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Xcel Energy

Docket No.: E002/RP-15-21

Response To: MN Public Utilities Information Request No. 31
Commission

Requestor: Andrew Twite

Date Received: August 19, 2016

Question:

Please provide the energy mix by fuel type under Xcel's current preferred plan for each year from 2016-2032.

Response:

We provide the requested energy mix data in a Table below.

It is important to note that 2031 and 2032 are beyond the planning period for this Resource Plan. Notably, the operating license for our Monticello nuclear facility expires in 2030. Because it falls outside of the planning period, we have not fully developed scenarios for potential license extension or replacement of Monticello generation beyond 2030. Rather, the expansion plans for 2030 and beyond are generic in nature, and Strategist has gas-fired capacity coming on-line in 2031 to replace Monticello; we take no position at this time as to whether replacement with natural gas is or is not the best alternative.

Energy Mix by Fuel Type – NSP System

	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>
Coal	34%	34%	33%	31%	31%	30%	28%	29%	23%
Biomass	4%	4%	3%	3%	3%	3%	3%	3%	2%
Gas	8%	7%	8%	6%	6%	6%	6%	4%	10%
Hydro	5%	5%	5%	5%	5%	5%	5%	6%	6%
Wind	18%	18%	18%	23%	23%	23%	25%	24%	24%
Solar	0%	2%	2%	3%	3%	4%	4%	5%	5%
Nuclear	<u>31%</u>	<u>30%</u>	<u>31%</u>	<u>29%</u>	<u>29%</u>	<u>29%</u>	<u>29%</u>	<u>29%</u>	<u>30%</u>
	100%	100%	100%	100%	100%	100%	100%	100%	100%

	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>
Coal	24%	22%	15%	15%	14%	15%	16%	15%
Biomass	2%	2%	1%	1%	0%	0%	0%	0%
Gas	11%	12%	21%	19%	23%	22%	32%	33%
Hydro	3%	2%	2%	2%	2%	2%	2%	2%
Wind	26%	27%	27%	26%	25%	25%	24%	24%
Solar	6%	6%	6%	8%	8%	8%	8%	8%
Nuclear	<u>28%</u>	<u>29%</u>	<u>28%</u>	<u>29%</u>	<u>28%</u>	<u>28%</u>	<u>18%</u>	<u>18%</u>
	100%	100%	100%	100%	100%	100%	100%	100%

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