CHAPTER 5. ADDITIONAL CONSIDERATIONS (MINN. R. 7855.0260)

Each application shall contain an explanation of the relationship of the proposed facility to each of the following socioeconomic considerations:

A. socially beneficial uses of the output of the facility, including its uses to protect or enhance environmental quality;

B. promotional activities that may have given rise to the demand for the facility; and

C. the effects of the facility in inducing future development.

5.1 SOCIALLY BENEFICIAL USES OF THE OUTPUT OF THE FACILITY

The incremental storage capacity made possible by the Project will allow the Plant to continue to provide energy for Xcel Energy and our customers. However, denial of a CN for the Project would require closure of the Monticello Plant in 2030. Carbon-free nuclear generation has been a cornerstone of Xcel Energy's generation fleet for nearly half a century. Today, our nuclear plants generate thirty percent of our overall supply and about half of the carbon-free energy for our Upper Midwest customers. This generation amounts to approximately 7 million metric tons of carbon dioxide annually, or the equivalent of removing 1.5 million cars from the road, with the Monticello Plant contributing one third of these benefits. With the Project, the Plant can continue to provide needed carbon-free energy and capacity – critical to Xcel Energy and Minnesota's abilities to reach their aggressive carbon reduction goals.

The Monticello Plant continues to provide reliable baseload power. The plant has achieved an average capacity factor of 96.5 percent over the past three years (including a record-setting 99.3 percent in 2018 and over 98 percent in 2020). In April 2021, Monticello began a scheduled refueling outage after successfully operating for over 700 consecutive days. The Plant is also an important system resource during the winter months, as it does not experience fuel supply issues and has a proven track record during cold weather events. This superior performance enables the Company to achieve and maintain our carbon reduction goals while incorporating increasing renewable energy resources and maintaining reliability – a critical need of both our residential and business customers.

Finally, as discussed in detail in our IRP, continued operation of the Monticello Plant during the forecast period provides the most cost-effective option for consumers. In

fact, the Monticello Plant achieved the exceptional performance discussed above, while at the same time reducing production costs by more than 20 percent since 2015. We believe this performance demonstrates that we can achieve deep carbon reduction along with industry-leading safety and reliability at an affordable cost. Carbon-free, reliable and affordable electricity provides benefits to our customers and across Minnesota's economy. The Monticello Plant continues to play a critical role in our ability to deliver those benefits.

5.2 PROMOTIONAL ACTIVITIES

Xcel Energy has not engaged in any promotional practices that create the need for additional spent fuel storage. The Monticello Plant has been an essential part of the electrical supply system for 50 years and will continue serving as a baseload power plant until 2030 and beyond, if the Project is approved.

5.3 INDUCED DEVELOPMENT

As more fully discussed in Chapter 14, the Project will employ an estimated 40 construction workers, with a peak at any one time of 12 workers and an average of 8 workers. This is in addition to the hundreds of union workers currently employed at the Plant. Minimal additional traffic will be generated from truck deliveries and commuting workers. Similarly, the Project should have minimal impacts on existing utilities, on water usage or on other public services. Finally, the Project will not impact agricultural lands nor will it necessitate relocation, as it will occur entirely within the Plant's existing footprint.

CHAPTER 6. CONSERVATION PROGRAMS (MINN. R. 7855.0270)

Xcel Energy has a long history of achievements in energy efficiency and demand side management (DSM) programs. Between 1990 and 2020, the Company spent $1.78 billion (nominal) on Minnesota DSM efforts, while saving nearly 10,991 GWh of energy and 3,886 MW of demand. Our actions to consistently adapt and judiciously grow our customer offerings have proven worthwhile as we continue to meet and exceed the state's statutory energy savings targets.

This chapter provides the information required by Minnesota Rules Part 7855.0270 related to conservation programs and discusses the Company's ongoing and planned DSM efforts and the contributions those efforts make to satisfying our customers' future energy needs. As discussed below, while the Company will continue its aggressive energy efficiency and DSM efforts, the level of additional energy and capacity savings necessary to replace the Monticello Plant through energy efficiency and DSM is not a reasonable or prudent alternative to the Project and the continued operation of the Monticello Plant.

6.1 REQUIRED INFORMATION

Each application for a Certificate of Need pursuant to Minnesota Rules Chapter 7855.0270 must include the following information:

6.1.1 Individual responsible for energy conservation programs.

Nick Mark, Manager DSM Strategy and Policy in the Customer Solutions Group, is responsible for Xcel Energy's demand-side management programs in Minnesota, North Dakota, South Dakota, Wisconsin, Michigan, Texas, New Mexico, and Colorado.

6.1.2 Energy conservation and efficiency goals and objectives.

In its Order approving Xcel Energy's 2016 – 2030 IRP, the Commission adopted an average annual energy savings level of 444 GWh for the planning period.[1] In its proposed 2020 – 2034 IRP (which is currently under review by the Commission), Xcel Energy proposes cumulative goals of 11,795 GWh of energy savings and 2,156 MW of demand savings over the fifteen year planning period, including the growth of

[1] *In the Matter of Xcel Energy's 2016-2030 Integrated Resource Plan,* Docket No. E-002/RP-15-21, Order Approving Plan with Modifications, January 11, 2017 page 11.

our Demand Response (DR) portfolio to over 1,500 MW by 2034.[2] This represents a substantial increase in energy savings over the 2016 – 2030 IRP, with an annual goal of approximately 780 GWh in the current IRP.

The energy and demand savings goals established in the IRP are implemented through the Conservation Improvement Program (CIP) administered by the Department of Commerce (DOC), Division of Energy Resources (DER). Currently, the Company is operating under the incremental DSM goals established by the Deputy Commissioner of the DOC in the approved 2021 – 2023 CIP Triennial Plan.[3] These goals are:

Table 6-1:
DSM Goals as Approved by the DOC in the 2021-2023 CIP Triennial Plan

	2021	2022	2023	Total
Budget	$125,604,411	$128,333,716	$131,608,727	$385,546,854
Generator kW	185,098	203,337	221,668	610,103
Generator kWh	712,950,947	710,492,269	708,082,957	2,131,526,173

As presented in the Company's annual CIP Status Reports filed with the Minnesota Department of Commerce, to date, Xcel Energy has exceeded its DSM goals established under the 2016 – 2030 IRP. During the recent 2016 – 2020 period, the Company exceeded its IRP goals by 800 GWh (3,067 GWh achieved versus 2,267 GWh goal) of energy savings and 164 MW (709 MW achieved versus 545 MW goal) of demand savings. Additionally, the Company proposed its most substantial annual electric savings goal ever filed: 2.5 percent of retail sales for the 2021 – 2023 CIP Triennial Plan.

Xcel Energy's objectives with respect to its conservation and load management efforts in Minnesota are to support the Company's path toward achieving some of the most ambitious decarbonization goals of any utility in the United States. Specifically, we aim to reduce carbon emissions by 80 percent below 2005 levels by the year 2030, and to provide 100 percent carbon-free energy by 2050.

The objectives of our current CIP Triennial Plan are to:

[2] *Xcel Energy's 2020-2034 Upper Midwest Integrated Resource Plan,* Docket No. E-002/RP-19-368, filed with the Public Utilities Commission, July 1, 2019.
[3] *In the Matter of Xcel Energy's 2021-2023 Conservation Improvement Program Triennial Plan,* Docket No. E,G002/CIP-20-473, Order Approving Plan with Determinations, November 25, 2020 page 75.

- Meet all statutory and regulatory requirements pursuant to Minn. Stat. § 216B.2401, 216B.241 and 216B.2411, as well as Minn. R. 7690.0500 and past Department decisions;
- Align with the DSM commitments made by the Company in the initial and Supplement Preferred Plan of our most recent Integrated Resource Plan filing;
- Expand and evolve previously-approved programs and products that meet both statutory CIP requirements and Demand Response targets ordered by the Commission;
- Address the decrease in net benefits generated by our programs as energy efficiency measures that were innovative when first introduced become widely adopted by implementing new program delivery strategies and offering new, innovative products to our customers; and
- Evaluate programs and increase investments in our low-income program portfolio to reaffirm our commitment to serving the needs of our under-resourced customers and traditionally underserved communities.

6.1.3 Energy conservation and efficiency programs considered, implemented, and not implemented.

Xcel Energy currently offers a combination of more than forty business, residential, income qualified, and pilot energy efficiency and demand response programs. With support ranging from home energy audits that identify and influence homeowners' and renters' behavioral patterns to a process efficiency program targeted at energy management and capital investment improvements for large to mid-sized industrial customers, the Company strives to provide a diverse array of programs that support the needs of each unique customer segment.

Additionally, we continually evaluate current program models and emerging technologies in order to confirm existing program strategies, while also looking for new opportunities to expand our extensive portfolio of cost-effective energy efficiency options. To ensure our programs are relevant today and into the future we perform cost-benefit analyses during the evaluation process. A cost-benefit analysis weighs the cost against the benefit of each program from a utility, participant, ratepayer, and societal perspective – yielding a ratio that indicates how beneficial (a ratio above one is considered cost effective) a program is from each perspective.

While each perspective can provide insight into a program's performance, the Societal Test, which measures the net cost/benefit of a program to society as a whole

(accounting for externalities such as improved health, comfort, and environmental impacts) is the benchmark measure used to determine if a program is viable for implementation. If a program does not pass the Societal Test it is not implemented. The two most common reasons a program fails the Societal Test are:

- The program employs a technology that was once considered efficient but has become the market standard, decreasing the benefit of the program; or
- The program employs an emergent efficient technology that has a significant implementation cost, resulting in costs that outweigh the benefit of the program.

These situations occur on a regular basis as the market constantly transforms. Through our evaluation process, we continually evolve our programs in response to maintain a mix of programs that are reliable, affordable, and relevant. These situations occur on a regular basis as the market constantly transforms.

Below is a list of our current programs:

Table 6-2:
Xcel Energy's 2021 DSM Program Budget and Goals

Regulatory Name	Electric Budget	DR Gen kW	EE Gen kW	Generator kWh
Business Energy Assessments	$1,371,620	0	540	6,084,451
Business New Construction	$10,977,919	28	13,199	56,517,902
Commercial Efficiency	$4,444,182	1,422	5,379	48,147,052
Commercial Streamlined Assessments	$1,926,974	7	2,731	14,747,729
Compressed Air Efficiency	$1,238,138	151	1,398	10,109,742
Custom Efficiency	$976,481	0	681	4,852,951
Data Center Efficiency	$426,330	0	295	5,867,570
Efficiency Controls	$793,843	286	155	11,527,577
Energy Information Systems	$551,841	0	260	3,457,366
Electric Rate Savings	$553,794	6,433	0	12,688
Foodservice Equipment	$50,522	3	80	548,006
HVACR	$3,593,672	77	4,648	25,802,623
Lighting Efficiency	$14,027,886	0	23,003	151,863,680
Multi-Family Building Efficiency	$1,611,500	70	609	3,965,236
Peak Partner Rewards	$1,490,495	28,887	0	170,712
Process Efficiency	$6,839,616	700	12,477	72,149,924

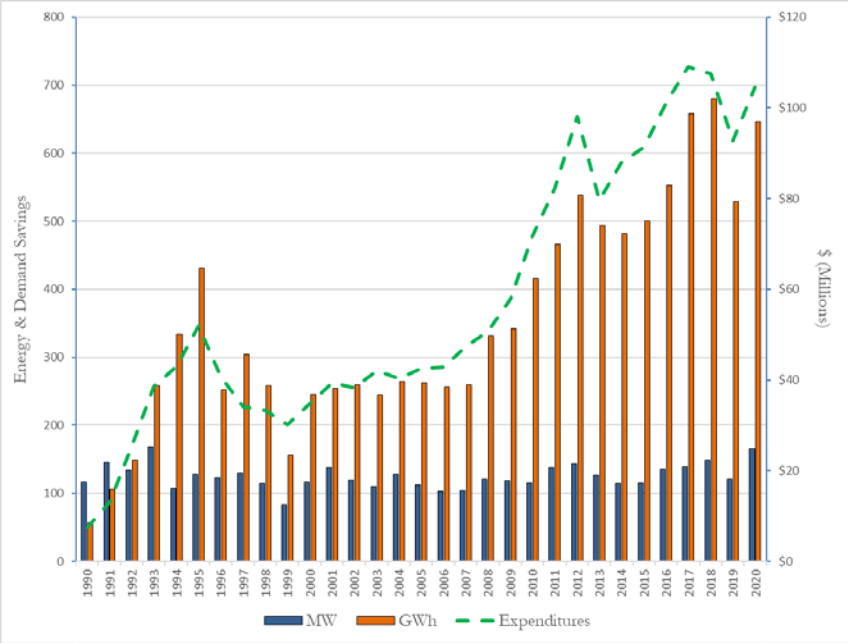
Regulatory Name	Electric Budget	DR Gen kW	EE Gen kW	Generator kWh
Business Saver's Switch	$2,942,808	4,815	0	398,201
Self-Direct	$5,000	0	0	0
Business Segment EE and DR Total	**$53,822,623**	**42,879**	**65,454**	**416,223,411**
Benchmarking	$108,700	0	0	0
Business Education	$197,000	0	0	0
Small Business Lamp Recycling	$46,323	0	0	0
Business Segment with Indirect Participants	**$54,174,646**	**42,879**	**65,454**	**416,223,411**
Efficient New Homes Construction	$975,927	0	1,760	4,206,354
Energy Efficient Showerhead	$33,516	0	66	810,168
Home Energy Insights	$1,428,667	0	4,409	19,949,994
Home Energy Squad	$2,016,290	675	1,391	7,872,984
Home Lighting	$5,764,817	0	22,180	161,583,086
Insulation Rebate Program	$90,015	25	231	221,301
Refrigerator Recycling	$1,118,032	83	849	6,369,241
Residential Demand Response	$9,848,240	17,529	1,634	1,244,564
Residential HVAC	$4,725,697	123	7,914	7,660,824
School Education Kits	$1,025,652	0	2,353	4,918,945
Whole Home	$39,220	7	35	97,331
Residential Segment EE and DR Total	**$27,066,074**	**18,441**	**42,821**	**214,934,790**
Consumer Education	$783,000	0	0	0
Home Energy Audit	$661,942	0	0	0
Residential Lamp Recycling	$405,795	0	0	0
Residential Segment with Indirect Participants	**$28,916,811**	**18,441**	**42,821**	**214,934,790**
Home Energy Savings Program	$1,364,167	37	110	560,294
Low Income Home Energy Squad	$584,326	258	257	992,218
Multi-Family Energy Savings Program	$893,415	0	74	204,645
Low Income Segment Total	**$2,841,907**	**294**	**441**	**1,757,157**
Advertising & Promotion	$6,244,922	0	0	0
Application Development & Maintenance	$3,491,894	0	0	0
CIP Training	$291,121	0	0	0
Partners in Energy	$873,655	0	0	0
Regulatory Affairs	$523,595	0	0	0
Planning Segment Total	**$11,425,187**	**0**	**0**	**0**
Codes and Standards	$20,000	0	0	0

Market Research	$1,286,628	0	0	0
Product Development	$5,149,006	0	0	0
Regulatory Name	**Electric Budget**	**DR Gen kW**	**EE Gen kW**	**Generator kWh**
Research, Evaluations, & Pilots Segment Total	**$6,455,634**	**0**	**0**	**0**
Portfolio Total	**$103,814,185**	**61,614**	**108,717**	**632,915,358**
Enerchange	$418,500	0	0	0
Energy Smart	$437,230	0	0	0
One-Stop Shop	$18,789,160	0	14,767	80,035,589
Trillion Btu	$170,355	0	0	0
Anticipated Alternative Filings Total	**$19,815,245**	**0**	**14,767**	**80,035,589**
Assessments	$1,974,981	0	0	0
Electric Utility Infrastructure	$0	0	0	0
Portfolio Total w Alternative Filings	**$125,604,411**	**61,614**	**123,484**	**712,950,947**

6.1.4 Major Accomplishments.

Xcel Energy is a nationally recognized leader in energy conservation and DSM programs. Between 1990 and 2020, the Company's Minnesota DSM efforts have saved nearly 10,991 GWh of energy and 3,886 MW of demand, far surpassing the state's statutory energy savings goals and enough to avoid building more than fifteen medium-sized (250 MW) power plants. Figure 6-1 below highlights our historical electric CIP savings achievements.

Figure 6-1:
Historical Electric CIP Achievements 1990-2020



In addition to delivering energy and cost savings for our customers, our energy efficiency portfolio has a significant carbon reduction benefit. Technologies and improvements implemented as a result of energy efficiency programs generally last for several years. Energy savings from these programs, therefore, result in avoided carbon emissions over the life of the improvement. For example, the energy efficiency measures and projects implemented during 2018 alone are anticipated to save more than 2,440,000 short tons of CO_2 over their entire lifetimes.

6.1.5 Future plans.

The Company's current IRP proposes goals of 11,795 GWh and 2,156 MW cumulative savings over the 2020 – 2034 planning period, including the growth of our Demand Response portfolio to over 1,500 MW by 2034. This represents an average annual energy savings of approximately 780 GWh. The Company further discusses its ongoing and planned efforts to achieve these aggressive targets in Section 6.2 below.

6.1.6 Effects on demand forecast, total costs by program and expected effects in reducing the need for new large energy facilities from DSM programs.

As Xcel Energy considers future demand needs, it draws from its long history and deep understanding of the savings potential that DSM programs provide in order to

ensure that informed and accurate estimates are reflected in our forecasts. Section 6.2 below provides a detailed description of the manner by which DSM savings are forecasted. With over 30 years of experience in delivering successful DSM programs, Xcel Energy and our customers have saved nearly 10,991 GWh of energy and 3,886 MW of demand, enough to avoid building more than fifteen medium-sized (250 MW) power plants. Additionally, as we implement our 2020 – 2034 IRP, the amount of avoided new energy facilities will continue to grow and with the most ambitious DSM goals ever proposed and growing demand response portfolio, it will do so at a more rapid pace.

The estimated total costs by program are provided in Table 6-2 above.

6.2 COMBINING DSM AND THE INTEGRATED RESOURCE PLAN

Xcel Energy's 2020 – 2034 IRP charts the path toward achieving some of the most ambitious carbon reduction goals of any utility in the United States. Specifically, we aim to reduce carbon emissions by 80 percent below 2005 levels by the year 2030, and to provide 100 percent carbon-free energy by 2050. The Company's projections for energy efficiency savings of 2.5 percent of retail sales are critical to these goals and are based on a combination of two major types of energy efficiency: energy savings from CIP programs and naturally occurring energy savings. In this section, we discuss the Company's current projections for efficiency savings from CIP programs, how we developed those projections, and the important contribution they make to the goals outlined in the Company's IRP.

Energy Efficiency Scenarios

We began the development of DSM scenarios with the Minnesota Statewide Potential Study conducted on behalf of the DOC.[4] The scope of this study was designed by the DOC and opened to third-party bidders who committed to identify the possible measures and customer segments that had the greatest potential to contribute to energy efficiency across the state. The Company was just one of many utilities that participated in the study, providing data, reviewing drafts, and participating in a stakeholder advisory committee. The Company further collaborated with the study vendor to produce estimates specific to NSP-Minnesota. This supplement to the

[4] The potential study was administered by Center for Energy and Environment, Optimal Energy and Seventhwave (now Slipstream). The full report can be downloaded here: https://www.mncee.org/MNCEE/media/PDFs/MN-Potential-Study_Final-Report_Publication-Date_2018- 12-04.pdf

study used the portion of statewide sales in the Company's service territory for the Residential and Business classes to develop achievable potential impacts and costs.

The study was used as the primary input for the Company's energy efficiency potential from 2020 through 2034 and included two scenarios: "Program Achievable" and "Maximum Achievable." The two scenarios in the study differ in terms of the percent of incremental cost covered by a utility rebate. The "Program Achievable" scenario estimates adoption of measures given utility rebates equal to 50 percent of the incremental costs. The "Maximum Achievable" scenario estimates adoption at rebates equal to 100 percent of the incremental costs, effectively removing any cost barrier to adoption. Doubling the rebate levels results in higher potential impacts, but also significantly increases the cost to achieve the incremental impacts. Table 6-3 below shows the impacts and utility program costs (including rebate) of each scenario in the Company's territory for the first and last year included in the potential study.

Table 6-3:
Energy Efficiency Scenarios

	2020		2029	
	GWh	**Costs ($M)**	**GWh**	**Costs ($M)**
Program Achievable	621	$101	762	$162
Maximum Achievable	895	$262	1,096	$419

To model levels of Energy Efficiency most accurately as a resource in the Resource Plan, the impacts for each scenario were estimated at the hourly level and extended over the lifetime of the measures installed. The two scenarios from the study provided achievable estimates each year for various end uses from both residential and business segments.

These end uses were bucketed into the following nine "shape" groups:

- Business Cooling: End-uses that cool occupied non-residential spaces. Highly correlated to weather with highest use during hot summer weekdays.
- Business Custom: Process and lighting end-uses at non-residential sites. Correlated to operating hours at a mix of types of businesses.
- Business Compressed Air: Leakage savings from end-uses that rely on compressed air. Generally flat hourly savings.
- Energy Management Systems: Operational savings from end-uses on an energy management system to reduce load when end-uses are not in use. Generally off-peak savings.
- Flat: End-uses that have constant hourly load across a year.

- Residential Cooling: End-uses that cool occupied residential spaces. Highly correlated to weather with highest use during hot summer evenings.
- Residential Lighting: End-uses that light occupied residential spaces. Correlated to non-daylight hours and residential occupancy patterns.
- Refrigeration: End-uses providing refrigeration in both residential and non-residential spaces. Correlated to weather and hours that the refrigeration cases are opened.
- Residential Water Heating: End-uses providing hot water to residential spaces. Correlated to residential usage of hot water.

The energy savings impacts of the measures in each of these "shape" groups were applied to the hourly load shapes and lifetime assumptions of these groups and have been utilized in the Company's subsequent triennial planning. Table 6-4 below shows the lifetime assumptions for each of the shape groups and the fraction of total energy savings each of the nine groups accounts for in the various forecasts.

Table 6-4:
Percent of Portfolio Energy

		Program Achievable		Maximum Achievable	
Shape	**Lifetime**	**2020**	**2029**	**2020**	**2029**
Business Cooling	18	14.3%	18.5%	14.0%	17.7%
Business Custom	16	39.4%	46.3%	41.6%	48.4%
Business Compressed Air	17	1.5%	1.9%	1.6%	2.0%
Energy Management Systems	17	6.1%	2.8%	5.6%	2.4%
Flat	12	7.5%	13.9%	7.2%	13.3%
Residential Cooling	9	0.5%	1.3%	0.6%	1.6%
Residential Lighting	5	1.9%	0.6%	1.8%	0.5%
Refrigeration	9	26.8%	8.8%	25.8%	8.8%
Residential Water Heating	8	1.9%	5.8%	1.8%	5.4%

In addition to the two scenarios included in the study, the Company developed an "Optimized Scenario," which included a higher level of incentives for technologies that consistently save energy during on-peak hours, or hours that have the highest costs to serve, because these measures will be the most cost-effective. Specifically, the measures included in the "Optimized Scenario" are those in the Business Cooling, Residential Cooling and Residential Refrigeration shapes. The "Optimized Scenario" includes the costs and impacts of these three shape groups at the Maximum

Achievable incentive level, with all the other shape groups at the Program Achievable incentive level.

To model investments in energy efficiency to include in the Resource Plan, the three scenarios (Program Achievable, Optimized Scenario and Maximum Achievable) were extended to cover program achievement over the 15-year plan period (2020-2034). The expected achievements and costs for 2029 were used to populate all years 2030 – 2034. With lifetimes extending up to 17 years, the lifetime impacts of these achievements extended from 2020 through 2050.

Modeling Results

To determine the most cost-effective level of future energy efficiency achievement, the following steps were taken:

- A revised load forecast was produced that removed the effect of all energy efficiency achievement over the 2020 – 2034 program years.
- The costs and lifetime impact of each of the scenarios were modeled as a supply-side resource.
- The resulting total system costs were calculated assuming achievement of each of the three scenarios, expressed as both Present-Value of Revenue Requirements (PVRR) and Present-Value of Societal Costs (PVSC).
- Total system costs were compared to identify the most cost-effective level of energy efficiency.

We modeled energy efficiency as a resource based on utility program costs, similar to the Utility Cost Test used in DSM cost-benefit estimation performed in CIP Triennial Plans. When modeling energy efficiency as a resource, the magnitude of rebate spending should be considered. The scenario that provides the lowest cost solution, when including the rebate spending, should be the Preferred Plan for energy efficiency.

The table below shows the PVRR of the three scenarios and the PVRR savings against the base case that removes the effect of all energy efficiency achievement:

Table 6-5:
Present-Value of Revenue Requirements (PVVR)
Energy Efficiency Scenarios (in Millions)

	PVVR	Delta PVVR
No Future Energy Efficiency	$39,985	-
Program Achievable	$37,656	($2,329)
Optimal Scenario	$37,572	($2,414)
Maximum Achievable	$38,432	($1,553)

This data shows that the Optimal Scenario produces the lowest cost, resulting in over $2.4 billion in savings for the 2020 – 2034 program years. The societal cost of emissions was also considered in modeling. The table below shows the PVSC of the three scenarios and the PVSC savings against the base case that removes the effect of all energy efficiency achievement:

Table 6-6:
Present-Value of Societal Costs (PVSC)
Energy Efficiency Scenarios (in Millions)

	PVSC	Delta PVSC
No Future Energy Efficiency	$49,071	-
Program Achievable	$46,087	($2,984)
Optimal Scenario	$45,989	($3,082)
Maximum Achievable	$46,609	($2,462)

This metric also shows that the Optimal Scenario produces the lowest cost, with nearly $3.1 billion in savings for the 2020 – 2034 program years.

Based on these results, the Company included the Optimal Scenario in the Preferred Plan proposed in the 2020 – 2034 IRP, including both the 2020 Supplement and 2021 Alternate Plan.

Naturally Occurring Energy Conservation

Our Energy Efficiency scenarios also include conservation measures defined as naturally occurring, or energy savings achieved through implementation of high-efficiency equipment outside of or as a supplement to utility CIP programs. The drivers for naturally occurring energy efficiency include (among other things): adoption of efficient technologies as industry standards, building code changes,

customer preference for green products, and competition among manufacturers to differentiate product offerings. These factors lead to more naturally occurring energy efficiency in the market outside of or in addition to utility products and programs.

The Minnesota Statewide Potential Study does not take into account code and standard changes that are not already published. Rather than trying to complicate the forecasting process, the Company included estimates of Naturally Occurring Energy Conservation in the IRP. The effect in immediate years is small because standards for those years are well-known, but the end of the planning period will likely see an increasing amount of energy savings occurring outside of DSM programs.

6.3 IMPACT OF DSM EFFORTS

Now, more than ever, there is a growing urgency to address the risk of climate change. As an industry leader in reducing carbon and other emissions, we are the first major U.S. power company to announce its vision to provide customers 100 percent carbon-free electricity. To support our vision, we have taken bold action in pursuing aggressive energy and demand response savings through the framework of our DSM programs. As important as the Company's and our customers' energy efficiency efforts are, and as substantial as our future achievements may be, they alone cannot eliminate the need for reliable, affordable, and carbon-free baseload power.

As discussed in Section 6.2, further expanding our DSM efforts beyond the "Optimized Scenario" (which is currently proposed in the 2020 – 2034 IRP and is included in our modeling results outlined in Chapter 9) to the "Maximum Achievable" scenario is not a reasonable option. First, the measures required to move from the "Optimized" to the "Maximum Achievable" scenario yield energy savings that have the highest cost to capture, resulting in a cost that more than doubles the cost of the "Optimized Scenario." More importantly, as it relates to this Application, the difference in savings between the "Optimized" and "Maximum Achievable" scenarios is less than either the capacity or the energy production of the Monticello Plant. Thus, even the "Maximum Achievable" scenario could not replace either the capacity or the energy the Plant provides.

Based on these results, the Company concludes that the level of additional energy and capacity savings necessary to replace the Monticello Plant through energy efficiency and DSM is not a more reasonable or prudent alternative than the Project and continued operation of the Plant.

CHAPTER 7. OTHER DATA FILED WITH APPLICATIONS (MINN. R. 7855.0280)

In addition to the information required by these rules, an applicant may file additional data if it believes that such data is relevant to the commission's decision.

The Company believes this application is complete and no additional data is required.