

APPENDIX N4 – RENEWABLE ENERGY COMPLIANCE POSITIONS

Our Upper Midwest Integrated System provides service to five states—and each state has varying levels of renewable energy requirements. Each state’s target is expressed as a percentage of electric retail sales from qualifying resources by a certain date.

Specific targets are as follows:

- North Dakota and South Dakota each has a voluntary Renewable and Recycled Energy Objective to have 10 percent renewable or recycled energy by 2015.¹
- Michigan has a Renewable Energy Standard that requires Xcel Energy to have 10 percent renewable energy by 2015.
- Wisconsin has a Renewable Portfolio Standard that requires Xcel Energy to have approximately 12.9 percent renewable energy by 2015.
- Minnesota has a Renewable Energy Standard that requires Xcel Energy to have 30 percent by 2020, including interim targets of:
 - Of the 30 percent, Minnesota’s RES requires Xcel Energy to have 25 percent of the Minnesota retail sales to come from wind energy by 2020.²
 - In addition, Minnesota’s SES requires Xcel Energy an additional 1.5 percent of the electricity it provides to Minnesota retail customers to come from solar energy by 2020.

A. Renewable Energy Credit Accounting and Management

We plan and operate our NSP system generation and transmission facilities as an integrated system in the most cost effective way possible to the benefit of all customers across the five state jurisdictions and that complies with the regulations of each of these states. In order to meet each of the Renewable Energy Standards in those states, we maintain a set of banked Renewable Energy Credits (REC) for future compliance. We maintain our REC inventory in the regional Midwest Renewable Energy Tracking System (M-RETS), which was established for compliance tracking

¹ As defined in North Dakota Century Code, 49-02-25, recycled energy means “systems producing electricity from currently unused waste heat resulting from combustion or other processes into electricity and which do not use an additional combustion process. The term does not include any system whose primary purpose is the generation of electricity unless the generation system consumes wellhead gas that would otherwise be flared, vented, or wasted.” South Dakota Codified Law 49-34A-94 contains a similar definition.

² This requirement is included in the total 30 percent RES, and we are authorized to count a limited amount of solar energy towards this 25 percent. Large hydro does not count as a renewable energy source for purpose of the Minnesota RES. Minn. Stat. § 216B.1691

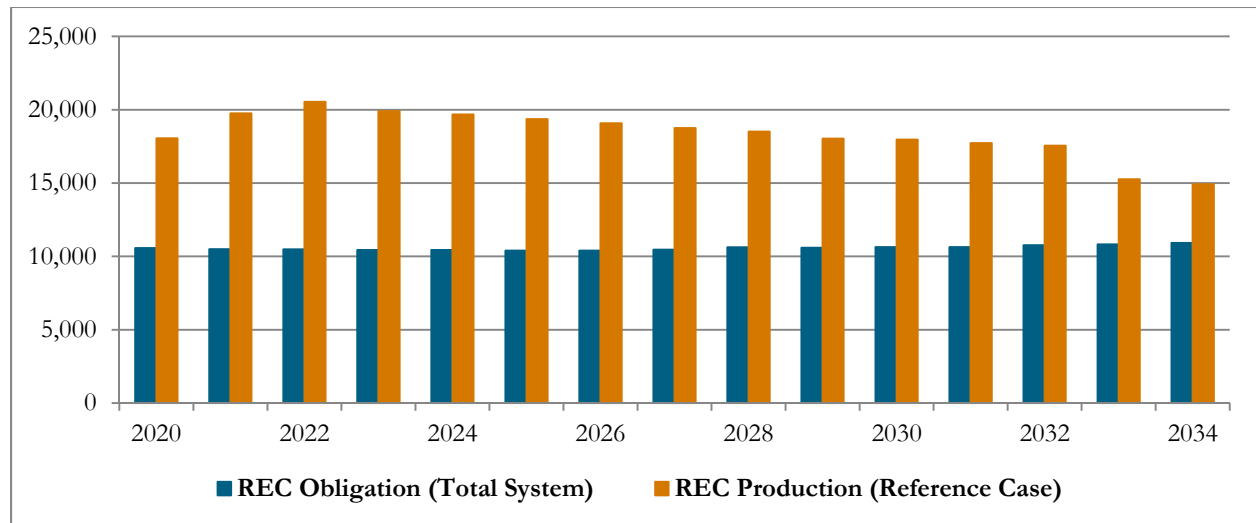
relative to state renewable energy standards. In M-RETS, one MWh of generation from a renewable source equates to one REC.

The Company currently expects to generate a sufficient amount of RECs throughout the planning period to satisfy our current renewable obligations without adding any renewable capacity beyond the projects we currently have under contract.

B. Renewable Energy Standard and Objective Compliance

Figure 1 below demonstrates our compliance through the Resource Plan planning period with all renewable energy standards and objectives across the NSP system with existing and currently approved resources. This evaluation assumes no large scale solar or wind additions, however includes modest distributed solar additions throughout the planning period. Appendix N5, filed June 1, 2018, is the company’s most recent Minnesota biennial RES Compliance filing.

Figure 1: Annual RES & REO REC NSP System Obligation & Production



C. Solar Energy Standard Compliance

Figure 2 below demonstrates our compliance with the Minnesota 1.5 percent Solar Energy Standard (SES) through the Resource Plan planning period with existing and currently approved programs. This evaluation assumes no large scale solar additions, however includes modest distributed solar additions throughout the planning period. Appendix N7, filed June 1, 2019, is the company’s most recent Minnesota SES Compliance filing.

Figure 2: State of Minnesota Annual SES REC Obligation & Production

