

NorthWestern Energy
Revenue Requirement - Regulated

Juhl Wind (Brule, Davison, Aurora)
Network Upgrades

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Rate Base:																			
Project Capitalize? (yes = capital, no = expense)	yes	\$	7,291,252	\$	7,291,252	\$	7,291,252	\$	7,291,252	\$	7,291,252	\$	7,291,252	\$	7,291,252	\$	7,291,252	\$	7,291,252
Less:																			
Accumulated Depreciation (Book Life)			150,720		301,441		452,161		602,882		753,602		904,323		1,055,043		1,205,764		1,356,484
Deferred Income Taxes			76,515		269,252		437,241		583,140		709,073		816,996		916,429		1,015,666		1,114,963
Total Year End Rate Base		\$	7,064,017	\$	6,720,559	\$	6,401,850	\$	6,105,230	\$	5,828,577	\$	5,569,933	\$	5,319,780	\$	5,069,823	\$	4,819,805
Average Annual Rate Base		\$	7,177,634	\$	6,892,288	\$	6,561,204	\$	6,253,540	\$	5,966,903	\$	5,699,255	\$	5,444,856	\$	5,194,801	\$	4,944,814
Return (Avg. Rate Base*Cost of Capital)	7.24%	\$	519,661	\$	499,002	\$	475,031	\$	452,756	\$	432,004	\$	412,626	\$	394,208	\$	376,104	\$	358,005
Property Taxes	0.78%		57,083		57,083		57,083		57,083		57,083		57,083		57,083		57,083		57,083
	0.00%		-		-		-		-		-		-		-		-		-
Depreciation			150,720		150,720		150,720		150,720		150,720		150,720		150,720		150,720		150,720
Deferred Income Taxes @ 35%			76,515		192,738		167,988		145,900		125,933		107,923		99,433		99,237		99,040
Income Taxes			105,908		(17,567)		(1,233)		13,036		25,718		36,926		38,950		32,791		26,377
Total Revenue Requirement		\$	909,887	\$	881,975	\$	849,590	\$	819,496	\$	791,459	\$	765,278	\$	740,394	\$	715,935	\$	691,483
Income Taxes:																			
Revenues		\$	909,887	\$	881,975	\$	849,590	\$	819,496	\$	791,459	\$	765,278	\$	740,394	\$	715,935	\$	691,483
Property Taxes			57,083		57,083		57,083		57,083		57,083		57,083		57,083		57,083		57,083
			-		-		-		-		-		-		-		-		-
MACRS																			
	yes																		
Tax Depreciation	15		367,536		698,318		628,486		566,005		509,405		457,950		433,692		433,692		434,427
Tax Depreciation	7		1,798		3,081		2,201		1,571		1,124		1,122		1,124		561		-
			-		-		-		-		-		-		-		-		-
Interest Expense (Based on Avg. Rate Base)	2.52%		180,876		173,686		165,342		157,589		150,366		143,621		137,210		130,909		124,609
Federal Taxable Income		\$	302,593	\$	(50,193)	\$	(3,522)	\$	37,247	\$	73,481	\$	105,502	\$	111,285	\$	93,690	\$	75,363
Federal Income Tax @ 35%	35.00%	\$	105,908	\$	(17,567)	\$	(1,233)	\$	13,036	\$	25,718	\$	36,926	\$	38,950	\$	32,791	\$	26,377
Federal Taxable Income		\$	302,593	\$	(50,193)	\$	(3,522)	\$	37,247	\$	73,481	\$	105,502	\$	111,285	\$	93,690	\$	75,363

Juhl Wind Interconnection Costs (60MW)
20-year PMT of the NPV of Rev Req Cost
Levelized Cost per MW

\$787,060.57
\$ 2.84

Brule County Facilities Study - Draft

	TPIF	NETWORK
Substation	\$ 433,230	\$ 1,940,946
Transmission	\$ -	\$ 137,877
Relaying	\$ 47,451	\$ 377,833
Metering	\$ 14,286	\$ -
Communications ¹	\$ 37,817	\$ 6,618
EMS	\$ 994	\$ 1,988
Lands & Permitting	\$ -	\$ 152,457
Subtotal	\$ 533,778	\$ 2,617,719
Distribution Subtotal	\$ -	\$ -
TPIF Upgrades	\$ 533,778	
Network Upgrades	\$ 2,617,719	
Distribution	\$ -	
TOTAL	\$ 3,151,497	

Davison County Facilities Study - Draft

	TPIF	NETWORK
Substation	\$ 433,230	\$ 1,947,671
Transmission	\$ -	\$ 121,526
Relaying	\$ 47,451	\$ 377,833
Metering	\$ 40,780	\$ -
Communications ¹	\$ 37,817	\$ -
EMS	\$ 994	\$ 1,988
Lands & Permitting	\$ -	\$ 157,683
Subtotal	\$ 560,272	\$ 2,606,701
Distribution Subtotal	\$ 2,257	\$ 10,212
TPIF Upgrades	\$ 560,272	
Network Upgrades	\$ 2,606,701	
Distribution	\$ 12,469	
TOTAL	\$ 3,179,442	

Aurora County Facilities Study - Draft

	TPIF	NETWORK
Substation	\$ 433,230	\$ 1,638,987
Transmission	\$ -	\$ 175,274
Relaying	\$ 47,451	\$ 377,833
Metering	\$ 14,158	\$ -
Communications ¹	\$ 31,435	\$ 18,723
EMS	\$ 1,408	\$ 2,751
Lands & Permitting	\$ -	\$ 155,224
Subtotal	\$ 527,682	\$ 2,368,792
Distribution Subtotal	\$ -	\$ -
TPIF Upgrades	\$ 527,682	
Network Upgrades	\$ 2,368,792	
Distribution	\$ -	
TOTAL	\$ 2,896,474	

19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057
\$ 7,291,252	\$ 7,291,252	\$ 7,291,252	\$ 7,291,252	\$ 7,291,252	\$ 7,291,252	\$ 7,291,252	\$ 7,291,252	\$ 7,291,252	\$ 7,291,252	\$ 7,291,252	\$ 7,291,252	\$ 7,291,252	\$ 7,291,252	\$ 7,291,252	\$ 7,291,252	\$ 7,291,252	\$ 7,291,252	\$ 7,291,252	\$ 7,291,252	\$ 7,291,252	\$ 7,291,252
2,863,689	3,014,409	3,165,129	3,315,850	3,466,570	3,617,291	3,768,011	3,918,732	4,069,452	4,220,173	4,370,893	4,521,614	4,672,334	4,823,054	4,973,775	5,124,495	5,275,216	5,425,936	5,576,657	5,727,377	5,878,098	6,028,818
1,574,863	1,522,111	1,469,359	1,416,607	1,363,855	1,311,102	1,258,350	1,205,598	1,152,846	1,100,094	1,047,342	994,590	941,837	889,085	836,333	783,581	730,829	678,077	625,324	572,572	519,820	467,068
\$ 2,852,700	\$ 2,754,732	\$ 2,656,764	\$ 2,558,795	\$ 2,460,827	\$ 2,362,859	\$ 2,264,890	\$ 2,166,922	\$ 2,068,954	\$ 1,970,986	\$ 1,873,017	\$ 1,775,049	\$ 1,677,081	\$ 1,579,112	\$ 1,481,144	\$ 1,383,176	\$ 1,285,207	\$ 1,187,239	\$ 1,089,271	\$ 991,303	\$ 893,334	\$ 795,366
\$ 2,901,684	\$ 2,803,716	\$ 2,705,748	\$ 2,607,779	\$ 2,509,811	\$ 2,411,843	\$ 2,313,875	\$ 2,215,906	\$ 2,117,938	\$ 2,019,970	\$ 1,922,001	\$ 1,824,033	\$ 1,726,065	\$ 1,628,097	\$ 1,530,128	\$ 1,432,160	\$ 1,334,192	\$ 1,236,223	\$ 1,138,255	\$ 1,040,287	\$ 942,318	\$ 844,350
\$ 210,082	\$ 202,989	\$ 195,896	\$ 188,803	\$ 181,710	\$ 174,617	\$ 167,525	\$ 160,432	\$ 153,339	\$ 146,246	\$ 139,153	\$ 132,060	\$ 124,967	\$ 117,874	\$ 110,781	\$ 103,688	\$ 96,595	\$ 89,503	\$ 82,410	\$ 75,317	\$ 68,224	\$ 61,131
57,083	57,083	57,083	57,083	57,083	57,083	57,083	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
150,720	150,720	150,720	150,720	150,720	150,720	150,720	150,720	150,720	150,720	150,720	150,720	150,720	150,720	150,720	150,720	150,720	150,720	150,720	150,720	150,720	150,720
(52,752)	(52,752)	(52,752)	(52,752)	(52,752)	(52,752)	(52,752)	(52,752)	(52,752)	(52,752)	(52,752)	(52,752)	(52,752)	(52,752)	(52,752)	(52,752)	(52,752)	(52,752)	(52,752)	(52,752)	(52,752)	(52,752)
126,500	124,010	121,520	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$ 491,633	\$ 482,050	\$ 472,467	\$ 343,855	\$ 336,762	\$ 329,669	\$ 322,576	\$ 258,400	\$ 251,307	\$ 244,214	\$ 237,121	\$ 230,028	\$ 222,935	\$ 215,842	\$ 208,750	\$ 201,657	\$ 194,564	\$ 187,471	\$ 180,378	\$ 173,285	\$ 166,192	\$ 159,099
\$ 491,633	\$ 482,050	\$ 472,467	\$ 343,855	\$ 336,762	\$ 329,669	\$ 322,576	\$ 258,400	\$ 251,307	\$ 244,214	\$ 237,121	\$ 230,028	\$ 222,935	\$ 215,842	\$ 208,750	\$ 201,657	\$ 194,564	\$ 187,471	\$ 180,378	\$ 173,285	\$ 166,192	\$ 159,099
57,083	57,083	57,083	57,083	57,083	57,083	57,083	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
73,122	70,654	68,185	65,716	63,247	60,778	58,310	55,841	53,372	50,903	48,434	45,966	43,497	41,028	38,559	36,090	33,622	31,153	28,684	26,215	23,746	21,278
\$ 361,427	\$ 354,313	\$ 347,199	\$ 221,055	\$ 216,431	\$ 211,807	\$ 207,183	\$ 202,559	\$ 197,935	\$ 193,311	\$ 188,687	\$ 184,063	\$ 179,439	\$ 174,814	\$ 170,190	\$ 165,566	\$ 160,942	\$ 156,318	\$ 151,694	\$ 147,070	\$ 142,446	\$ 137,822
\$ 126,500	\$ 124,010	\$ 121,520	\$ 77,369	\$ 75,751	\$ 74,133	\$ 72,514	\$ 70,896	\$ 69,277	\$ 67,659	\$ 66,040	\$ 64,422	\$ 62,803	\$ 61,185	\$ 59,567	\$ 57,948	\$ 56,330	\$ 54,711	\$ 53,093	\$ 51,474	\$ 49,856	\$ 48,238
\$ 361,427	\$ 354,313	\$ 347,199	\$ 221,055	\$ 216,431	\$ 211,807	\$ 207,183	\$ 202,559	\$ 197,935	\$ 193,311	\$ 188,687	\$ 184,063	\$ 179,439	\$ 174,814	\$ 170,190	\$ 165,566	\$ 160,942	\$ 156,318	\$ 151,694	\$ 147,070	\$ 142,446	\$ 137,822