

APPENDIX O2 – SCOPE & OUTLINE: CENTER FOR ENERGY & ENVIRONMENT STUDY

The Company is participating in a study overseen by the Center for Energy and Environment (CEE) that will examine the impacts of the large baseload generation plants in Minnesota on the host communities. The other participants in the study include the Coalition of Utility Cities (CUCs), Minnesota Power, and the Prairie Island Indian Community. The CUCs are a coalition of communities that host large baseload generation plants in Minnesota and include: Becker, Monticello, Red Wing, Oak Park Heights and Cohasset. With the support of the McKnight Foundation, the Just Transition Fund, and the Initiative Foundations of Minnesota, the CUCs contracted with CEE to oversee a study on the direct and indirect financial and social impacts of hosting a baseload power plant on the host communities.

A portion of the host community impact study will be similar to the study conducted for Sherco 1 and 2 in our last Resource Plan. The study will evaluate alternative retirement and replacement scenarios for our remaining baseload facilities. The study will also evaluate the impacts of Minnesota Power's Boswell plant on the Cohasset area. In addition, the study will provide a qualitative component that will include interviews and surveys of key stakeholders in the local area of each plant. The independent oversight of CEE and the direct participation of impacted communities are important components that we believe will lend additional credibility to the study. On February 12, 2019, we hosted a workshop as part of the Resource Plan process on the scope of this study as part of our outreach efforts in advance of our July 1 filing. At that workshop, the CUC presented on issues facing host communities and included individual presentations by representatives from Becker, Oak Park Heights, Red Wing, Monticello, and the Prairie Island Indian Community. The study scope and process was well received by attendees of the workshop.

The study will consist of a quantitative and qualitative component. Efforts on both components are underway and we will supplement this Resource Plan filing when each component is complete. We expect to provide a supplement on the quantitative component within the next 60 days. A report on the qualitative component is expected to be completed in November.

To support the quantitative effort, CEE has contracted with the University of Colorado to conduct economic modeling of the local and statewide impacts of the retirement of the baseload generation plants in Minnesota. The Company retained the University of Colorado to conduct the study for Sherco 1 and 2 in our last IRP. The Business Research Division (BRD) of the Leeds School of Business at the University of Colorado Boulder will analyze the economic impact of alternative plant

retirement scenarios on their respective host communities. The purpose of this part of study is to provide third-party research examining the economic positive and negative effects of different scenarios. The scenarios analyzed will reflect five plant retirement scenarios as summarized below, including our preferred plan.

Scenarios to be Analyzed in the Host Community Impact Study								
Strategist Scenario	Description	Coal Retirements				Nuclear		
		Sherco 1	Sherco 2	Sherco 3	AS King	Monticello	Prairie Island 1	Prairie Island 2
1	Reference	2026	2023	2040	2037	2030	2033	2034
2	Early King	2026	2023	2040	2028	2030	2033	2034
4	Early Coal	2026	2023	2030	2028	2030	2033	2034
9 Pref. Plan	Early Coal; Extend Monti	2026	2023	2030	2028	2040	2033	2034
10	Early King; Extend Monti	2026	2023	2040	2028	2040	2033	2034
12	Early Coal; Extend All Nuclear	2026	2023	2030	2028	2040	2043	2044

This quantitative analysis will examine the baseload retirement scenarios, above, and the added resources based on the resource expansion plans in each scenario, which correspond to scenarios analyzed using the Strategist model. The analysis will consider operating expenditures, capital expenditures, and consumer rate costs for each scenario above relative to the reference scenario.

The research analysis method to be used for this study is the Regional Economic Models, Incorporated's (REMI) input-output, general equilibrium, econometric, and economic geography model, using state and national economic and demographic data, as well as data from the Company including capital expenditures, operating expenditures, and revenue requirements for each scenario. The study will look at near-term, mid-term, and long-term impacts and will capture the economic activity related to decommissioning and the construction of replacement generation.

While the specific location of replacement generation is unknown, a portion of the replacement generation will be assumed to be constructed within Minnesota and the study will examine impacts on the State of Minnesota. The REMI modeling will analyze the economic impacts on each host county and well as the state of Minnesota. The model allows for the analysis of changes in spending, investment, and employment in each region. We will supplement our IRP filing with the report from the BRD as soon as it is available.

The Host Community Impact study will also contain a qualitative component. CEE will collect responses to a questionnaire from community residents to gauge awareness, opinions and concerns around potential power plant closures. CEE will also conduct interviews with community members and leaders in each affected community, key stakeholders representing labor, and other impacted stakeholders. CEE will develop a report that identifies overarching themes and findings including issues that may be unique for specific communities. We will supplement our Resource Plan filing with the qualitative report once it is available.

We are grateful to CEE for overseeing this study and to the study participants for engaging in this constructive exercise. As we move forward with our carbon reduction goals, we are cognizant that phasing out some of our legacy generation has a significant impact not only on our energy mix, but on the economies of communities where those plants are located and the employees who work in those plants. We are dedicated to working with our employees, communities, and stakeholders to manage community impacts throughout our clean energy transition. Our baseload generation plants are prominent places of employment and contributors to the property tax base in the host communities. This is why we make efforts to spur economic development in locations where our current units will eventually be phased out.

For example, since our most recent Resource Plan, where we proposed to retire the Sherco 1 and 2 coal units in Becker, we have worked extensively with the local government, community stakeholders, and the state to draw new development to support the local economy. This includes a planned combined cycle generating unit at the Sherco site, the Northern Metal Recycling facility, and, prospectively a new Google data center with energy matched by a wind facility. Some of that activity (e.g. the Google data center) is also anticipated to spur new renewable energy development on our system.

In addition to the community impacts, we are also aware that these plant closures impact our employees and their families. With this in mind, and consistent with our past practices, we will work with these impacted employees to transition them to other Xcel Energy plants or areas of the company. In the past, when plants have been closed or converted (and impacted headcount) we have provided résumé writing services, support for interview practice, job training, and job shadowing opportunities. Through natural attrition and job re-locations, we have been able to successfully “re-home” nearly all impacted employees from plant closures and conversions to date.

As we continue toward achievement of our aggressive carbon goals, we will continue to make significant investments in clean energy in the states we serve. As we do so, we will look for opportunities to create fair access to clean energy programs, jobs and economic development opportunities. The Host Community Impact study will provide further context and opportunities for engagement with our communities, employees, and stakeholder as we continue to work together on the clean energy transition.