn the 9.23 per cent rate of return authorized by the commission based on electric rates and end-of-period rate base and that a return of only 7.31 per cent on company's end-of-period rate base for the twelve months ended September 30, 1977, will be realized. The commission has already averred to several defects contained in Exhibit No. 4, including the fact that it is not based on the test period advocated by company during the hearings on company's application, said test period having been adopted by the commission. Additionally, the allegations are based on positions of company which have been rejected by this commission in its previously entered decision and order, such as year-end rate base. Finally, the alleged earnings are not actual earnings for the period utilized by company. Earnings are higher, of course, on an average rate base and on other principles adopted by this commission in its previously rendered decision and order.

It is interesting to note that company's annual reports to stockholders reflect per share earnings on the basis of the average number of shares outstanding during the year. Company and the investment community recognize the necessity for same in that earning power of capital is properly measured by relating earnings during a particular period to the average investment during that period. Company's concept in this case of measuring revenues during a test period with the investment levels that exist at the end of the perios is untenable and does not in any manner reflect a proper matching of the earnings capability of company's investment.

Other portions of the affidavit of Al Schmidt simply reiterate the arguments previously made to this commission which were rejected in this commission's decision and order entered on the 27th day of September, 1976. The affidavit ***314** and related exhibits provide no valid test for the commission's previously entered decision and order in that said affivadit and exhibits are based upon rejected and invalid principles.

Finally, the commission feels that the submission of information filed by company on the 17th day of December, 1976, as well as the recently filed November, 1976, monthly report conclusively establish the inherent unreliability of the affidavit and related exhibits of Al Schmidt. Moreover, said submission of information filed by company on the 17th day of December, 1976, further establishes that the allegations contained in the affidavit and related exhibits of Al Schmidt are unfounded and unsupported.

The commission will not further elaborate upon each and every inaccuracy, inconsistency, and misleading allegation contained therein, but simply finds that said affidavit and related exhibits are both meritless and incredulous. The commission further finds that the submission of the affidavit and exhibits of Al Schmidt, and the subsequent developments related thereto, require this commission to direct staff to initiate a complete investigation of this entire matter.

Certain issues have not been contested by company, staff, or SDEC, and will therefore require no further elaboration herein as they are hereby adopted by this commission. The commission, on the basis of all of the testimony, exhibits, briefs, and arguments, and the entire record in this proceeding, including all matters submitted to the commission on rehearing, hereby enters its findings of fact and conclusions of law as follows:

Findings of Fact

I.

That the discussion and analysis above set forth is hereby incorporated as if set forth in full herein.

II.

That the commission hereby readopts and reaffirms its Finding of Fact Nos. I to XXXI, inclusive, and XXXIII to LVII, inclusive, entered on the 27th day of September, 1976, in the commission's decision and order; and that the commission rescinds Finding of Fact No. XXXII contained therein.

III.

That the specifications of error upon rehearing and the allegations in the affidavit of Al Schmidt and related exhibits are without merit and are unsupported in the record before this commission, except for the contention of company that the regulatory expense adopted by the commission should not be amortized.

Conclusions of Law

I.

The commission hereby incorporates the above set forth discussion and analysis as if set forth in full herein.

II.

The commission hereby readopts and reaffirms its Conclusion of Law Nos. I to XX, inclusive, and XXII to XXXIII, inclusive, and hereby rescinds Conclusion of Law No. XXI.

***315 III**

That Conclusion of Law No. XXXIV, except as hereinafter provided, is hereby incorporated as if set forth in full herein.

IV.

That Attachment No. 1, Appendix E contained in Conclusion of Law No. XXXIV is rejected and that Revised Attachment No. 1, Appendix E attached hereto, is hereby incorporated as if set forth in full herein.

V.

That the specifications of error upon rehearing, except as relating to Finding of Fact No. XXXII and Conclusion of Law No. XXI be, and the same hereby are, denied.

VI.

That the allegations contained in the affidavit and the related exhibits of Al Schmidt are unfounded and unsupported in the record before this commission.

VII.

Except as modified herein with respect to Finding of Fact No. XXXII Conclusion of Law No. XXI and Attachment No. 1, Appendix E, the commission's decision and order entered on the 27th day of September, 1976, not inconsistent herewith, is hereby readopted, reaffirmed, and incorporated as if set forth in full herein.

End of Document

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF SOUTH DAKOTA

IN THE MATTER OF THE APPLICATION OF NORTHERN STATES POWER COMPANY FOR AN INCREASE IN ITS RATES FOR ELECTRIC SERVICE IN SOUTH DAKOTA.	)))))	Docket No. F-3422

STAFF MEMORANDUM IN SUPPORT OF STIPULATION AND SETTLEMENT AGREEMENT BETWEEN NORTHERN STATES POWER COMPANY AND COMMISSION STAFF

On April 15, 1983, representatives of Northern States Power Company ("NSP" or "Company") and Commission Staff ("Staff") met in Pierre to discuss possible settlement of part or all of the issues at contention in this docket. As a result of these negotiations, NSP and Staff have agreed to a settlement level revenue increase of $3,902,000 on an annual basis. This settlement also includes a one and one-half year moratorium on further rate increases, until November 1, 1984.

I.

Positions of the Parties

In its application filed November 17, 1983, NSP sought to increase its annual revenues for electric service by $4,917,000 on the basis of an adjusted test year ended June 30, 1982. On March 28, 1983, Staff filed testimony recommending that the Company be allowed to increase its rates by $1,525,000. On

April 11, 1983, Company filed its rebuttal testimony purporting to justify an increase of approximately $5,515,000. Company's position on rebuttal reflected refinements to certain adjustments originally proposed by Company but rejected by Staff, and certain additional adjustments not included in the Company's initial filing.

II.

Settlement Level Increase

A. Initial Staff Position:

Based on data exchanges with the Company after Staff filed its testimony, Staff conceded corrections to its original position amounting to $728,000. These corrections are shown on the reconciliation exhibit attached to this memorandum. It should be noted that the $200,000 flowthrough error shown as a correction on the reconciliation exhibit was the result of incorrect information provided to Staff by a Company data response. Staff's corrected position, therefore, had the case gone to hearing, would have been $2,253,000.

B. Tyrone Stipulation:

The reconciliation exhibit also shows a Tyrone expense adjustment of $313,000 as an add-on to Staff's initial, corrected position. In addition to the Settlement Agreement resolving outstanding revenue requirement issues, NSP and Staff have also entered into a Stipulation resolving the recovery of

Tyrone cancellation costs. The Stipulation, dated April 15, 1983, is referenced in Article IV of the Settlement Agreement. The Stipulation is also submitted to the Commission for approval in this case.

As the Stipulation sets forth, the Eighth Circuit Court of Appeals' decision in October, 1983 upholding the FERC's approval of NSP's proposed amendment to the Coordinating Agreement between it and NSP (Wisconsin) finally determined the assignment of Tyrone cancellation costs between the two companies. As a result of the Eighth Circuit's ruling, approximately 87% of the $67.1 million in cancellation costs must be borne by NSP (Minnesota). The South Dakota Supreme Court's January 3, 1983 opinion on the Tyrone issue in the appeal of the Commission's decision in Docket F-3353 upheld the Commission's discretionary authority to defer its decision on the retail recovery of Tyrone related costs pending a final ruling from the federal courts on the FERC's decision. Now that the FERC decision has been affirmed and is no longer subject to further judicial review, how Tyrone cancellation costs are to be recovered from South Dakota ratepayers again becomes a question for Commission decision.

In light of the Eighth Circuit's ruling requiring pass-through of Tyrone costs to NSP (Minnesota), Staff has sought to lessen the rate impact of the Tyrone recovery on South Dakota retail customers. Company and Staff have stipulated (1) to a recovery of the Tyrone costs (subject to Commission approval) over a twenty year amortization period, and (2) to a carrying charge on the unamortized balance of those costs which does not include a common equity component. The Stipulation also provides for the recovery of the deferred portion of the amortized loss, as required under the Settlement Agreement in Docket F-3353.

The Stipulation reflects a recognition that the amortization of the Tyrone loss commenced on March 6, 1979 (the date of the Wisconsin Public Service Commission's decision denying Tyrone certification), but that the Company's entitlement to begin recovering the annual amortization expense from South Dakota ratepayers did not begin until November 30, 1980 (the date of the Settlement Agreement in Docket F-3353). Thus, under the Stipulation the Company will absorb the first twenty months' amortization expense (March, 1979 through November, 1980).

The Stipulation further reflects that from the date of the Settlement Agreement in F-3353 (November 30, 1980) until the effective date of the rates in this case (May 1, 1983) recovery of Tyrone related costs from South Dakota customers has been deferred. This deferral resulted from the Commission's Orders in Dockets F-3353 and F-3382. Under the Settlement Agreement in Docket F-3353 and under the Commission's Order in Docket F-3382, however, NSP is entitled to a carrying charge on the deferred amounts to compensate the

Company for the deferral. The Stipulation applies the carrying charge formula contained in the F-3353 Settlement Agreement to the amounts deferred in both previous cases.

In addition to recovery of the deferred portion of the Tyrone loss, the Stipulation also provides for the recovery of the current portion of the cancellation loss, i.e., that portion collectible from May 1, 1983 through the end of the amortization period (approximately March 6, 1999). The Stipulation applies a partial carrying charge to the current portion, similar to interest on a loan, to compensate the Company for the extended recovery period. This carrying charge is computed at the weighted cost of preferred stock plus an allowance for associated income taxes at the prevailing tax rate, and the weighted cost of debt as determined by the most recent Commission NSP rate order. The Stipulation does not reflect a common equity component in the carrying charge.

Exclusion of the common equity component from the carrying charge represents a settlement position between Company and Staff. Initially, Staff had proposed that the loss be recovered over the remaining twenty-seven years of the thirty year amortization period recommended by the Commission in the FERC proceedings, with no carrying charges applied to the unamortized balance. Company sought recovery over the remaining seven years of the "variable" ten year amortization period ordered by the FERC, also with no carrying charges.

For settlement purposes, the Company and Staff have agreed to a twenty year recovery period (seventeen years remaining since March, 1979), and to a carrying charge which excludes the common equity component. Staff believes that the exclusion of the common equity component effects an appropriate sharing of the Tyrone loss between ratepayers and equity stockholders. This exclusion will not require ratepayers to reimburse stockholders for that portion of the rate of return (carrying charge) which would otherwise serve to compensate stockholders for their share of the cost of money required to carry the unamortized balance of the Tyrone loss. Staff's advocacy of this position reflects the recommendation made by the Commission through its Witness Robert G. Towers in the FERC proceedings that the common equity portion of the AFUDC on Tyrone costs be excluded from the recoverable amount.

Staff takes the position that the twenty year recovery and the allowance of a partial carrying charge on the unamortized balance most equitably provides for the recovery of Tyrone related costs from South Dakota ratepayers. If the Commission approves the Stipulation on the Tyrone issue, Company has agreed to jointly move to have the pending appeals of the last two Commission Orders dismissed. Both appeals are currently before the Sixth Circuit Court for Hughes County. The only outstanding issue in each appeal is the treatment of Tyrone expenses. The Commission's approval of the Tyrone stipulation in this case will settle the matter for once and for all. The Stipulation provides a framework for the recovery of Tyrone costs prospectively through the end of the amortization period. In all future NSP rate cases, the amounts of the revenue requirement associated with the Tyrone amortization expense will be calculated on the basis of the Stipulation in this case.

C. Update to Staff Position:

The reconciliation exhibit shows seven amounts listed under the heading "Updates". These represent amounts which Staff accepts as valid add-ons to its initial, corrected position. Staff's acceptance of these amounts is based in some cases on refinements of adjustments initially proposed by Company as part of its application but rejected by Staff in its testimony. The refined adjustments were included in Company's rebuttal testimony. Other amounts were included initially in Company's rebuttal filing. One was presented for the first time during settlement discussions. All of the amounts reflected as updates would have been accepted by Staff had the case gone to hearing. A brief description supporting Staff's acceptance of each follows.

Fuel Stocks, etc.

In NSP's rebuttal presentation, the Company updated the average balance of fuel stocks (repriced), materials and supplies and prepayments to reflect a more current thirteen month average.

Nuclear fuel decommissioning

In NSP's rebuttal, the Company included an additional month's expense associated with its nuclear fuel decommissioning so that a full annual level would be reflected. The initial filing reflected only eleven months of costs.

Pensions

The additional $12,000 for pension costs reflects an annualization of NSP's current pension accrual, which the Staff had initially not reflected on an annualized basis.

Inflation

NSP's initial presentation included no "inflation" adjustment. On rebuttal, however, NSP introduced such an adjustment. The $110,000 reflected as a part of the settlement was constructed similar to the manner in which other "inflation" adjustments which have been approved by the Commission were constructed.

Split Rock Substation

Initially, Staff deleted the adjustments proposed by NSP to annualize its Split Rock substation investment and associated costs because NSP had not taken into account acknowledged load growth which would be serviced by the facilities. At settlement, however, the Company agreed to reduce the amount of its claimed costs by a growth rate, thereby accounting for its anticipated load growth. NSP also outlined more fully at rebuttal that certain aspects of this facility mitigate towards considering it as a facility necessary to assuring system reliability more so than one which accommodated system growth.

Storm damage

Initially, Staff took exception to NSP's construction of a five year period to develop a five year average for storm damage expenses for inclusion in the cost of service. On rebuttal, NSP updated its five year period to the most recent five full calendar year period thereby applying a calendar year average consistent with past methods of averaging these costs.

Non-revenue producing plant

Initially, Staff included non-revenue producing plant additions which were in-service as of January 1983. With the passage of time, NSP was able to update these additions to a period corresponding more closely with the date that rates established in this proceeding will be effective.

D. Settlement Issues:

Were this case to go to hearing, Staff's corrected and updated position would be at $3,096,000. The reconciliation sheet identifies three additional amounts as "settlement position changes". These represent issues which Staff was willing to agree to for settlement purposes in exchange for the eighteen month moratorium in this case.

Excess capacity

The first represents a settlement of the excess capacity adjustment initially proposed by Staff. Instead of the full excess capacity adjustment of $361,000 originally recommended by Staff, which was based on the Company's average investment in generating facilities, Staff has, for settlement purposes only, agreed to an excess capcity adjustment of $157,000 based on the Company's investment in oil-fired generation only. This settlement position change adds back $203,000 to Staff's position, the difference between the original $361,000 adjustment and the settlement level adjustment of $157,000.

Return on equity

In exchange for the eighteen month moratorium, Staff also agreed to an increase in the allowed rate of return on equity from 14% to 14.5%, for settlement purposes only. Staff would point out that 14.5% is the maximum return on equity ever granted by the Commission in a gas or electric rate case. Therefore, Staff's position for settlement does not exceed any previous Commission Order on this issue.

Additional dollars for extended moratorium

In order to procure the extended moratorium agreed to under the Settlement Agreement, Staff agreed to an additional lump sum increase of $297,000. Staff finds this to be a reasonable price for the lengthy moratorium agreed to by Company.

Moratorium

Staff places a substantial value on the eighteen month moratorium which was obtained by entering into this Stipulation.

Based on evidence which is contained in the record in this case concerning the level of non-revenue producing plant which NSP expects to place in service during the remainder of 1983 and concerning other changes in its costs which are expected to occur in 1983 and beyond, Staff does not find it unrealistic to expect that NSP would file another rate increase request as early as November 1983, absent a moratorium. Assuming that NSP at that time could justify a rate increase of at least $1.8 million, which does not appear to be an unrealistic assumption, a rate increase of that magnitude could go into effect in May 1984. However, the moratorium would forestall implementation of this amount until November 1984, a full six months. Delaying the implementation of a minimal rate increase of $1.8 million on an annual basis is worth $900,000 to customers. Obviously, the greater the amount of the rate increase which could be justified, the greater is the value of the moratorium to the consumers.

Dated at Pierre, South Dakota, this 20th day of April, 1983.

Respectfully submitted,

Walter Washington

WALTER WASHINGTON
Assistant Attorney General
Public Utilities Commission
500 East Capitol Avenue
Pierre, South Dakota 57501

On Behalf of Commission Staff

NORTHERN STATES POWER COMPANY
Reconciliation of Staff Position
Docket No. F-3422
(000's)

Staff's original recommendation		$1,525
Corrections:		
Repair allowance tax effect	$ 78	
Profit on sale of fuel oil	42	
Interest expense	221	
CWIP not included in rate base	60	
Flowthrough	200	
Excess capacity	77	
Rate case expense (@ 10.22%)	50	728
Staff recommendation as corrected		$2,253
Tyrone*		313
Staff's recommendation as corrected, including Tyrone		2,566
Updates:		
Fuel stocks, M&S, prepayments	$ 7	
Nuclear fuel decommissioning	53	
Pensions	12	
Inflation	110	
Split Rock substation (@ 10.42%)	72	
Storm damage	32	
Non-revenue producing plant	244	530
Staff recommendation as corrected and updated		$3,096
Settlement position changes:		
Excess capacity	$203	
Return on equity	306	
Additional dollars for extended moratorium	297	806
Settlement increase		$3,902

*Tyrone settlement figures were unavailable at the time Staff's initial case was filed.

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF SOUTH DAKOTA

IN THE MATTER OF THE APPLICATION OF NORTHERN STATES POWER COMPANY FOR AN INCREASE IN ITS RATES FOR ELECTRIC SERVICE IN SOUTH DAKOTA.	))))	ORDER APPROVING STIPULATION AND SETTLEMENT (F-3422)

On November 17, 1982, Northern States Power Company (NSP or Company) filed with this Commission an application for an increase in its rates for electric service in South Dakota. On April 15, 1983, Company and South Dakota Public Utilities Commission Staff (Staff) entered into a Stipulation regarding the proper regulatory treatment of South Dakota's share of Company's Tyrone Energy Park related abandonment expenses. On April 18, 1983, Company and South Dakota Public Utilities Commission Staff (Staff) entered into an agreement settling all matters at issue in this proceeding with the exception of rate design which is to remain open as a continuing docket, and providing for an annual revenue increase of $3,902,000 for electric service provided to its South Dakota customers on or after May 1, 1983.

The Commission has carefully reviewed the Tyrone stipulation and finds that it establishes just and proper regulatory treatment for Company's Tyrone related abandonment expenses. The Commission further has carefully reviewed the Settlement Agreement entered into by Company and Staff and finds that it properly establishes just and reasonable rates. The Commission therefore finds that said agreement should be approved upon the terms and conditions set forth therein. The Commission further finds that Company should file proposed schedules and related tariff sheets consistent with the allowed revenue level provided for in that agreement. It is therefore

ORDERED, that the Stipulation entered into between Company and Staff regarding the proper regulatory treatment of South Dakota's share of Company's Tyrone Energy Park related abandonment expenses is hereby approved subject to the terms and conditions set forth therein; and it is

FURTHER ORDERED, that the Settlement Agreement entered into by Company and Staff be, and the same hereby is, approved upon the terms and conditions set forth therein; and it is

FURTHER ORDERED, that Company file proposed rate schedules and related tariff sheets consistent with the allowed revenue level provided for in the Settlement Agreement approved by this Order. Said rate schedules and related tariff sheets are to be effective for electric service rendered on and after May 1, 1983.

Dated at Pierre, South Dakota, this 27 day of April, 1983.

BY ORDER OF THE COMMISSION:

KENNETH STOFFERAHN, Chairman

JEFF SOLEM, Commissioner

DENNIS EISNACH, Commissioner

(OFFICIAL SEAL)

STATE OF SOUTH DAKOTA
PUBLIC UTILITIES COMMISSION

In the Matter of the Application of Northern States Power Company for an Increase in its Rates for Electric Service in South Dakota	STIPULATION AGREEMENT BETWEEN NORTHERN STATES POWER COMPANY AND COMMISSION STAFF (F-3422)

This Stipulation Agreement is made and entered into by and between Northern States Power Company ("Company") and the Staff of the Public Utilities Commission ("Staff").

On June 23, 1980, the Company filed for an increase in electric rates for its retail customers in the State of South Dakota (Docket No. F-3353). A part of the requested increase consisted of an allocated portion of the amortization expense for the abandoned Tyrone Energy Park Project owned by the Company's subsidiary, Northern States Power Company of Wisconsin ("NSP(Wis)") paid by the Company to NSP(Wis) pursuant to an amendment to the intercompany Coordinating Agreement which had been filed with the Federal Energy Regulatory Commission on August 24, 1979 (Docket No. ER79-616) and allowed to become effective retroactively to March 6, 1979, subject to refund.

On November 12, 1980, the Company and Staff entered into a Settlement Agreement in Docket No. F-3353. The Settlement Agreement was approved by the Commission on November 19, 1980 and settlement level rates took effect on November 23, 1980. The Staff proposed, and the Commission decided over the Company's objection that the Commission defer its decision concerning the recovery of the inter-company expense related to the Tyrone abandonment until the conclusion of the FERC proceeding determining the payments to be made by the Company to NSP(Wis). The Commission's decision to defer recovery of the Tyrone expense was affirmed by the South Dakota Supreme Court on January 5, 1983.

The Settlement Agreement provided no recovery of the Tyrone expense during the period of deferral. Article IV of the Settlement Agreement provided for the accumulation of carrying charges according to a specified formula which would be recovered in the future along with the unrecovered annual expense of the Tyrone amortization. The purpose of the carrying charge was to reimburse the Company for the cost of the money during the delay in recovery.

On December 3, 1981, the Federal Energy Regulatory Commission issued its order in Docket No. ER79-616 which approved the amendment to the Coordinating Agreement but extended the time during which the Company would pay its Wisconsin subsidiary for the allocable share of the Tyrone loss from 5 years to about 8.9 years. This change reduced the Company's annual payments to NSP(Wis). The FERC's order was affirmed by the U.S. Eighth Circuit Court of Appeals on October 19, 1982, and is now final. As a result, under the terms of the Settlement Agreement the time has arrived for Commission determination of the retail rate treatment of the Tyrone expense and accrued carrying charges.

On November 17, 1982, the Company filed for an increase in its electric rates with the Commission (Docket No. 3422). It is anticipated that all or a portion of that increase will be placed into effect on May 17, 1983. A part of that requested increase consists of an allocated portion of the annual Tyrone expense, plus additional amounts related to past Tyrone expenses, the accrued carrying charges and additional carrying charges on the unamortized balance during recovery of the deferred amount. The Company proposed to amortize these amounts during the remaining portion of the amortization period determined by the FERC. The impact of this proposal on the test year revenue requirement would be $556,624.00.

The Company and Staff have discussed the matter of recovering the Tyrone expenses through retail rates. As a result of these discussions, the parties have agreed as follows, subject to the conditions set forth in this Stipulation Agreement, including acceptance of this Agreement in its entirety and without change or condition by the Commission which is unacceptable to any party, and with the understanding that each term of the Agreement is in consideration and support of every other term.

Article I. Framework of Stipulation.

It is agreed that pursuant to Order 134 of the Federal Energy Regulatory Commission in Northern States Power Company (Minnesota), Northern States Power Company (Wisconsin), Docket No. ER79-616 and pursuant to the decision of the United States Court of Appeals for the Eighth Circuit in South Dakota Public Utilities Commission, et al,

v. FERC (1982), 690 F.2d 674, that the Company is required to pay to NSP(Wis) the Company's pro rata share of approximately $67.1 million in costs associated with the abandonment of the Tyrone Nuclear Project, according to the participation ratios contained in the Coordinating Agreement between the Company and NSP(Wis) approved by the FERC in Docket ER79-616. The parties also agree that the amortization of all Tyrone-related expenses during the remaining amortization period may have an unnecessarily large impact on South Dakota ratepayers which would occur during a time of economic recession. The parties therefore agree that it is in the public interest to implement a procedure for the amortization of the Tyrone expenses in South Dakota which decreases the impact on rates by increasing the period of amortization and providing for a modified carrying charge for amortized amounts.

Article II. Implementation.

It is agreed that this Stipulation Agreement shall be incorporated into the final Commission order in the pending Company rate case, Docket No. F-3422, whether reached by litigation or settlement, and shall be the basis for determining the component of the overall revenue requirement related to the Tyrone expense and accrued carrying charges. This Stipulation Agreement is constructed upon an assumed effective date for final rates of May 17, 1983, and appropriate revisions of its parameters will be made if a different effective date occurs. Acceptance of this Agreement by the Commission will constitute a complete resolution and settlement of all outstanding issues and claims related to recovery of the Tyrone expense.

Article III. Duration.

It is agreed that this Stipulation Agreement also shall be the basis for determining the recovery of Tyrone expenses and carrying charges in all future proceedings before the Commission and any successor agencies until the conclusion of the recovery period specified herein.

Article IV. Method of Recovery.

The initial revenue requirement of Tyrone expenses for implementation on May 17, 1983, is estimated to be $317,197. It is agreed and understood that the initial revenue requirement for recovery, beginning May 17, 1983, will be recomputed using the capital structure and rate of return finally determined by the Commission in F-3422. The determination of the estimated initial revenue requirement is shown on Schedules 1 through 3 which are attached hereto and made a part hereof.

The Method of Recovery simulates a loss occurring on the Company's books on March 6, 1979, amortized over a period of 20 years with a deferral in commencement of recovery of the amounts from November 30, 1980 until May 17, 1983. The initial $317,197 consists of current and previously deferred amounts related to an assumed implementation date of May 17, 1983. These estimates are developed in Schedule 1.

The current portion of the initial revenue requirement is $234,046 and includes the annual amortization of principal and an annual carrying charge applicable to that portion of the simulated amortization occurring after May 17, 1983. (See Schedule 1, Col. F, Line 1). The principal related to the current portion is about $2,030,000, as is shown on Schedule 2. The carrying charge rate to be applied to the average unrecovered balance of the current principal shall be the weighted cost of preferred stock plus an allowance for associated income taxes at the prevailing tax rate and the weighted cost of debt as determined in the most recent South Dakota Public Utilities Commission order for NSP. This rate is illustratively developed on Schedule 3.

The deferred portion of the initial revenue requirement is $82,923 and includes the allocable South Dakota related Tyrone expense from November 23, 1980 through May 16, 1983 and related carrying charges. The deferred principal is $392,000 including the carrying charges accrued under terms of the Settlement Agreement in Docket No. F-3353 through May 17, 1983. The method of determining the carrying charge rate applicable to the deferred portion in this and future rate cases shall remain as defined in the Settlement Agreement Docket No. F-3353. That Settlement Agreement provides that the carrying charge rate applicable to the deferred balance is the weighted cost of capital for common and preferred equity plus an allowance for income taxes at the prevailing tax rate and the weighted cost of debt as determined in the most recent South Dakota Public Utilities Commission order for NSP. This rate is illustratively developed on Schedule 3.

Recovery of the South Dakota amortization shall commence with rates implemented on May 17, 1983 and continue until March 6, 1999. The annual amount to be amortized is developed in Schedule 1 and shall serve as a model for computations of Tyrone expenses in future rate proceedings.

It is further stipulated that in all rate proceedings before the South Dakota Public Utilities Commission establishing the Company's revenue requirements from the date of this Agreement until the South Dakota portion of the loss is amortized, shall include in the cost of service an allowance for the South Dakota jurisdictional portion of the cancellation loss, including all accumulated carrying charges, as set forth herein.

The Company will continue to recover its Tyrone costs at the annual amount determined in Docket No. F-3422 until the Commission in a subsequent rate case determines the Company's overall cost of service in such future cases. The Commission shall determine the revenue requirement related to the Tyrone abandonment in accordance with the method of recovery described herein. The carrying charge rates shall be adjusted to reflect the then current costs of each component of the capital structure.

In this and future rate cases, the South Dakota jurisdictional portion of the cancellation loss shall be determined by the schedule of principal payments, in the manner shown in Schedule 1, reflecting, however, the participation ratios and demand allocations used in the adjusted test year in each case, until such time as the FERC amortization is complete and NSP(M's) share of the total cancellation loss is known.

Upon completion of the FERC amortization, the final South Dakota jurisdictional portion of the cancellation loss shall be determined by applying the actual year-by-year participation ratios among NSP(M) and NSP(W) to the total NSP Minnesota and Wisconsin Company loss and further applying the actual year-by-year South Dakota retail production demand allocation factors to the resulting year-by-year NSP(M) loss. This final South Dakota jurisdictional loss will be compared to the South Dakota jurisdictional loss as calculated in the preceding paragraph. Any difference in these amounts will be subtracted or added to the unamortized portion of the loss and will be reflected over the remaining term of the South Dakota approved amortization period (20 years commencing on March 6, 1979).

The parties also agree that revenue allowances for the recovery of the carrying charges in Docket No. F-3422 and future cases will be treated for ratemaking purposes as non-taxable revenue in light of the fact that the accumulated charges will include an allowance for income taxes.

Article V. Conditions.

The Stipulation Agreement is expressly conditioned upon the Commission's acceptance of all the provisions thereof, without change or condition which is unacceptable to any party. The discussion between the Company and Staff which produced this Agreement have been conducted with the customary understanding that all offers and discussions related hereto are and shall be privileged, shall be without prejudice to the position of the party presenting such offer or participating in such discussion, and are not to be used in any manner in connection with this proceeding or otherwise.

This Stipulation Agreement is submitted on the condition that in the event the Commission does not by order accept it in its entirety, this Agreement shall be deemed withdrawn and shall not constitute any part of the record in this proceeding or any other proceeding or be used for any other purpose. If approved by the Commission, this Stipulation Agreement shall be binding upon the parties hereto, upon their successors, assigns, agents and representatives, and upon the Commission or any successor agency. It is understood that Staff enters into this Stipulation Agreement for the benefit of the retail electric customers of the Company in the State of South Dakota.

This Stipulation Agreement is entered into this 15th day of April, 1983, by and between the Company and Staff by their respective agents who represent that they are fully authorized to do so on behalf of their principals.

STAFF OF THE SOUTH DAKOTA PUBLIC UTILITIES COMMISSION

By Walter Wendling [signature]
Attorney

Dated: April 15, 1983

NORTHERN STATES POWER COMPANY

By [signature]
Attorney

Dated: April 15, 1983

82-6

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

IN CIRCUIT COURT

SIXTH JUDICIAL CIRCUIT

* *

IN THE MATTER OF THE APPLICATION OF NORTHERN STATES POWER COMPANY FOR AUTHORITY TO ESTABLISH INCREASED RATES FOR ELECTRIC SERVICE IN SOUTH DAKOTA (PUC Docket No. F-3382).

MEMORANDUM DECISION
Civ. 82-6

* *

Northern States Power (NSP) filed its application with the South Dakota Public Utilities Commission (PUC or Commission) to increase its annual electric rate revenues on retail sales in South Dakota by $6,184,000. Although the PUC Staff initially recommended a $3,056,000 increase, adjustments before and during the PUC evidentiary hearings resulted in a PUC Staff proposal for a revenue increase of $4,603,000. The December 15, 1981 PUC decision and order (PUC Order) does not specifically state the amount of the authorized revenue increase. NSP alleges, however, that the PUC Order mandates a revenue increase of $5,227,000.

NSP seeks judicial review of the PUC Order pursuant to SDCL Chapter 1-26 and asks this Court to reverse or modify the PUC's disposition of several issues. Having thoroughly reviewed the PUC Order, evidentiary record and exhibits, briefs of the parties, and the oral argument of counsel at the July 27, 1982 hearing, the following is this Court's memorandum decision.

I.

TYRONE-RELATED EXPENSES

The PUC Order denied NSP's $445,872 request for the 1980 test year for the annual amortization expenses associated with the cancellation of construction on the Tyrone nuclear generating plant. The PUC Order, p. 47, stated the following grounds for disallowance of the Tyrone-related expenses:

> . . . the Commission finds that consistent with its holding in Docket No. F-3353 the recovery of Tyrone-related costs should be deferred until the issues of the FERC (Federal Energy Regulatory Commission) proceeding have been finally determined by a final order of the FERC no longer subject to judicial review.

The PUC acknowledges that this Court has disposed of this very issue in its memorandum decision dated November 12, 1981. In that prior case, the PUC also deferred consideration of the Tyrone-related expenses until the FERC action became final. On appeal, this Court ruled that the PUC had thereby exceeded its statutory authority under SDCL 49-34A-6 -8 in deferring NSP's recovery of the Tyrone-related costs. The PUC, while adhering to the same position here as it advanced in the prior case, submits that the filing of the notice of appeal of this Court's prior Order operates to stay the execution of that Order pending final disposition of that case before the South Dakota Supreme Court.[1]

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[1]The PUC Brief, p. 3, apparently contains a typographical error and seeks to make reference to SDCL 15-26A-38 as authority for a stay of this Court's Order pending appeal.

NSP cites this Court's previous memorandum decision which authorizes the recovery of the Tyrone losses. NSP also notes that FERC has now entered its final order approving amortization of the Tyrone-related costs under the Coordinating Agreement between NSP-Wisconsin and NSP-Minnesota. NSP argues that this coordinating agreement is a "wholesale rate" subject to FERC jurisdiction under the Federal Power Act, 16 U.S.C. 824 et seq., and that state regulatory commissions, including the PUC, cannot ignore that FERC Order. NSP further cites Northern States Power Co. v. Hagen, 314 NW2d 32 (N.D. 1981) and Northern States Power Co. v. Minnesota Public Utilities Commission et al., District Court, Ramsey County, Minnesota, File No. 452088, Memorandum Opinion and Order, August 3, 1982, as authority for the proposition that inquiry by the PUC as to the reasonableness of Tyrone-related costs in intrastate retail rate proceedings undermines the federal preemption doctrine and supremacy clause of the United States Constitution and frustrates the present Congressional scheme for the establishment of reasonable wholesale rates.

Suffice it to say that this Court shall adhere to its previous ruling and disposition of the Tyrone issue as set forth in its November 12, 1981 memorandum decision. Accordingly, the PUC is directed to grant NSP's request for amortization of the Tyrone-related costs, and the allowed recovery shall include a reasonable carrying charge to compensate NSP for the period of deferral. While the PUC has taken the position that SDCL 15-26A-38 operates as an automatic stay of this Court's ruling on this issue during the pendency of an appeal to the South Dakota Supreme Court, it is this Court's opinion that the PUC must abide by this Court's ruling during the pendency of an appeal therefrom until such time, if any, that the PUC applies for and obtains a stay from the South Dakota Supreme Court.

In light of this holding, this Court need not consider the other arguments advanced by NSP on this issue. Counsel for NSP is directed to prepare an order consistent with this opinion. Likewise, NSP is directed to prepare and to submit alternative rate schedules that, on the one hand, reflect the inclusion of the Tyrone-related expenses consistent with this opinion and this Court's November 12, 1981 memorandum decision. NSP's rate schedules shall alternatively reflect the exclusion of the Tyrone-related expenses and the refund of any allowed expenses and appropriate carrying charges plus interest thereon at the judgment rate in the event this Court's order is stayed or is reversed on appeal.

II.

NUCLEAR PLANT DECOMMISSIONING

NSP conducted extensive engineering and economic analysis studies to ascertain the estimated future costs of nuclear fuel disposal and nuclear plant decommissioning. NSP requested that the PUC approve an annual sinking fund allowance consisting of a "minimum base" allowance plus a 25% "contingency". Although the PUC Order, p. 37, approved NSP's use of a sinking fund and a net negative salvage allowance for recovery of these costs, the PUC Order disallowed NSP's requested 25% contingency allowance.

NSP suggests that the reliability and legitimacy of its recommended sinking fund allowance is underscored by the extensive experience and expertise of its consultants. In addition, NSP witness Mr. Ewers testified that the base minimum amounts are not the best estimates or expected values for nuclear plant decommissioning, and that the actual decommissioning costs have, in his experience, always exceeded the base estimates. NSP also notes that the Minnesota PUC conducted extensive hearings on this very issue and recently adopted, subject to periodic future review, the same decommissioning plan as that submitted by NSP in this South Dakota rate case. According to NSP, the regulatory approval of NSP's proposed 25% contingency allowance by a neighboring jurisdiction, as well as the opportunity to periodically review the decommissioning cost estimates, demonstrates the reasonableness and even the necessity of the 25% contingency allowance.

The PUC adopted PUC Staff witness Mr. Towers' recommendation that the decommissioning costs, as reflected in the NSP engineering estimate, should be included in current rates so that present customers who derive benefits from the nuclear plants will pay for the attendant decommissioning costs. However, the PUC also adopted Mr. Towers' recommendation to disallow the requested 25% contingency, and it found that both the minimum base and the 25% contingency were subject to variation. The PUC Order, p. 37, notes that future inflation rates, technological developments, modes of nulear plant decommissioning, and even the cost estimates for the next 25 year period are unknown. According to the PUC brief, the 25% contingency allowance appears to be an "arbitrary" figure, and NSP's studies failed to explain or justify the contingency. Similarly, the PUC brief notes that other state regulatory commissions have disregarded present contingency allowance requests where future decommissioning costs are unknown but later become ascertainable.

Although NSP's actual decommissioning costs may eventually exceed the minimum base allowance granted by the PUC Order, this Court cannot conclude that the PUC's disallowance of the 25% contingency constitutes reversible error under the criteria of SDCL 1-26-36. With respect to the future decommissioning of these particular nuclear plants, NSP has failed to point to any specific record evidence that suggests the 25% contingency allowance is essential. NSP witness Mr. Ewers merely testified that, based on his experience, he had "never seen . . . a nuclear project come in under the (decommissioning) estimate." Accordingly, it is this Court's opinion that, based on the particular facts in this case, the PUC's decision to award NSP the minimum base allowance and to deny the 25% contingency allowance is supported by substantial evidence and must be accorded "great weight" by this Court. SDCL 1-26-36.

Moreover, it is within the regulatory purview of the PUC to deny NSP's requested 25% contingency allowance where the costs of decommissioning can be monitored during later periods and reflected in future rates as those events affecting decommissioning costs occur. See, In re Connecticut Light & Power Co., 41 PUR 4th 1, 59 (Conn. DPUC 1980); In re Consolidated Edison Co. of New York, Inc., 29 PUR 4th 332, 335 (NY PSC 1979); In re Southern California

Edison Co., 27 PUR 4th 144, 180-183 (Calif. PUC 1978). As the PUC Order concedes, NSP is not precluded from seeking an additional decommissioning cost allowance at such time in the future, if any, that it can satisfactorily establish such additional costs. For these reasons, the PUC Order is affirmed in these respects.

III.

FEDERAL INCOME TAX EXPENSE ADJUSTMENT

Although the 1980 adjusted test year expenses filed by NSP utilized the actual interest tax deduction and thus reflected NSP's actual income tax expense, the PUC Order, pp. 37-38, instead adopted an income tax expense allowance predicated on the use of a hypothetical capital structure and the interest tax deduction resulting therefrom. The amount of the federal income tax disallowance here is $67,000.

NSP asserts that the PUC adjustment deprives it of the reasonable opportunity to earn the allowed overall rate of return on the test year data. It also contends that the "hypothetical" or " fictitious" federal income tax allowance will jeopardize NSP's use of the investment tax credit under the Internal Revenue Code and its regulations.

In contrast, PUC Staff argues that the federal income tax expense adjustment is an essential corollary to the hypothetical capital structure adopted by the PUC in this case. Because the PUC has adjusted NSP's capital structure to disallow a return on imprudent and inefficient equity capital investments, so reasons

PUC Staff, it is likewise necessary to deny NSP's requested federal income tax expense allowances on such capital. Contrary to assertions that the use of hypothetical interest tax deductions will endanger NSP's opportunity to utilize the investment tax credit, the PUC brief stresses PUC Staff witness Brown's testimony that no interest tax deductions are imputed to that portion of NSP's capital structure associated with the investment tax credit. According to PUC Staff, this federal income tax expense adjustment is not only permissible under the tax laws, but it is also a common regulatory practice in many states.

It is a widely-acknowledged principle that as a state utility regulatory commission, the PUC may adjust NSP's interest deductions (for purposes of computing the federal income tax expense allowance here) and "synchronize" these with NSP's hypothetical capital structure. See, In re Boston Edison Co., 21 PUR 4th 113, 122 (FPC 1977); In re Sierra Pacific Power Co., 9 PUR 4th 537, 547-48 (FPC 1975); City and County of San Francisco v. California Public Utilities Commission, et al., 91 PUR 3rd 209 (Calif.); In re Valley Gas Co., Docket No. 1497 (RI PUC 1981); In re Toledo Edison Co, 36 PUR 4th 209, 238-39 (Ohio PUC 1980); In re Continental Tel. Co. of Maine, 18 PUR 4th 636, 645 (Maine PUC 1977); In re Northern States Power Co., 11 PUR 4th 385, 404 (Minn. PSC 1975).

Although NSP will not be compensated for its actual federal income tax expenses, it is also a well-established proposition that the PUC possesses the authority to reduce an income tax expense allowance when the utility has an imprudent, unreasonable, or uneconomical capital structure that would otherwise impose a greater capital cost upon ratepayers. In re Citizens Utilities Co., 34 PUR 4th

606, 623-24 (Idaho PUC 1980); Pennsylvania Public Utilities Commission v. Carnegie Natural Gas Co., et al., R-79100977 (Penn. PUC 1980).

Likewise, NSP's assertion that the PUC Order jeopardizes its use of the investment tax credit is also unwarranted. In re Union Electric Co., 39 PUR 4th 300, 303-05 (FERC 1980) held that the computation of a hypothetical federal income tax expense allowance does not violate §46(f) of the Internal Revenue Code (relative to investment tax credits) and the pertinent IRS regulations. This, in connection with PUC Staff witness Brown's testimony on this matter, underscores the propriety of the PUC's decision to adjust NSP's income tax expense allowance.

Because the PUC findings on this issue are supported by substantial evidence in the record and are not affected by any reversible error under the criteria of SDCL 1-26-36, the PUC Order must be affirmed.

IV.

AMORTIZATION OF DEFERRALS IN EXCESS OF PREVAILING 46% CORPORATE TAX RATE

The PUC Order, pp. 38-39, adopted PUC Staff's proposal for amortization of accumulated deferred federal income taxes (ADFIT) in excess of the prevailing 46% corporate tax rate. Under the PUC Order, the 2% increment under the earlier corporate tax rate of 48% (in existence prior to January 1, 1979) will be "flowed-back" to ratepayers over a 3-year period in annual amounts of $133,000.

NSP raised two objections to PUC Staff's proposal as adopted by the PUC. First, NSP contends that the current flow-back of deferred taxes treats the ratepayer and NSP equitably; that PUC Staff's proposal disrupts normal accounting processes; and that FERC has approved NSP's procedure here. Secondly, NSP asserts that if corporate tax rates do increase and the ADFIT in question here is flowed-back to ratepayers under the terms of the existing PUC Order, any increase over the present corporate tax rates will necessitate the imposition of a surcharge to adequately restore the ADFIT balance.

NSP further requests this Court to reverse the PUC's disposition of the ADFIT issue for the reasons that the PUC decision does not comport with established accounting principles;[2] that consistent with the PUC's established regulatory policy, NSP has already flowed-back ADFIT tax benefits to ratepayers and thus PUC Staff's amortization plan will actually create an ADFIT account deficit; and that NSP could lose its right to claim accelerated depreciation for income tax purposes, which in turn would result in substantial detriment to ratepayers.

Here, the PUC decision to amortize and flow-back excess ADFIT during a 3-year period is supported by substantial evidence in the record. While NSP sought to prove that the PUC Staff proposal would violate established accounting principles, NSP witness McIntye admitted that the proposal is not inconsistent

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[2] See, Accounting Principles Board (APB) Opinion No. 11; Uniform System of Accounts, General Instruction 18; Federal Power Commission, Accounting Release AR-2; Federal Energy Regulatory Commission, Order No. 144.

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[2] See, Accounting Principles Board (APB) Opinion No. 11; Uniform System of Accounts, General Instruction 18; Federal Power Commission, Accounting Release AR-2; Federal Energy Regulatory Commission, Order No. 144.

with FERC Order No. 144. NSP's accounting principle theory is further eroded by the Addendum to APB Opinion No. 2, which renders APB Opinion No. 11 inapplicable to regulated utilities. Moreover, despite NSP's contention that the PUC Order may in fact create an ADFIT account deficiency, it is this Court's opinion that the PUC action here did not constitute reversible error under SDCL 1-26-36. That NSP has failed to exercise its normalization option and has already flowed certain tax benefits to ratepayers does not preclude the PUC from adopting PUC Staff's flow-back proposal. See, Black Hills Power & Light Co., Docket No. F-3389 (S.D. PUC 1982). In the same vein, PUC Staff witness Brown testified that it would not be necessary to amortize any ADFIT deficiency in the event future corporate tax would exceed the present 46% rate. As pointed out in the record and the PUC Brief, NSP could request additional amounts here in future proceedings should tax rates increase. Further, the record suggests that present ratepayers will benefit from the more rapid 3-year amortization of ADFIT. Notwithstanding the mere possibility that corporate tax rates may rise in the future, NSP has failed to provide substantial evidence that would support a finding contrary to the PUC's on this issue.

Additionally, NSP's argument that the 3-year amortization of excess ADFIT may cause NSP to lose its right to claim accellerated depreciation must also fall. Although NSP urges that IRC Regulation 1.167(1)-1(h)(2) proscribes the PUC's reduction of excess ADFIT, there is nothing in the record or in the parties' briefs to suggest that the IRS has or will take this position. When confronted with the issue of rapid amortization of excess ADFIT, other state regulatory commissions have not hesitated to so order. See, In re

Pennsylvania Public Utilities Commission v. Philadelphia Electric Co., 33 PUR 4th 319, 332 (Penn. PUC 1980); In re Sierra Pacific Power Co., 40 PUR 4th 186, 227-28 (Nev. PSC 1980); In re General Tel. Co. of California, 37 PUR 4th 127, 168 (Calif. PUC 1980); In re Peoples Natural Gas Co., 44 PUR 4th 62, 80 (Iowa SCC 1981). In addressing this identical issue, the New York Public Service Commission in In re New York Tel. Co., 32 PUR 4th 353, 369-70 (1979) stated:

> . . . the IRS would have to take the position that the existing statute, §167(e) of the Internal Revenue Code, required at all times whatever treatment is prescribed at any time by the IRS through tis interpretive regulations. We believe that ~~the risk of this~~ occurring is so remote that it would be wrong to delay returning to consumers the excess accumulation solely on this basis.

Accordingly, the PUC's disposition of this issue must be affirmed.

V.

RATE BASE-SURPLUS CAPACITY

Consistent with PUC Staff witness Towers' recommendation, the PUC Order, pp. 41-43, denies NSP's common equity return on 794 megawatts (mw) of excess capacity.[3] Although the PUC found that

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[3]Mr. Towers arrived at the 794 mw excess capacity by calculating the 1982 excess summer peak, as adjusted (6,711 mw) and subtracting therefrom the expected summer peak demands and firm sales, as adjusted to include the obligatory 15% Midcontinent Area Power Pool (MAPP) reserve requirement (5,917 mw).

ratepayers are required to bear all "out-of-pocket" expenses associated with NSP's facilities and will pay for $1,245,000 of excess capacity costs, the PUC also found that NSP's shareholders shall bear $505,000 in excess capacity costs.

NSP makes references to the record below and seeks to erode the PUC findings. It initially notes that Mr. Towers admitted he did not have any training or experience in the design and operation of electrical generation and transmission systems. NSP also suggests that Mr. Towers overstated the level of NSP's excess capacity in proposing that all capacity beyond the 15% MAPP minimum requirement be characterized as "excessive". It further contends that Mr. Towers' "average net investment" computation affects all common equity, and the proposed $505,000 common equity disallowance is clearly excessive when compared to the $174,636 figure arrived at by NSP.[4] Further, NSP asserts that management must be afforded some latitude to maintain capacity in excess of the 15% MAPP requirement and that the PUC failed to make a finding of managerial imprudence; that even though NSP's oil-fired units

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[4]NSP objects to Mr. Towers' "horizontal" adjustment which disallows $505,000 in common equity return by imputing the 794mw excess capacity to NSP's coal, nuclear, gas and hydroelectric capacity alike. In comparison, NSP seeks to impute the entire excess capacity to its oil-fired generating plants and thereby arrives at a total common equity disallowance of $174,636. Therefore, NSP asserts that the $505,000 common equity adjustment is unwarranted because its net book investment per kilowatt is less on the oil-fired units than on the newer capacity units and thus the ratepayers will not have to pay the full return on the latter.

may constitute excess capacity, the common equity return should be allowed because these units enhance system reliability and can serve narrow peak periods; that the PUC cannot deny this return on any units because the record establishes that all present plant capacity satisfies the "used and useful" criteria; and that even though nearly two-thirds of NSP's excess capacity is due to the recent Manitoba Hydroelectric interconnection, Mr. Towers' testimony seemingly suggests that it would have been imprudent if NSP had not made this capacity addition.

This Court has thoroughly considered NSP's arguments and is satisfied that the PUC did not act arbitrarily or capriciously and did not abuse its discretion in arriving at a $505,000 dis-allowance on common equity return. Further, the PUC did not commit clear error in adopting Mr. Towers' excess capacity adjustment recommendations and rejecting NSP's proposals.

Although NSP directs this Court to caselaw that suggests the PUC must reach a prerequisite fact finding, supported by the record, that NSP's excess capacity is the result of managerial imprudence, San Diego Land & Town Company v. Jasper, 189 U.S. 439 (1903) and Covington & L Turnpike Road Co. v. Sandford, 164 U.S. 578 (1896) support a contrary conclusion. In view of this split of authority the PUC did not err as a matter of law in failing to reach a prerequisite fact finding of NSP managerial imprudence. Moreover, the PUC had sufficient basis to find that the excess capacity in question was not "used and useful", particularly in light of the testimony of NSP witness Caskey, who admitted that excess capacity does exist.

NSP's briefs also cite caselaw in support of the proposition that the PUC cannot require NSP to provide installed capacity precisely equal to the minimum reserve margin, and the NSP need not add capacity in the precise units needed.[5] However, those cases are factually distinguishable and thus inapplicable to the instant case because they addressed the issue of total rate base disallowance of excess capacity. As the PUC Brief correctly notes, the PUC Order here limits the excess capacity disallowance to NSP's common equity. Our neighboring state regulatory commissions have also confronted this particular question and have disallowed common equity returns on excess capacity. See, e.g., In re Montana-Dakota Utilities Co., 44 PUR 4th 249 (ND PSC 1981); In re Otter Tail Power Co., 44 PUR 4th 219 (ND PSC 1981) (both cases utilizing identical mode of computing excess capacity as here, including 15% MAPP reserve margin); cf., In re Iowa Public Power & Light Co., Dockets RPU-78-27,-30,-36 (Iowa PSC 1982) (both cases utilizing 25% reserve margin in computing excess capacity). Similarly, the reasonableness of the PUC Order is underscored by its very terms which require ratepayers to bear all out-of-pocket costs and to thus pay $1,245,000 of excess capacity costs.

Because of the above-stated reasons, the PUC Order is affirmed on this matter.

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[5] In re Southern California Edison Co., 23 PUR 4th 44, 52 (FPC 1977); City of Cleveland v. PUC, 406 NE 2d 1370, 1374 (Ohio 1980); In re Cleveland Electric Illuminating Co., 38 PUR 4th 498, 508 (Ohio PUC 1980); In re Tampa Electric Co, 92 PUR 3d 398 (Fla. PSC 1971).

VI.

CAPITAL STRUCTURE AND RETURN ON COMMON EQUITY

The PUC modifed NSP's proposed capital structure to reflect adjustments in the aliquot portions of debt, preferred stock, and common equity. The three major capital structure adjustments proposed by PUC Staff and adopted by the PUC include (1) a reduction in the common equity portion; (2) an increase in the preferred stock component; and (3) a reduction in the common equity cost rate. PUC Order, p. 47. Although NSP does not challenge the PUC's authority to adopt a hypothetical capital structure for ratemaking purposes, it argues that the capital structure adjustments are not supported by the evidence in the record and are thus "clearly erroneous".

NSP objects to the reduction in the preferred stock component via PUC Staff witness Wilson's hypothetical add-back of preferred stock redeemed in excess of the maximum sinking fund retirements. By adding back the retired preferred stock, the fractional portion of preferred stock in NSP's capital structure is increased. In turn, this reduces NSP's rate of return because preferred stock comprises NSP's lowest cost capital component.

Mr. Wilson also reduced NSP's common equity ratio for "1981 retirements" of common equity capital. As shown in the record, Mr. Wilson premised this adjustment on the fact that NSP had retired some of its common equity in 1980 and that NSP would continue to decrease its common equity ratio. He also excluded NSP's non-utility investments and Tyrone-related expenses from the common equity ratio.

Based on the evidence in the record, the PUC did not commit clear error in adding-back preferred stock previously redeemed by NSP in 1980 and 1981. Dr. Wilson's testimony establishes that NSP's preferred stock redemptions greatly exceeded the maximum sinking fund requirements. This, when considered with the fact that NSP's preferred stock retirements reduce the the portion of its lowest cost capital to the detriment of its ratepayers, does not persuade this Court to believe that the PUC has committed reversible error. SDCL 1-26-36.

Moreover, the PUC did not err in reducing NSP's common equity ratio to reflect 1981 retirements of common stock. Its 1980 Annual Report stated that NSP had repurchased and thus retired some of its existing shares to decrease its common equity ratio and to bring this more in line with the industry-wide common equity ratio of 36%. In view of the 1980 common stock retirements initiated by NSP and the 1980 Annual Report declaration (wherein NSP announced its intention to reduce its common equity rateo), the PUC adjustment to reflect 1981 common stock retirements was justified.

This Court is further satisfied that the PUC correctly deducted NSP's non-utility investments from its common equity balance. NSP claims that the record does not support the PUC finding that the non-utility investments must be wholly imputed to NSP's common equity. While this Court agrees that the source of these funds is less than clear from the record, it must note that Mr. Wilson has characterized NSP's decision to make these investments as " . . . a determination of an <u>equity nature</u> that was made by the management of the Company." That is, these non-utility investments are for the benefit of NSP's stockholders and should not burden NSP's ratepayers, who receive no benefit therefrom. NSP, and not the PUC, bears the burden of proving the capital component source of these funds.[6]

Finally, the PUC did not commit reversible error in deducting the Tyrone-related expenses from NSP's common equity. NSP will be compensated for these costs in accordance with this Court's previous disposition of the Tyrone issue. To allow recovery of these costs via the common equity return would enable NSP to receive a "double recovery". As Mr. Wilson testified, the total $75 million Tyrone loss must be excluded from common equity because the Tyrone amortizations to date do not affect NSP's capitalization.

The PUC Order is affirmed in these respects.

RETURN ON COMMON EQUITY

The PUC Order, pp. 48-49, adopted PUC Staff witness Wilson's discounted cash flow (dcf) model for determing NSP's cost of common equity. Dr. Wilson recommended a cost of common equity range of 14.0 to 14.5%; the PUC Order authorized 14%. Both NSP

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6 SDCL 49-34A-11: "The burden of proof to show that any rate filed is just and reasonable shall be upon the public utility filing same." Therefore, the PUC may impute NSP's non-utility investments to common equity in the absence of sufficient proof by NSP to the contrary.

and PUC Staff agree that the dcf model computes the "total investor return" by adding the "current dividend yield" and the "expected dividend growth rate."

NSP contends that the PUC adoption of Dr. Wilson's model is clearly erroneous, arbitrary and capricious, and an abuse of discretion. It submits that Dr. Wilson's current dividend yield is understated because the period selected (May through October, 1980) represents a deviation from the financial market conditions that have existed in the two years prior to the evidentiary hearings. NSP suggests that if Dr. Wilson had computed the current dividend yield on the basis of the 12-month period of 1980, the dcf model would have provided a better estimate of the dividend yield. As to the expected dividend growth rate, NSP argues that acclaimed investment advisory services show dividend, earnings, and book value growths that exceed Dr. Wilson's recommendation. According to NSP, the evidence warrants a finding that the proper dcf estimate for the cost of common equity is 16.8%.

Based on the entire evidence in the record, it is this Court's opinion that the PUC did not err in arriving at a 14.0% cost of common equity for NSP. Likewise, the PUC did not err in rejecting NSP witness Kolkmann's Methdd I-IV studies.

Dr. Wilson computed the 14.0% cost of common equity by analyzing statistical data from the 93 electric and electric/gas utilities that, with the exception of one utility, comprise the entire industry. While Dr. Wilson may well have obtained a lower dividend yield by using the period selected, the record reveals that Dr. Wilson's dividend yield more accurately reflects historical yields from normal market conditions. Similarly, NSP's mere allegations that other investment advisory services recommend higher expected dividend growth rates do not convince this Court that the PUC committed reversible error in adopting Dr. Wilson's growth rates.

Accordingly, the PUC's disposition of this issue is affirmed. Counsel for NSP is directed to prepare an order consistent with this opinion.

Dated this 28th day of October, 1982.

BY THE COURT:

Robert A. Miller
Presiding Circuit Judge

ATTEST:

Eunice Cory
Clerk of Courts

(SEAL)

STATE OF SOUTH DAKOTA
CIRCUIT COURT, HUGHES CO.
FILED
OCT 28 1982
Eunice Cory CLERK
By Mary T. Erickson Deputy

South Dakota Codified Laws
Title 49. Public Utilities and Carriers (Refs & Annos)
Chapter 49-34a. Gas and Electric Utilities Regulation (Refs & Annos)

SDCL § 49-34A-4

49-34A-4. Regulatory powers of commission--Rules

Currentness

The commission shall regulate to the extent provided in this chapter every public utility as defined in this chapter. The commission may promulgate rules pursuant to chapter 1-26 in furtherance of the purposes of this chapter concerning:

(1) Procedures and requirements for applications for rate and tariff changes;

(2) Requirements for gas and electric utilities to maintain and make available to the public and the commission records and information;

(3) Requirements and procedures regarding customer billings and meter readings;

(4) Requirements regarding availability of meter tests;

(5) Requirements regarding billing adjustments for meter errors;

(6) Procedures and requirements for handling customer disputes and complaints;

(7) Procedures and requirements regarding temporary service, changes in location of service and service interruptions;

(8) Standards and procedures to ensure nondiscriminatory credit policies;

(9) Procedures, requirements and record-keeping guidelines regarding deposit policies;

(10) Procedures, requirements and record-keeping guidelines regarding customer refunds;

(11) Policies for refusal of gas or electric service;

(12) Policies for disconnection and transfer of gas and electric service;

(13) Customer payment plans for delinquent bills;

(14) Requirements regarding advertising; and

(15) Procedures and requirements for applications for tariff mechanisms seeking the automatic annual adjustment of charges for the jurisdictional costs of new or modified transmission facilities under the provisions of § 49-34A-25.1.

Credits

Source: SL 1975, ch 283, § 6; SL 1986, ch 22, § 23; SL 1990, ch 371, § 3; SL 2006, ch 239, § 6.

Notes of Decisions (4)

S D C L § 49-34A-4, SD ST § 49-34A-4
Current through the 2015 Regular Session, Exec.Order 15-1, and Supreme Court Rule 15-16

End of Document

South Dakota Codified Laws
Title 49. Public Utilities and Carriers (Refs & Annos)
Chapter 49-34a. Gas and Electric Utilities Regulation (Refs & Annos)

SDCL § 49-34A-6

49-34A-6. Rates to be reasonable and just--Regulation by commission

Currentness

Every rate made, demanded or received by any public utility shall be just and reasonable. Every unjust or unreasonable rate shall be prohibited. The Public Utilities Commission is hereby authorized, empowered and directed to regulate all rates, fees and charges for the public utility service of all public utilities, including penalty for late payments, to the end that the public shall pay only just and reasonable rates for service rendered.

Credits
Source: SL 1975, ch 283, § 16.

S D C L § 49-34A-6, SD ST § 49-34A-6
Current through the 2015 Regular Session, Exec.Order 15-1, and Supreme Court Rule 15-16

End of Document

South Dakota Codified Laws
Title 49. Public Utilities and Carriers (Refs & Annos)
Chapter 49-34a. Gas and Electric Utilities Regulation (Refs & Annos)

SDCL § 49-34A-8

49-34A-8. Criteria for determination of rates by commission

Currentness

The commission, in the exercise of its power under this chapter to determine just and reasonable rates for public utilities, shall give due consideration to the public need for adequate, efficient, economical, and reasonable service and to the need of the public utility for revenues sufficient to enable it to meet its total current cost of furnishing such service, including taxes and interest, and including adequate provision for depreciation of its utility property used and necessary in rendering service to the public, and to earn a fair and reasonable return upon the value of its property.

Credits
Source: SL 1975, ch 283, § 16; SL 1976, ch 296, § 9; SL 2007, ch 269, § 1.

Notes of Decisions (33)

S D C L § 49-34A-8, SD ST § 49-34A-8
Current through the 2015 Regular Session, Exec.Order 15-1, and Supreme Court Rule 15-16

End of Document

South Dakota Codified Laws
Title 49. Public Utilities and Carriers (Refs & Annos)
Chapter 49-34a. Gas and Electric Utilities Regulation (Refs & Annos)

SDCL § 49-34A-8.4

49-34A-8.4. Burden on public utility to establish criteria for determination of rates

Currentness

The burden is on the public utility to establish that the underlying costs of any rates, charges, or automatic adjustment charges filed under this chapter are prudent, efficient, and economical and are reasonable and necessary to provide service to the public utility's customers in this state.

Credits
Source: SL 2007, ch 269, § 2.

S D C L § 49-34A-8.4, SD ST § 49-34A-8.4
Current through the 2015 Regular Session, Exec.Order 15-1, and Supreme Court Rule 15-16

End of Document

South Dakota Codified Laws
Title 49. Public Utilities and Carriers (Refs & Annos)
Chapter 49-34a. Gas and Electric Utilities Regulation (Refs & Annos)

SDCL § 49-34A-11

49-34A-11. Burden of proving reasonableness of rates

Currentness

The burden of proof to show that any rate filed is just and reasonable shall be upon the public utility filing same.

Credits
Source: SL 1975, ch 283, § 10.

Notes of Decisions (1)

S D C L § 49-34A-11, SD ST § 49-34A-11
Current through the 2015 Regular Session, Exec.Order 15-1, and Supreme Court Rule 15-16

End of Document

South Dakota Codified Laws
Title 49. Public Utilities and Carriers (Refs & Annos)
Chapter 49-34a. Gas and Electric Utilities Regulation (Refs & Annos)

SDCL § 49-34A-19

49-34A-19. Costs and revenue considered in determining rates--Acquisition cost of property as alternative--Projected income and expenses

Currentness

In determining the rate base upon which the utility is to be allowed to earn a fair rate of return, the Public Utilities Commission shall use the depreciated original cost of the property. However, the commission may alternatively use the full acquisition cost of any property acquired by the utility after the property was first devoted to public use. Full acquisition cost of such property shall be used if:

(1) The utility makes application prior to acquisition;

(2) The commission holds a hearing;

(3) The commission finds that the cost of acquisition is prudently incurred; and

(4) The commission finds that the acquisition will provide benefits to the utility's customers.

In determining the revenue requirement the commission shall consider revenue, expenses, cost of capital and any other factors or evidence material and relevant thereto. The commission may take into consideration the reasonable income and expenses that will be forthcoming in a period of twenty-four months in advance of the test year.

Credits
Source: SL 1975, ch 283, § 12; SL 1976, ch 296, § 18; SL 1982, ch 330; SL 1990, ch 375.

S D C L § 49-34A-19, SD ST § 49-34A-19
Current through the 2015 Regular Session, Exec.Order 15-1, and Supreme Court Rule 15-16

End of Document

Administrative Rules of South Dakota Currentness
Public Utilities Commission (Article 20:10)
Article 20:10 Public Utilities
Chapter 20:10:13 Public Utilities Rate Filing Rules

ARSD 20:10:13:01

20:10:13:01. Definitions.

Terms used in this chapter mean:

(1) "Commission," the Public Utilities Commission of the State of South Dakota;

(2) "Functional classification," classification among production, transmission distribution, and general functions;

(3) "Rate schedule," the rates or charges for a particular classification of service, including all special terms and conditions under which such service shall be furnished;

(4) "Rules" or "regulations," in tariff schedules, the rules, practices, classification exceptions, and conditions observed by a public utility that conditionally govern the application of rate schedules. The term does not refer to "rules" as defined in SDCL 1-26-1(7);

(5) "Tariff schedule," the entire body of rates, charges, classifications, and rules collectively, enforced by a public utility, although the book or volume incorporating the same may consist of one or more sheets applicable to distinct service classifications.

(6) "FERC," the federal energy regulatory commission;

(7) "KWH," kilowatt hours;

(8) "BTU," British thermal unit;

(9) "MCF," thousand cubic feet;

(10) "ADR," asset depreciation range;

(11) "Test period," the test period outlined in § 20:10:13:44, except that if additional material is filed by the utility, a test period is any 12 consecutive months beginning no later than the proposed effective date of the rate application.

Credits

Source: 2 SDR 12, effective August 19, 1975; 2 SDR 90, effective July 7, 1976; 12 SDR 86, effective November 24, 1985; 12 SDR 151, 12 SDR 155, effective July 1, 1986.

General Authority: SDCL 49-34A-4.

Law Implemented: SDCL 49-34A-10.

Current through rules published in the South Dakota register dated August 24, 2015.

ARSD 20:10:13:01, SD ADC 20:10:13:01

End of Document

Administrative Rules of South Dakota Currentness
Public Utilities Commission (Article 20:10)
Article 20:10 Public Utilities
Chapter 20:10:13 Public Utilities Rate Filing Rules

ARSD 20:10:13:44

20:10:13:44. Analysis of system costs for a 12-month historical test year.

The statement of the cost of service shall contain an analysis of system costs as reflected on the filing utility's books for a test period consisting of 12 months of actual experience ending no earlier than 6 months before the date of filing of the data required by §§ 20:10:13:40 and 20:10:13:43 unless good cause for extension is shown. The analysis shall include the return, taxes, depreciation, and operating expenses and an allocation of such costs to the services rendered. The information submitted with the statement shall show the data itemized in this section for the test period, as reflected on the books of the filing public utility. Proposed adjustments to book costs shall be shown separately and shall be fully supported, including schedules showing their derivation, where appropriate. However, no adjustments shall be permitted unless they are based on changes in facilities, operations, or costs which are known with reasonable certainty and measurable with reasonable accuracy at the time of the filing and which will become effective within 24 months of the last month of the test period used for this section and unless expected changes in revenue are also shown for the same period.

Credits
Source: 2 SDR 90, effective July 7, 1976; 9 SDR 55, effective November 7, 1982; 12 SDR 151, 12 SDR 155, effective July 1, 1986.

General Authority: SDCL 49-34A-4.

Law Implemented: SDCL 49-34A-10, 49-34A-12, 49-34A-41.

Current through rules published in the South Dakota register dated August 24, 2015.

ARSD 20:10:13:44, SD ADC 20:10:13:44

End of Document