

- ☐ Non Public Document – Contains Confidential Data
☐ Public Document – Confidential Data Excised
☒ Public Document

Xcel Energy

Docket No.: EL18-023

Response To: South Dakota Public
Utilities Commission

Data Request No. 1-6

Requestor: South Dakota Public Utilities Commission Staff

Date Received: September 27, 2018

Question:

Provide the avoided energy, avoided generation, and avoided transmission and distribution cost schedules used in the 2017 and 2019 benefit/cost models.

Response:

Please see the tables below for the avoided energy, avoided generation, and avoided transmission and distribution cost schedules.

We further note the following sources of information:

- **Capacity Cost (\$/kW-Year):** CT Cost Modeling in 2015 IRP update - Includes capital (\$56.29) and O&M (\$2.75), adjusted for reserve margin (1.75%) and then a fixed gas charge (\$0.00) added.
- **T&D Cost (\$/kW-Year):** 2013 value carried over from previous triennial that was consistent with CO and NM that loosely ties back to a 2004 Nexant study - 2010 value of 31.17 escalated 3 years at prior escalation of 1.92 percent.
- **Marginal Energy System Load Weighted Average (\$/kWh):** Based off current assumptions from Resource Planning - Sept 2015.

Table 1: 2017 and 2019 Benefit/Cost Model Details

2017-2019 MN/SD Avoided Cost Streams – Nominal Dollars

Year	Capacity Cost (\$/kW-Year)	T&D Cost (\$/kW-Year)	Marginal Energy System Load Weighted Average (\$/kWh)
2017	\$60.07	\$36.23	\$0.02618
2018	\$61.41	\$37.08	\$0.02594
2019	\$62.79	\$37.96	\$0.02803
2020	\$64.19	\$38.85	\$0.03198
2021	\$65.63	\$39.77	\$0.03377
2022	\$67.09	\$40.71	\$0.03508
2023	\$68.60	\$41.67	\$0.03662
2024	\$70.13	\$42.65	\$0.04040
2025	\$71.70	\$43.66	\$0.04217
2026	\$73.30	\$44.69	\$0.04426
2027	\$74.94	\$45.74	\$0.04645
2028	\$76.62	\$46.82	\$0.04830
2029	\$78.33	\$47.93	\$0.04989
2030	\$80.09	\$49.06	\$0.05054
2031	\$81.88	\$50.22	\$0.05029
2032	\$83.71	\$51.40	\$0.05194
2033	\$85.58	\$52.62	\$0.05458
2034	\$87.50	\$53.86	\$0.05347
2035	\$89.46	\$55.13	\$0.05376
2036	\$91.46	\$56.43	\$0.05823
2037	\$93.50	\$57.76	\$0.05895
2038	\$95.59	\$59.12	\$0.05831

Preparer: Erin Buchanan
Title: Technical Consultant
Department: Customer Solutions
Telephone: (612) 342-9037
Date: October 12, 2018