

## Staff Briefing Papers

Meeting Date May 6, 2021

Agenda Item \*\*3

Company Minnesota Power (MP or the Company)

Docket No. **E015/M-20-828 and E,G-999/CI-20-492**

**In the Matter of Minnesota Power's Petition for the Approval of the Acquisition of Solar Power to Support Economic Relief and Recovery**

**In the Matter of An Inquiry into Utility Investments that May Assist in Minnesota's Economic Recovery from the COVID-19 Pandemic**

- Issues
1. Should the Commission approve Minnesota Power's request to execute three affiliated interest agreements between the Company and ALLETE Enterprises, Inc. related to the Laskin, Sylvan, and Duluth Solar? Should the Commission approve the land leases of Minnesota Power property near the Sylvan hydroelectric station and at Laskin Energy Center?
  2. Should the Commission find that the solar projects are in the public interest and approve the projects as a reasonable and prudent way for the Company to continue to work towards meeting its obligations under Minn. Stat. § 216B.1691?
  3. Should the Commission waive Minnesota Power's requirement to use competitive bidding for solar acquisition? If not, should the Commission require Minnesota Power to issue a new solar RFP?

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The attached materials are work papers of the Commission Staff. They are intended for use by the Public Utilities Commission and are based upon information already in the record unless noted otherwise.



4. Should the Commission authorize Minnesota Power to recover the Power Purchase Agreement (PPA) and land lease costs through Commission-approved methods for solar resources?

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### Relevant Documents

### Date

Commission Order Approving Expedited Procedural Timeline	February 16, 2021
Minnesota Power, <i>Petition (Public and Non-Public)</i>	February 4, 2021
City of Duluth, <i>Comments</i>	March 11, 2021
Range Association of Municipalities & Schools, <i>Letter of Support for Hoyt Lakes Solar Project</i>	March 12, 2021
Minnesota State Legislatures of Duluth, Hoyt Lakes, and Sylvan Township, <i>Comments</i>	March 15, 2021
LIUNA Minnesota & North Dakota, <i>Comments</i>	March 15, 2021
Department of Commerce, <i>Comments (Public and Non-Public)</i>	March 15, 2021
OAG, <i>Comments (Public and Non-Public)</i>	March 15, 2021
Cass County Economic Development, <i>Letter of Support</i>	March 15, 2021
GRACE Multicultural, <i>Letter of Support</i>	March 16, 2021
Hispanics in Energy, <i>Letter of Support</i>	March 16, 2021
Region Five Development Commission, <i>Letter of Support</i>	March 16, 2021
Minnesota Power, <i>Reply Comments (Public and Non-Public)</i>	March 25, 2021
Minnesota Solar Energy Industries Association, <i>Reply Comments</i>	March 25, 2021
BlueGreen Alliance, <i>Reply Comments</i>	March 25, 2021
LIUNA Minnesota & North Dakota, <i>Reply Comments</i>	March 25, 2021
National Electrical Contractors Association, <i>Letter of Support</i>	March 31, 2021
Iron Range Resources & Rehabilitation, <i>Letter of Support</i>	April 12, 2021

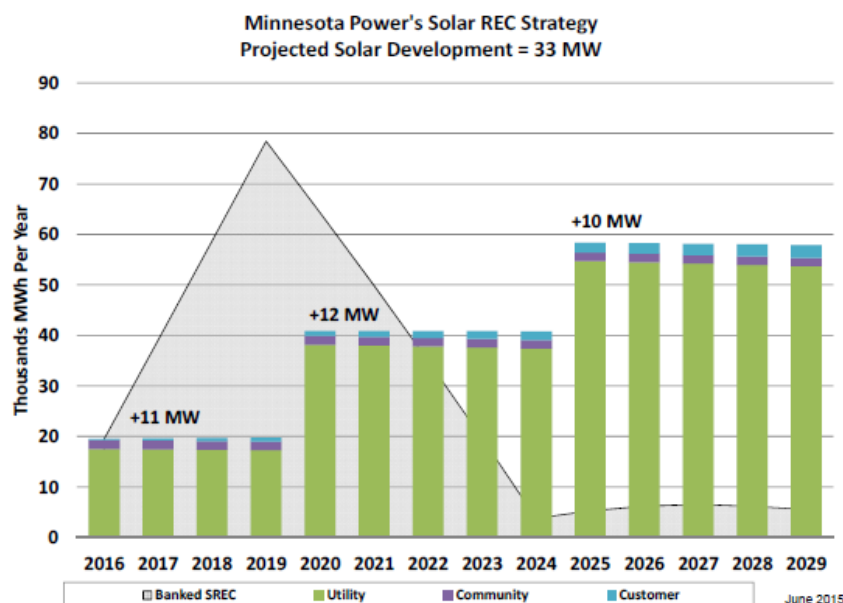
## I. Statement of the Issues

1. Should the Commission approve Minnesota Power's (MP) request to execute three affiliated interest agreements between the Company and ALLETE Enterprises, Inc. related to the Laskin, Sylvan, and Duluth Solar? Should the Commission approve the land leases of MP-owned property near the Sylvan hydroelectric station and at Laskin Energy Center?
2. Should the Commission find that the solar projects are in the public interest and approve the projects as a reasonable and prudent way for the Company to continue to work towards meeting its obligations under Minn. Stat. § 216B.1691?
3. Should the Commission waive Minnesota Power's requirement to use competitive bidding for solar acquisition? If not, should the Commission require Minnesota Power to issue a new solar RFP?
4. Should the Commission authorize MP to recover the Power Purchase Agreement (PPA) and lease costs through Commission-approved methods for solar resources?

## II. Background

### A. MP's Solar Acquisition Timeline

In MP's last approved Integrated Resource Plan (IRP), which was filed on September 1, 2015, MP estimated it would need to add approximately 33 megawatts (MW) of solar to meet its requirements under the Solar Energy Standard (SES). The figure below is from MP's 2015 IRP, and it shows the Company's initial SES compliance plan.<sup>1</sup> The first increment would be 11 MW—10 MW from the Camp Ripley Solar Project (approved in February 2016) and 1 MW of community solar. MP proposed to then add 12 MW of solar in 2020 and 10 MW in 2025:



<sup>1</sup> Docket No. 15-690, *In the Matter of Minnesota Power's 2015 Integrated Resource Plan*, Appendix H, p. 6.

The Commission approved MP's 2015 IRP (with the associated SES compliance plan) on July 18, 2016. However, in addition to the 33 MW for SES compliance, the Commission found, based on Strategist modeling from the Department, that "up to 100 MW of solar by 2022 is likely an economic resource for Minnesota Power's system," and MP "shall account for this finding in its request for proposals in any competitive acquisition process."<sup>2</sup>

MP's requirement to use a competitive bidding process was established by the Commission's Order in MP's Camp Ripley Solar docket, in which the Commission determined that a competitive solicitation could invite numerous locations and help reduce costs.<sup>3</sup> With this requirement, and the Commission's instruction from the IRP Order, MP issued a request for proposals (RFP) for up to 300 MW of solar generation, which received proposals for 83 projects from 26 bidders, totaling approximately 3,400 MW of nameplate capacity. (MP also submitted proposals for two self-build projects.)

However, during its bid evaluation, MP determined that a 10 MW solar resource was in the best interest of its customers—in other words, MP chose not to consider an amount above its 2020 SES compliance estimate. On June 7, 2017, MP executed a Power Purchase Agreement (PPA) for the 10 MW Blanchard Solar Project, which the Commission approved on October 1, 2018.<sup>4</sup>

The Blanchard Project did not come to fruition. On December 13, 2018, MP filed a letter notifying the Commission that the developer of the Blanchard project, Cypress Creek Renewables, was unable to obtain a site permit from the Morrison County Board of Commissioners. More than two years later, on April 28, 2020, MP filed a letter stating that because Cypress Creek was unable to meet the established PPA terms, the PPA was terminated.

#### *B. Docket No. 20-492*

On May 20, 2020, the Commission opened an *Inquiry into Utility Investments that May Assist Minnesota's Economic Recovery from the COVID-19 Pandemic* in Docket No. 20-492 (the Economic Recovery docket) and issued a Notice of Reporting Required by Utilities, which sought information from all rate-regulated electric and gas utilities in Minnesota on ongoing, planned, or proposed investments that meet the following conditions:

- Provide significant utility system benefits;
- Are consistent with approved resource plans, approved natural gas distribution infrastructure or pipeline safety plans, triennial conservation plans, and existing Commission orders;
- Reduce carbon or other pollutant emissions in the power sector or across economic sectors;

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<sup>2</sup> Docket No. E015/RP-15-690, *Order Approving Resource Plan with Modifications*, page 15, Order Point 11 (July 18, 2016).

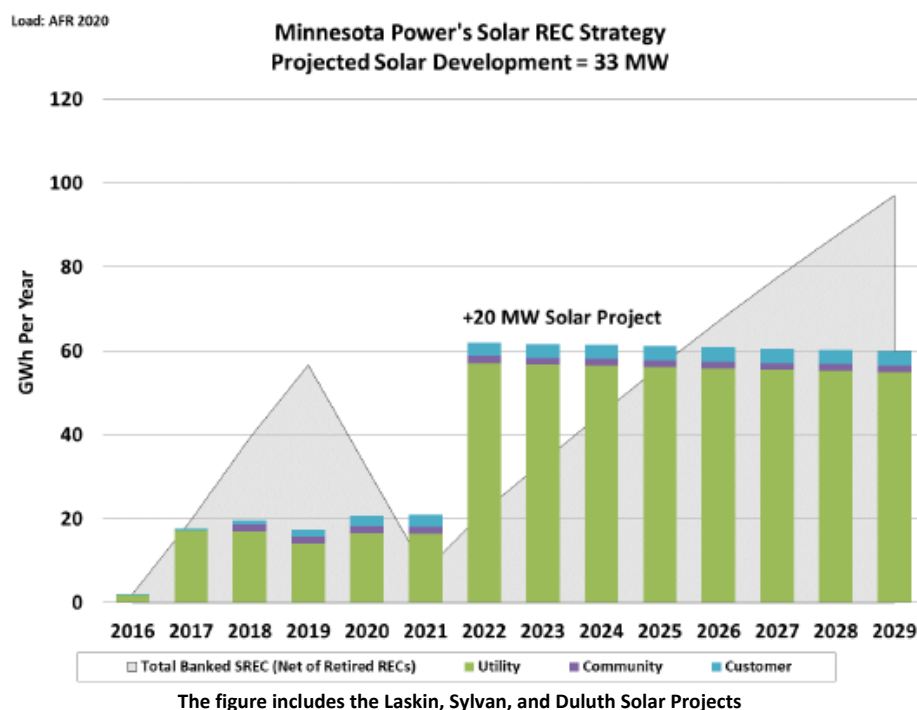
<sup>3</sup> Docket No. 15-773, *In the Matter of the Petition of Minnesota Power for Approval of Investments and Expenditures in the Camp Ripley Solar Project for Recovery through Minnesota Power's Renewable Resources Rider under Minn. Stat. § 216B.1645 and Related Tariff Modifications*, Order Point 10 (February 24, 2016).

<sup>4</sup> Docket No. 18-401.

- Increase access to conservation and clean energy resources for all Minnesotans;
- Create jobs or otherwise assist in economic recovery for Minnesotans; and
- Use women, veteran, or minority-owned businesses to the extent possible, which can be documented for verification purposes.

On June 17, 2020, MP filed comments in the Economic Recovery docket announcing that the Company “will request Commission approval to advance approximately \$40 million of new solar energy investment within its service territory with the development of approximately 20 MW of solar projects in northern Minnesota.”<sup>5</sup> In November 2020, MP requested expedited review of the investment, and MP filed a Petition for Approval of the Laskin, Sylvan, and Duluth Solar projects on February 4, 2021.

The three projects reflect the same amount of capacity, 33 MW, initially envisioned in the 2015 IRP, although on an accelerated schedule. In the Petition, MP updated its SREC Strategy figure from the IRP to show two increments of utility-scale solar instead of three:



The Petition stated that the “proposed economic recovery projects meet every one of the conditions for possible investments outlined in the Commission’s May 20, 2020 Notice.”<sup>6</sup> However, the Notice required that investments must be consistent with existing orders, and the projects were acquired through competitive bidding. MP argued that an RFP process “would not have provided the flexibility and timeliness required” to meet the Commission’s Order in

<sup>5</sup> Docket No. 20-492, MP’s June 17, 2020 comments, p. 11.

<sup>6</sup> Petition, cover page.

Docket No. 20-492.<sup>7</sup> The Commission will weigh the parties' arguments and decide whether an RFP process would have hindered the flexibility and timeliness to acquire resources.

### III. Minnesota Power Petition

#### A. Company Requests

MP is seeking Commission approval to execute three affiliated interest agreements between the Company and ALLETE Enterprises, Inc. related to Laskin, Sylvan, and Duluth Solar, which collectively amount to approximately 21 MW of solar-generated energy and capacity.

Laskin and Sylvan Solar will be developed on land already owned by MP. Since the projects will be owned by an ALLETE Enterprises LLC partnership, the LLC will need to have a land lease from MP. The leases will be at zero-cost, and MP estimates that this arrangement will result in a levelized cost savings of \$1-\$1.50/MWh for each project. The Duluth Solar project will be on land leased from the City of Duluth, and the lease terms are currently being negotiated with city staff. Final approval and execution of the land lease are pending Duluth City Council action.

The final contracts will be based on the model contracts included as Appendix A of the Petition. Upon Commission approval, MP will execute the PPA and the Sylvan and Laskin leases. Staff confirmed with MP that the executed PPA and leases should be mostly the same as the model contracts, and MP could file them as a compliance filing.

MP also requests that the Commission find the projects are in the public interest and a reasonable and prudent way for meeting its obligations under Minn. Stat. § 216B.1691. Further, MP requests the Commission authorize MP to recover the PPA and lease costs through Commission-approved methods for solar resources.

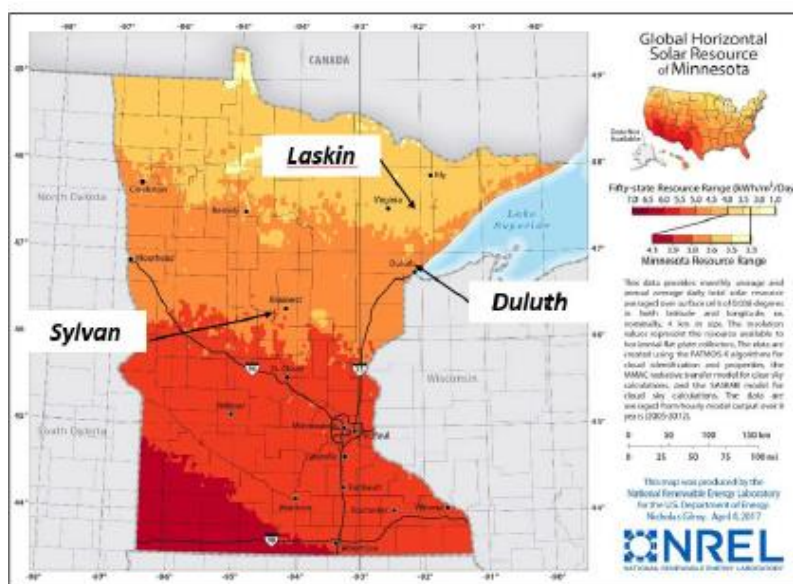
#### B. Project Descriptions

Laskin Solar will be near Hoyt Lakes, adjacent to the Laskin Energy Center; Sylvan Solar will be near MP's Sylvan hydroelectric station west of Brainerd, on the Crow Wing River; and Duluth Solar will be in northeast Duluth. Additional details are shown in the table below. Note that Sylvan Solar will have more energy output than Laskin despite being similar in size:

Project	Size (MW)	MWh/yr.	Capacity Factor	Acres of land	Interconnection costs	Siting Regulation
Laskin	9.6	16,500	18.5%	70	\$425,000	St. Louis County Cond'l Use Permit
Sylvan	10	21,700	23.3%	66	\$175,000	Sylvan Township Cond'l Use Permit
Duluth	1.6	2,600	17.5%	9	\$250,000	City of Duluth Special Use Permit

<sup>7</sup> Petition, p. 27.

Sylvan Solar is expected to generate more energy per year than Laskin Solar by about 5,200 MWh – in other words, its capacity factor is about 5% greater – despite being similar in nameplate capacity. This is due to the location and the DC to AC ratio differences between the projects.<sup>8</sup> Because Sylvan is more southerly, there is more solar resource availability than at Laskin. The figure below shows the average solar resource at the three sites, with the darker colors representing higher solar resource availability.



MP expects to complete the projects on an expedited timeline, which MP stated is in response to the Commission's direction in Docket No. 20-492 to provide economic recovery to Minnesotans as quickly as possible. The table below outlines the proposed schedule for all three projects. MP expects site preparation to begin soon after Commission approval:

Task	Anticipated Date
Begin Tree Clearing	June/July 2021
Site Preparation	July/August 2021
Begin Construction of Solar Array	September 2021
Commissioning and Start-Up	March 2022
Begin Commercial Operation	April 2022
Register Project with M-RETS	April 2022

### C. Project Costs

MP issued an RFP for the solar panels and requested domestic and Minnesota-manufactured solar equipment. To maximize the federal Investment Tax Credit (ITC) benefit, MP has secured Safe Harbor modules through a contract with Heliene, which will supply modules for all of the projects and manufactured at their facility in Mountain Iron, Minnesota. MP explained:

<sup>8</sup> MP Response to PUC IR 4 (April 8, 2021).



The most significant advantage of utilizing Heliene modules is their ability to provide bifacial modules manufactured in America, which no other supplier was able to do . . . Utilizing bifacial modules results in an increased production at little to no additional cost, which results in a lower cost of energy.<sup>9</sup>

ALLETE Enterprises intends to issue additional RFPs for inverters, solar racking systems, DC collection systems, computer systems for plant control and analysis (Supervisory Control and Data Acquisition, or SCADA), and labor to ensure competitive pricing for each component.

The overall project cost will be approximately \$40.9 million. A cost breakdown by project is shown in the table below; estimated project costs for Laskin, Sylvan, and Duluth Solar projects are \$17.4, \$19.6, and \$3.9 million, respectively. MP will be responsible for project management, permitting, licensing and approvals procurement, and construction management.

**Labor and Materials Costs**

	<b>Sylvan</b>	<b>Laskin</b>	<b>Duluth</b>	<b>Total</b>
Equipment/Materials	\$10,130,000	\$9,290,000	\$1,870,000	\$21,290,000
Construction Labor	\$5,690,000	\$4,800,000	\$1,110,000	\$11,600,000
Indirect Costs	\$3,080,000	\$2,510,000	\$680,000	\$6,270,000
Contingency	\$700,000	\$800,000	\$240,000	\$1,740,000
<b>Total</b>	<b>\$19,600,000</b>	<b>\$17,400,000</b>	<b>\$3,900,000</b>	<b>\$40,900,000</b>

While MP has secured Safe Harbor modules, the Company explained that it “is not able to effectively utilize the federal solar ITCs provided by the proposed solar projects if they were wholly owned by the Company even with the federal extension to 2022.”<sup>10</sup> Therefore, MP will utilize an affiliate to partner with a tax equity investor to own the projects and sell the power and associated Solar Renewable Energy Credits (SRECs) to MP through a PPA. Once ALLETE Enterprises enters into an agreement with a tax equity investor and forms an affiliate to construct and operate the solar projects, ALLETE Enterprise’s interests and obligations under the PPA will be assigned to the operating affiliate. If a tax equity investor is unable to invest in the project upon completion, MP will continue to evaluate financing options.

#### *D. Comparison to National and Northern Midwest Projects*

MP believes the project costs are aligned with other solar projects of comparable size and location. Table 4 of the Petition compares Sylvan, Laskin, and Duluth Solar to other projects on a total cost and cost per watt basis. For space and readability, staff reproduced a condensed version of Table 4 below (the complete table is on page 34 of the Petition):

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<sup>9</sup> Petition, p. 28.

<sup>10</sup> Petition, p. 30.



Project	COD	Size (MW)	Cost (\$M)	\$/Watt(ac)
<b>MP Portfolio</b>				
Sylvan	2022	10	\$19.6	\$1.96
Laskin	2022	9.6	\$17.4	\$1.81
Duluth	2022	1.6	\$3.9	\$2.44
<b>Berkeley Lab 2020 Report</b>				
Average of 20 US projects	2019	5-20		\$1.88
<b>Energy Acuity Database</b>				
Average of 9 U.S. projects	2019-present	3-10		\$2.24
<b>Northern Midwest Projects</b>				
Madison G&E (Dane County Airport)	2020	9	\$16.8	\$1.87

MP emphasized the targeted nature of the site selection; MP hopes to provide an economic boost for local communities, spread out the investment across its service territory, and take advantage of distributed-connected projects rather than transmission-interconnected projects.

#### *E. Cost Recovery*

MP requests the Commission “authorize Minnesota Power to recover the PPA and lease costs through **Commission-approved methods for solar resources**”<sup>11</sup> (emphasis added by staff). “Commission-approved methods” refers to the cost allocation structure first established in the Camp Ripley docket, which addressed the statutory exclusion of recovery of SES costs from certain large customers. In the Camp Ripley Order, the Commission approved MP’s proposed Solar Energy Adjustment Rider (SEA Rider), which the Company began applying in February 2017, and a Solar Factor adjustment.

The SEA Rider is used in conjunction with the Company’s existing Fuel and Purchased Energy Adjustment Rider (FPE Rider). To ensure costs are allocated only to solar-paying customers, SES costs are removed from the FPE Rider and recovered instead through the SEA Rider. A separate Solar Factor is part of MP’s Renewable Resource Adjustment Rider (RRR). (On April 15, 2021, the Commission approved MP’s 2020 solar factors within its RRR.) SES costs that do not flow through the SEA Rider, such as costs associated with owning and operating a solar facility, will be allocated to solar-paying customers through the Solar Factor. SES-paying customers are also credited with solar capacity benefits through the Solar Factor.

The estimated first-year rate and bill impacts of each component are shown in Table 5 below. For an average residential customer, the first-year bill impact is estimated to be \$0.58 per month, or a rate increase of about 0.72%. However, this would be slightly offset by the solar

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<sup>11</sup> Petition, p. 6.

capacity benefit, which reduces the bill impact to \$0.49 per month, or a rate increase of about 0.61%.<sup>12</sup>

Rate Class Impacts	<u>PPA Only</u>	<u>RRR Solar Factor Only</u>		<u>PPA Plus Solar Factor</u>	
	SES-Paying Customers	SES-Paying Customers	SES-Exempt Customers	SES-Paying Customers	SES-Exempt Customers
Residential (average current rate, cents/kWh)	11.162	11.162		11.162	
Increase cents/kWh	0.080	-0.012		0.068	
Increase (%)	0.72%	-0.11%		0.61%	
Average Impact (\$/month)	\$0.58	-\$0.09		\$0.49	

Staff notes that the table above shows only the first-year rate increases and bill impacts, but since the PPA includes an escalation rate, staff requested MP provided levelized rate increases and bill impacts by customer class over the 25-year PPA term. MP's response is included as Minnesota Power Response to PUC IR 3, Attachment 1. MP noted it does not have base rates, rider rates, or the required billing determinates for the 25-year term, so it could only produce estimates relative to current rates and billing determinants. MP calculated that the levelized bill impact for an average residential customer is \$0.59 per month, or a rate increase of 0.73%.

#### *F. Cost Cap Proposal*

At the January 21, 2021 agenda meeting, the Commission directed MP to include a cost cap proposal, and the Petition provides two cost cap mechanisms. First, the overall capital cost amount of \$40.9 million would be a soft cap subject to the Commission's typical rider process that allows utilities to justify in a rate case if costs go above that soft cap amount. Second, because MP will be purchasing the output of the solar facilities through a PPA, the model PPA includes an escalated pricing schedule that will provide a per megawatt hour price cap.

In the Decision Options, the Commission may approve one or both of the proposed caps:

- Approve Minnesota Power's proposed \$40.9 million cost cap and allow the Company to justify in a rate case or other rate proceeding if costs exceed that amount. **AND/OR**
- Approve Minnesota Power's per megawatt hour price cap included in Exhibit B of the model PPA.

Staff notes that while the decision alternatives are presented as "**AND/OR**," MP confirmed with staff that the Company is fine with the Commission approving both cost caps.

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<sup>12</sup> Petition, p. 44.

### G. Socioeconomic Benefits

MP conducted an economic impact study using a customized model from Regional Economic Model, Inc. (REMI).<sup>13</sup> Impacts of the three solar facilities were modeled in aggregate, rather than for each solar facility. The results are presented as Appendix B of the Petition.

As shown by Table 1 of Appendix B, below, during planning and construction in 2021, regional employment is temporarily increased by about 73 jobs – 38 direct jobs and 35 indirect jobs – and Gross Regional Product (GRP) is increased by about \$10.2 million.<sup>14</sup> Most of these immediate stimulative effects from construction fade in the post-2021 timeframe; however, the increased payments to local taxing authorities and increased purchases from local vendors for parts and maintenance provide some long-term stimulus.<sup>15</sup>

**Table 1: Economic Impacts of three solar projects totaling 20 MW in 2021**

20 MW of New Solar in 2021 Category	Construction		Operating								
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Total Employment (Individuals)	6	73	6	4	3	2	1	1	1	1	1
Gross Domestic Product (\$1000)	1,889	10,173	247	209	105	55	35	31	35	41	49
Population (Individuals)	2	26	20	17	14	12	10	9	8	7	7
Local Government Spending (\$1000)	114	709	400	239	153	106	80	66	57	52	49
Empl. - Natural Resources	-	-	-	-	-	-	-	-	-	-	-
Empl. - Construction	-	40	1	-	-	-	-	-	-	-	-
Empl. - Manufacturing	1	3	-	-	-	-	-	-	-	-	-
Empl. - Retail and Wholesale	1	6	-	1	-	-	-	-	-	-	-
Empl. - Transport and Utilities	-	2	-	-	-	-	-	-	-	-	-
Empl. - Finance, Insurance,...	-	1	-	-	-	-	-	-	-	-	-
Empl. - Services	2	14	-	1	1	-	-	-	-	-	1
Empl. - Government	1	7	4	3	2	1	1	1	1	1	1
Empl. - Farm	-	-	-	-	-	-	-	-	-	-	-

### H. Diverse Suppliers

MP discussed changes in its procurement process to encourage the participation of more diverse suppliers. For example, MP added a section to its “New Supplier Application” that allows suppliers to share their certification status or self-identify in seven diverse supplier categories: disability-owned, women-owned, veteran-owned, LGBT-owned, minority-owned, HUBZone, and small economically disadvantaged.

MP also discussed its participation in the Electric Utility Diversity Workgroup (EUDG), which authored a report to the Minnesota Legislature in early-2020 outlining recommendations for utilities to increase the diversity in both their workforce and supply chain.<sup>16</sup> The EUDG report

<sup>13</sup> REMI is an input/output econometric simulation software that combines a national economic outlook with specified regional economic conditions to produce a forecast for the 13-County Planning Area such as employment by sector, population, economic output by sector, and gross regional product.

<sup>14</sup> The REMI model has a defined geography (13-county planning region) and effectively assumes all projects are centrally located.

<sup>15</sup> Petition, Appendix B, Page 3 of 6.

<sup>16</sup> Petition, p. 50.

included a number of recommendations for increasing supplier diversity. Those recommendations, and MP's efforts in response, are included in Table 6 below.

Table 6: EUDG Supplier Diversity Recommendations and Minnesota Power's Efforts

<b>EUDG Work In Partnership Supplier Diversity Recommendations</b>	<b>Minnesota Power's Efforts</b>
Those utilities in the state that have existing Supplier Diversity programs can share their list of diverse suppliers with other utilities across state.	The Company has reached out to Xcel Energy and CenterPoint Energy for their diverse supplier lists.
They can work jointly to engage with diverse suppliers and share best practices.	The Company has had several meetings with Xcel Energy and CenterPoint Energy around best practices for supplier diversity; attended "lunch and learns" during summer 2020 co-sponsored by Xcel Energy and the Women's Business Development Center; attended the first annual Minnesota Utility Industry Supplier Diversity Symposium in early November. Outreach to Enbridge around supplier diversity best practices.
Community groups can also serve as partners by offering ideas or activities that results in enhanced supplier diversity outcomes.	The Company has attended diverse supplier networking and lunch and learn events sponsored by the Women's Business Development Center; has had virtual meetings with the National Veteran Business Development Council and the North Central Minority Supplier Development Council.
Additionally, utilities can solicit information from existing prime contractors on the subcontractors that are used and identify diverse suppliers in process.	The Company has added Tier II supplier diversity language into high volume materials contracts such as: Border States Electric, Fastenal, Ferguson Enterprises, Innovative Office Solution and Applied Industrial Technologies; in the process of adding Tier II supplier diversity language into additional service contracts including Burns & McDonnell and other service providers.
Finally, utilities can ask utility credit-card providers to identify diverse suppliers from which they are obtaining goods/services currently.	The Company solicits this information from our credit card provider on a quarterly basis.

#### IV. Party Comments

The Department of Commerce (Department), the Office of the Attorney General—Residential Utilities Division (OAG), and LIUNA Minnesota & North Dakota (LIUNA) filed Initial Comments.

MP, LIUNA, BlueGreen Alliance, and the Minnesota Solar Energy Industries Association (MnSEIA) filed Reply Comments.

The following participants letters of support for MP's Petition:

- Cass County Economic Development Corporation, an entity for job creation, technical assistance to businesses, and economic development in Cass County, Minnesota;
- City of Duluth;
- GRACE Multicultural, a local woman and minority-owned multicultural communications firm;
- Hispanics in Energy;
- Iron Range Resources & Rehabilitation;
- Range Association of Municipalities & Schools (RAMS);
- Region Five Development Commission (R5DC), an organization that engages with counties, cities, and townships to advance their community and economic vision;
- Senators Paul Gazelk, Thomas Bakk, and David Tomassoni and Representative Dave Lislegard, who represent districts than encompass Duluth, Hoyt Lakes, and Sylvan Township; and
- Twin Ports Arrowhead Chapter of NECA, a member-based association that is the voice of union electrical contractors in the Arrowhead Region of Northern Minnesota.

#### *A. Support for the Proposal*

Among the parties and participants listed above, all except the Department and the OAG recommended that the Commission approve MP's proposal. This section provides a brief summary of the benefits discussed by those recommending approval.

**Jobs and Tax Revenue:** RAMS supported the Laskin project in Hoyt Lakes, estimating that Laskin Solar will provide 31 full-time equivalent jobs for six months and tax revenue of \$18,000 per year. R5DC stated that the total investment will generate tax revenue of about \$375,000 over 15 years. State representatives of Duluth, Hoyt Lakes, and Sylvan Township cited MP's analysis showing the projects' positive contribution to Gross Regional Product and secondary economic effects. NCEA-Twin Ports applauded MP's commitment to using local prevailing wage construction labor that will put union contractors and their employees to work.

**Diverse Suppliers:** GRACE Multicultural and Hispanics in Energy recognized the Company's leadership within the EUDG. GRACE Multicultural supported MP's updated RFP process that includes diverse suppliers and diverse spending and noted that MP incorporated the EUDG's recommendations into its procurement processes.

**Local Manufacturing:** LIUNA stated that MP's commitment to buy regionally-produced solar panels will create good-paying manufacturing jobs and help grow Minnesota's clean energy manufacturing economy. BlueGreen Alliance urged the Commission to consider how utilities procure materials, as extremely low-cost solar panels can be produced by forced labor in China. MnSEIA stated that locally-manufactured solar modules and local labor will benefit the employment of Minnesotans, and Heliene modules are of the highest-quality and represent the finest of Minnesota manufacturing.

**Consistency with local initiatives:** The City of Duluth stated that MP's proposal is consistent with the Duluth Citizens Climate Action Plan. R5DC stated the Sylvan project fits well within the Comprehensive Regional Economic Development Strategy (CREDS) in its region.

**Community-based approach:** Cass County Economic Development Corporation appreciated MP's localized approach, which shows that MP is a partner in the creation of strong rural economies. LIUNA stated that MP customers want to see evidence that the clean energy transition will involve investments inside the service territory that create jobs for them. BlueGreen Alliance stated that renewable energy development has so far failed to create local jobs, and the U.S. is reliant on foreign supply chains for solar.

**Minimal bill impact:** Hispanics in Energy stated that the cost to customers of less than \$0.50 per month is an excellent investment for clean energy. LIUNA stated that the projects will not create any meaningful burden for ratepayers.

### *B. Disputed Issues*

The disputes in this case largely stem from MP's decision not to acquire the solar projects through competitive solicitation, which the Company was required to do. Because the PPA had no competition, the Department and the OAG were concerned the costs could be too high, and both recommend the Commission require MP to issue an RFP for additional solar. The Department stated there is no imminent need for a solar facility, so a competitive process can be completed without risk that the Company will have a deficit of SRECs.

#### 1. The Need for a Solar Facility

The Department stated that in MP's 2019 SES Report,<sup>17</sup> MP reported a balance of 78,011 SRECs. Using the energy sales forecast from MP's 2021 IRP, the Department estimated that MP has sufficient SRECs to meet its SES requirement through approximately 2025. Therefore, MP has enough time to undertake a competitive bidding process for the acquisition of additional solar.

### **MP Response**

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<sup>17</sup> Docket No. 20-464.

MP argued that the Commission has recognized MP's need to obtain an additional 22 MW of solar power by 2025 to meet its SES requirements. For 2021, MP plans to use banked SRECs to meet the SES. Without the proposed projects, MP will have insufficient SRECs starting in 2022.

### Staff Comment

Attachment A of the Department's comments shows MP's SREC balance by year, and from this table, the Department concluded that MP has a surplus of SRECs through 2025.

#### Attachment A: Estimate of SES Requirements

Total Retail	9,014,804,625						
Excluded	5,990,228,784						
Subj. to SES	3,024,575,841						
	<b>MWh</b>	<b>less excl. sales</b>	<b>Subj to SES</b>	<b>SES Req.</b>	<b>Annual Gen.</b>	<b>Balance</b>	<b>Beg. Balance at yr-end 2020</b>
2019	9,014,805	5,990,229	3,024,576			78,011	
2020	6,429,214	5,990,229	438,985	6,585		71,426	
2021	8,018,229	5,990,229	2,028,000	30,420	19,377	60,383	
2022	8,019,984	5,990,229	2,029,755	30,446	19,377	49,314	
2023	8,019,386	5,990,229	2,029,157	30,437	19,377	38,254	
2024	8,048,545	5,990,229	2,058,316	30,875	19,377	26,756	
2025	8,238,929	5,990,229	2,248,700	33,731	19,377	12,402	
2026	8,404,497	5,990,229	2,414,268	36,214	19,377	(4,435)	
2027	8,415,657	5,990,229	2,425,428	36,381	19,377	(21,439)	
2028	8,446,712	5,990,229	2,456,483	36,847	19,377	(38,909)	
2029	8,430,339	5,990,229	2,440,110	36,602	19,377	(56,134)	
2030	8,430,290	5,990,229	2,440,061	244,006	19,377	(280,763)	
Sales from Appdx A MP IRP 21-33							
Annual Generation reflects average actual solar generation for 2019 & 2020							
SES Requirement begins in 2020							
Balance = Prior-Yr balance + annual generation - SES requirement							

After reviewing MP's 2020 Annual Electric Utility Forecast Report (2020 AFR) and June 1, 2020 SES Compliance Report (for the 2019 compliance year), which are the same sources the Department used to estimate MP's SES requirements, staff concluded MP will incur a deficit of SRECs sooner than 2025.

One reason is because staff believes the Department's assumed sales subject to the SES is too low. Staff refers the Commission to the "Subj. to SES" column of the table above, which shows sales subject to the SES reduce by approximately 1,000,000 MWh in 2021 relative to 2019 (and with no significant increase through 2024). Next, staff refers the Commission to the "less excl. sales" column, which in the 2020 AFR includes mining and industrial customers.<sup>18</sup> Note that the Department held SES-excluded sales constant through 2030.

<sup>18</sup> Mining is reported as a separate category if annual sales are greater than 1,000 GWh. Otherwise, mining is included in the industrial category.



Staff disagrees that SES-exempt sales should be held constant because SES-exempt sales is where the most significant reduction in forecasted energy sales occurs. The table below shows non-farm residential, commercial, mining, and industrial sales, as well as calculated system totals, from the 2020 AFR.<sup>19</sup> Together, mining and industrial sales decline by 1,011,178 MWh from 2019 to 2021; however, adding together residential and commercial sales results in an *increase* of 17,631 MWh. Also, note that non-farm residential and commercial sales alone exceed the Department's estimate for sales subject to the SES in 2021.

		Non-Farm Residential	Commercial	Mining	Industrial	Calculated System Totals
Past Year (2019)	MWH	1,008,187	1,202,403	5,038,704	1,670,560	9,014,805
Present Year (2020)	MWH	1,005,610	1,227,755	2,648,800	1,454,578	6,429,214
1 <sup>st</sup> Forecast Year (2021)	MWH	1,000,730	1,227,491	4,426,719	1,271,367	8,018,229
2 <sup>nd</sup> Forecast Year (2022)	MWH	999,715	1,226,346	4,466,021	1,236,545	8,019,984
3 <sup>rd</sup> Forecast Year (2023)	MWH	998,951	1,226,790	4,468,010	1,234,366	8,019,386

Because the Department assumed SES-excluded sales do not change, the Department's table assumes the reduction comes entirely from sales subject to the SES, which is not the case in the 2020 AFR. If sales subject to the SES in 2021 remain similar to 2019, MP's SES requirement in 2021 would be roughly 15,000 MWh higher than what the Department's table shows.<sup>20</sup>

Staff also noticed inconsistencies between MP's June 1, 2020 SES Compliance Report and the Department's SREC balance and annual SES generation values. The table below is an excerpted version of MP's reported 2019 year-end balance and accrued SRECs. According to the report, MP accrued 17,386 SRECs in 2019 to bring the Company to a year-end balance of 56,644 SRECs.

<b>Breakdown of S-RECS generated</b>				
	Balance at Beginning of Reporting Year	Accrued in Reporting Year	Used in Reporting Year	Year End Balance
1. Utility-owned solar projects	35,463	14,012		49,475
4. Community Solar Gardens - Minnesota Power Program*				
a. Subscribed Portion	1,616	1,732		3,348
b. Unsubscribed Portion	350			350
7. Facilities under a net metering tariff				
a. Receiving an incentive (any type)	1,829	1,642		3,348
<b>Total</b>	<b>39,258</b>	<b>17,386</b>		<b>56,644</b>

<sup>19</sup> To reduce space and aid the readability of the table, staff used only the past year, present year, and three forecast years, and included these four customer classes because they accounted for 98% of total sales in 2019 and account for 90% of total sales in the 2021 forecast year.

<sup>20</sup> 2,000,000 MWh \* 0.015 = 30,000 MWh; 3,000,000 MWh \* 0.015 = 45,000 MWh; 45,000-30,000 = 15,000 SRECs.

The Department's table shows that MP had a 2019 balance of about 78,000 SRECs and a 2020 balance of about 71,000 SRECs, while annual SES generation held constant at 19,377 MWh from 2021-2030. For the 2019 reporting year, however, MP's beginning and year-end balance were far less than the Department's estimates, and MP's solar generation was lower than the Department's estimate. Because MP's sales subject to the SES should be higher than the Department's estimate, and MP's SREC balance appears to be lower than the Department's estimate, staff concludes MP will have a deficit of SRECs sooner than 2025.

Having said that, the Department's point is that MP could use SRECs in order to allow time for a competitive bidding process. Since MP has the option of purchasing SRECs, the Commission might find that, even in the event MP could incur a deficit, purchasing SRECs for a short period of time is a more reasonable option than approving a PPA that is not in the public interest.

## 2. Acquisition Process and Project Costs

The dispute regarding the acquisition process can be considered alongside the issue of cost; the Department and the OAG argued that competitive bidding could have resulted in lower-cost projects, and both recommend the Commission require MP to issue a solar RFP.

### a. Department comments

The Department argued that the Commission's Camp Ripley Order required MP to undertake a competitive process that would explore more sites and help lower costs. In addition, solar prices have continued to decline since the Commission's order. Acquiring cost-effective projects is particularly important in MP's case given that Minn. Stat §216B.1691, Subd 2f(f) (1) and (2) excludes SES costs to be recovered from the following customers:

(1) an iron mining extraction and processing facility, including a scam mining facilities as defined in Minnesota Rules, pt. 6130.0100, subpart 16; or

(2) a paper mill, wood products manufacturer, sawmill, or oriented strand board manufacturer. In addition to being excluded from the calculation of a utility's SES requirements, customers in these industries are excluded from paying for any of the costs associated with satisfying the SES requirement.

SES-exempt customers represent approximately 70% of MP's retail sales, which means the cost of solar resources are borne entirely by customers representing just 30% of MP's retail sales. Competitive bidding will ensure that customers paying for solar resources are protected.

### b. OAG comments

The OAG argued that the Commission's approval of the PPA is governed by the affiliated-interest statute, Minn. Stat. § 216B.48. Under that statute, the Commission may only approve a utility's contract with an affiliated interest "if it clearly appears and is established upon investigation that [the contract] is reasonable and consistent with the public interest."<sup>21</sup>

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<sup>21</sup> Minn. Stat. § 216B.48, subd. 3.

According to the OAG's analysis, MP's proposal will "impose a hefty bill impact on ratepayers over the life of the projects."<sup>22</sup> The OAG determined that, even under MP's calculation of the levelized costs, Laskin, Sylvan, and Duluth Solar are, individually and collectively, well-above those of competitively procured solar projects. The OAG developed its own levelized cost calculation, which used the Company's first-year price and the escalation factor, and found that the levelized costs were even higher than MP's estimate.

The OAG recognized that the projects will bring some economic benefits to MP's service area, and the OAG agreed that the PPA might be justified if the economic stimulus outweighs the price premium. However, the OAG concluded "the amount of these benefits is dwarfed by the price premium."<sup>23</sup> By MP's own estimate, the projects will result in only \$15.4 million in regional economic benefits over the entire PPA term.<sup>24</sup>

Attachment A of the OAG's comments compare the total payments over the 25-year PPA term to the total payments of a "Market rate PPA" to show that the "MP Premium" is more than double the regional economic benefits. Therefore, the OAG determined the utility did not clearly establish that the affiliated-interest agreement is in the public interest.

The OAG believes that a better path forward is for MP to conduct an open, competitive procurement process to ensure that the Company obtains stimulus benefits at the lowest possible cost to ratepayers. The OAG recommends the Commission require MP to seek up to 30 MW of solar – more than what MP proposes – and that MP should file the proposed bidding process, timeline, evaluation criteria, and RFP language with the Commission at least one month prior to the issuance of the RFP.

### **c. MnSEIA**

MnSEIA supports MP's proposal, but its support is contingent on future biddable projects. MnSEIA argued that competitive bidding encourages an open transparent process that allows solar projects of all kinds to be considered, which results in the best value and innovation that the solar industry can provide. Furthermore, competitive bidding "offers one of the relatively few chances in Minnesota's vertically-integrated, monopoly utility market for non-utility actors to contribute."<sup>25</sup>

MnSEIA stated it is concerned with perhaps stymying further investment in solar that would otherwise be pursued through a competitive solicitation. Therefore, MnSEIA recommends the Commission "open a docket to explore what avenues are available for near-term solar deployment that is both outside of these projects and open to competition from developers."<sup>26</sup>

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<sup>22</sup> OAG comments, p. 4.

<sup>23</sup> OAG comments, p. 4.

<sup>24</sup> OAG comments, p. 8.

<sup>25</sup> MnSEIA comments, p. 3.

<sup>26</sup> MnSEIA comments, p. 3.

#### d. MP Reply

MP responded that its acquisition process was tailored to reflect the Commission's directive in the Economic Recovery docket. In addition, the procurement process intended to promote equity and diversity efforts, consistent with the Commission's EUDG report recommendations.<sup>27</sup> Furthermore, MP argued that an open, competitive bidding process could result in the outsourcing of the manufacturing of solar panels when a local manufacturer located in northern Minnesota is capable of providing panels needed for the projects.

MP also disagreed with the OAG's argument that the PPA is more expensive than smaller-sized solar projects that would be solicited through an RFP. Specifically, the OAG's calculation of \$47.81/MWh<sup>28</sup> as a competitive small-solar offer price is unrealistic; MP argued the OAG's assumptions leading to this calculation are unclear, but they seem to be biased toward achieving the lowest possible comparable price. In addition, MP argued the OAG based its competitive small-scale market price on construction costs for larger solar projects.

Both the Department and the OAG referred to Otter Tail's 49.9 MW Hoot Lake Solar Project as an indicator that the costs for Sylvan, Laskin, and Duluth Solar are too high. MP argued that the Hoot Lake Solar comparison "fails to consider the size difference of the projects and also any differing tax treatments in reaching the conclusion that they should have a similar price."<sup>29</sup>

### V. Staff Discussion

#### A. Commission Considerations

Before addressing specific aspects of the disputed issues, staff will discuss three general areas for the Commission to consider: compliance with Commission orders; balancing economic stimulus with ratepayer impacts; and SES compliance costs.

##### 1. Compliance with Commission Orders

The Commission's Camp Ripley Order required MP to acquire future solar resources through competitive solicitation, and MP did not seek the PPA with ALLETE Enterprises through a competitive process. When resource acquisition proposals deviate from Commission orders, it might signal that Commission orders do not need to be followed. Therefore, while the Commission has previously allowed departures from resource acquisition requirements, the utility must first justify that unique circumstances demand a different approach.<sup>30</sup> Specifically, MP must justify that granting a waiver is in the public interest.

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<sup>27</sup> MP reply comments, p. 3.

<sup>28</sup> MP is responding to pages 5-6 of the OAG's comments.

<sup>29</sup> MP reply comments, p. 9.

<sup>30</sup> For example, Xcel Energy acquired Dakota Range Wind III without an RFP to meet the needs of the Google data center, and the Commission reasoned that "unique circumstances can justify more flexible methods in order to ensure that the process does not work to the detriment of all parties."

MP argued that the proposal is a “direct response” to the Commission’s May 20, 2020 Notice in the Economic Recovery docket. This characterization could be misleading if interpreted as though the Company would have not pursued the projects but for the Commission’s inquiry. Below is the timeline of MP’s solar acquisition since the Commission’s July 2016 Order approving MP’s IRP. Notably, MP announced the solar investment just three weeks after the Commission’s May 20, 2020 Notice, which indicates that MP had already been planning to backfill the Blanchard Project with other projects within its service territory.

- August 4, 2016: MP issued an RFP for up to 300 MW of solar.
- June 18, 2018: MP filed a Petition for Approval of the 10 MW Blanchard Project.
- October 1, 2018: The Commission approved the Blanchard Solar PPA.
- December 13, 2018: MP notified the Commission that the Morrison County Board of Commissioners voted against granting a site permit for the Blanchard Project.
- April 28, 2020: MP filed a letter notifying the Commission that the Blanchard PPA was terminated.
- May 20, 2020: The Commission issued its Notice in the Economic Recovery docket.
- June 17, 2020: MP filed comments in the Economic Recovery docket stating it will be requesting Commission approval to invest \$40 million in the Laskin, Sylvan, and Duluth Solar projects.<sup>31</sup>

While MP describes the projects as economic recovery opportunities, staff views the Petition mostly as a long-awaited proposal to comply with the IRP; it has been nearly five years since the Commission required MP to procure 12 MW of additional solar by 2020, and the Company has not yet met this requirement. When viewed strictly through the lens of IRP compliance, it could be argued that backfilling the Blanchard Project acquired through a competitive process with a more expensive PPA not acquired through a competitive process is unreasonable.

However, staff does not believe MP’s decision to bypass a competitive bidding process is necessarily disqualifying. Pages 25-27 of the Petition provide several reasons why MP elected to develop three self-build solar projects outside of an open RFP process. In the following sections, staff will discuss arguments for and against waiving MP’s resource acquisition requirements and approving the PPA.

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<sup>31</sup> Docket No. 20-492, *In the Matter of an Inquiry into Utility Investments That May Assist in Minnesota’s Economic Recovery From The COVID-19 Pandemic*, p. 11 (June 17, 2020).

## 2. Rate Impacts

Careful consideration should be given to proposals that align with state energy goals, but at the same time, are expected to increase rates. Arguably, rate impacts have not been mitigated to the fullest extent if the solar projects are not the least-cost solar projects MP could acquire.

On the one hand, MP's proposal will help meet the Company's SES requirements, reduce carbon dioxide (CO<sub>2</sub>) emissions by displacing carbon-emitting generation, advance Minnesota's progress to a renewable economy, and promote local economic development—those benefits are undisputed. On the other, MP's analysis shows that the projects may increase rates by around 0.8% on a levelized basis,<sup>32</sup> with the exception of certain large SES-exempt industrial customers who will not bear the costs of the projects.

LIUNA stated that the projects “will not create any meaningful burden for ratepayers,” and MP implied the bill impacts are insignificant by stating that the projects can be acquired at “less than \$0.50 per month for the average residential customer.”<sup>33</sup> Staff is uncomfortable with statements that broadly define what a meaningful bill impact is—residential customers who have also seen hardships from the pandemic may find any increase in bills undesirable. The Commission will need to consider whether policy objectives and socioeconomic benefits outweigh the rate impacts to customers not exempt from the SES.

## 3. SES Compliance Costs

With the 10 MW from Camp Ripley acquired without competitive solicitation, and the approximately 21 MW from the Laskin, Sylvan, and Duluth Solar projects acquired without competitive solicitation, all of MP's SES requirements would be met without a competitive bidding process. In addition, MP has chosen to consider only small-scale solar projects, while acknowledging that larger projects could result in lower-cost solar resources.<sup>34</sup>

Generally speaking, staff believes achieving the SES cost-effectively is an important goal. But according to MP's 2021 SES Rate Impact Report, which is Attachment I of its IRP and filed in the instant docket,<sup>35</sup> the SES results in a significant cost premium relative to other sources of generation. As shown by an excerpt of the SES Rate Impact Report below, MP estimated that the levelized cost of the SES is \$106.86/MWh on a historic basis and \$80.21/MWh over the IRP timeframe,<sup>36</sup> which results in a \$42.07/MWh premium over total avoided costs:

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<sup>32</sup> According to MP's response to PUC IR 3, using a PPA-only recovery method, bills increased by 0.84-1.11% on a levelized basis. Under a PPA Plus Solar Factor method, bills increased by 0.73%-0.98%.

<sup>33</sup> Petition, cover page.

<sup>34</sup> On page 33 of the Petition, MP discussed a SEIA report and a Berkeley Lab report showing that larger projects have significantly lower costs in \$/watt terms.

<sup>35</sup> MP filed its RES/SES Rate Impact Report in the instant docket as MP Response to PUC IR 5.

<sup>36</sup> The 56,235 MWh includes Camp Ripley, Laskin, Sylvan, Duluth, as well as some small-scale solar, such as community solar.

Levelized SES Generation	Historic Period (2005-2020)	Future Period (2021-2035)
Total SES Generation (PPA + Owned, MWh)	13,820	56,235
Total Cost for SES Generation (\$/MWh)	\$106.86	\$80.21
Total Avoided Costs (\$/MWh)	\$59.46	\$38.14
<b>Total SES Premium (\$/MWh)</b>	<b>\$47.39</b>	<b>\$42.07</b>

MP stated that the investment will enable the Company to meet its SES obligations early. One of staff's concerns is that unnecessarily meeting the SES more quickly could result in meeting the SES more expensively.

### B. Levelized Cost Considerations

A threshold question in this docket is weighing the regional stimulus benefits against the rate increase for SES-paying customers. The OAG provided guidance on how to consider this issue by comparing the "MP Premium" – that is, the difference between the PPA's energy payments and the OAG's estimate of a market-rate PPA – to the estimated \$15.4 million in regional economic benefits.<sup>37</sup> The OAG determined that the price premium significantly outweighs the regional economic benefits. MP countered that the proposed projects *do* reflect a market rate PPA for smaller utility-scale solar, and in combination with the local benefits, the solar projects are clearly in the public interest.

In terms of levelized costs, the PPA does not reflect the least-cost solar resources MP could have acquired, but there are reasons for this which the Commission might decide are valid. From staff's perspective, it was not MP's intention to acquire solar projects with the lowest LCOE. MP explained it aimed to balance price and targeted stimulus. The package's price premium is the result of several choices the Company made, and the Commission could consider the following questions when determining whether the PPA price can be justified:

- Was it reasonable for MP to consider projects 10 MW or less only?** MP argued that the OAG's estimate of a market-rate solar project is incorrect because it failed to consider the fact that MP's proposed projects are smaller. This response concedes that MP could have acquired a solar project with a lower LCOE if the Company had sought larger-sized projects. MP chose to spread out its investment across the Company's service territory, and in doing so MP selected three smaller-sized solar projects. It should be expected that three smaller projects will have higher LCOEs than one large project, so if the Commission determines MP's choice to spread out its solar investment was reasonable, then a price premium can be justified.

<sup>37</sup> The OAG's results are presented in Attachment A of its comments.



- **Was it reasonable for MP to locate projects in the northerly areas of its service territory?** As discussed previously, Laskin Solar is expected to have less energy output and a lower capacity factor than Sylvan Solar, which is roughly the same size, because MP chose to site a solar project in the more northerly Hoyt Lakes area. Because the Hoyt Lakes area has relatively less solar resource availability, it should be expected that it would have a higher LCOE than Sylvan. MP chose the Laskin Energy Park as a site because it is a host community that has been impacted by the closure of small coal plants. The Commission may find it is reasonable for MP to site a solar project in a host community even though the LCOE is higher due to being located in a lower solar resource area.
- **Does MP's project cost comparison provide a reasonable benchmark?** Typically, a resource acquisition petition would include capacity expansion modeling to show the net present value of the project, but MP did not conduct that analysis. The Commission has considered LCOEs of recently-approved projects and/or the results of a recent RFP as a reasonable benchmark, but the most recent solar bid prices MP has received are from 2016.<sup>38</sup> MP justified the cost of the solar projects by presenting a summary of recent market data compared to the proposed projects, in terms of cost per watt and total investment cost (see Table 4 of the Petition or page 8 of the briefing papers). In order to determine whether the PPA price is reasonable, the Commission will need to decide if the summary of market data is a sufficiently reasonable benchmark.
- **Are the terms of the PPA in ratepayers' interests?** As stated above, MP's market summary benchmark compared projects by total investment and cost per watt, but in a competitive bidding process, projects would also be evaluated on the favorability of their *terms*, not just capital costs. For example, the Blanchard PPA had a fixed price for the entire 25-year term, whereas the PPA proposed in this Petition has an escalating pricing schedule. MP explained that "[t]he moderate price escalation throughout the term of the PPA is projected to be tempered by concurrent inflation and increases in energy costs."<sup>39</sup> Because MP did not have to compete against another bid, it did not have to consider the possibility that an alternative proposal could be offered with a lower or no escalator. MP's REMI analysis stated that the majority of the immediate stimulative effects from construction fade in the post-2021 timeframe,<sup>40</sup> but the costs recovered from ratepayers will continue to escalate over the 25-year term of the PPA. (Staff refers the Commission to Appendix A, Exhibit B, Page 62 of the Petition to see the contract energy price schedule.)

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<sup>38</sup> In response to PUC IR 1, MP filed the independent evaluator report from MP's 2016 Solar RFP. Table A-6 on Page R-21 shows the top-ranking 10 MW proposals.

<sup>39</sup> Petition, p. 36.

<sup>40</sup> Petition, Appendix B, Page 1 of 6.

### C. Acquisition Process

#### 1. Clarifying the Department and OAG positions

Given some of the responses to the Department's and OAG's comments, it is worth clarifying the Department's and OAG's positions. BlueGreen Alliance, for example, asserted that the Department and OAG are "urging a view of utility procurement that would close its eyes to everything but the absolute lowest cost bidder."<sup>41</sup> This is not only an inaccurate (and frankly unfair) assessment of the Department's and OAG's position, but it mischaracterizes competitive bidding processes overall.

The Department and the OAG determined that MP should have followed the Commission's requirement to use an open, formal competitive bidding process, and that doing so could be beneficial to MP's ratepayers. The OAG, which actually called for more solar generation than MP proposed, did not oppose local components or labor. Rather, the OAG concluded:

Instead of crafting a bid invitation that (for example) assigns points to these factors, Minnesota Power simply awarded an overpriced project to its affiliate.<sup>42</sup>

The existence of market competition is not inherently at odds with considering local benefits and diverse suppliers. For example, in Xcel Energy's recent solicitation for wind repowering projects,<sup>43</sup> Xcel's RFP indicated bid preferences, such as the use of union labor, and bids were screened based on whether they met the RFP requirements. Xcel then ranked projects by a "Final Weighted Score," which was derived by assigning projects points for price and non-price factors. One non-price factor, for example, was "Certified Diverse Suppliers," which was defined as "suppliers of material or labor from a firm owned by various minority, women, veteran, disabled personnel, etc."<sup>44</sup> This factor accounted for 7.5% of the project's score.

The Commission previously determined in the Camp Ripley Order that "competitive processes to choose project sites help reduce costs."<sup>45</sup> MnSEIA stated (and staff agrees) that "RFPs encourage an open and transparent process that balances the economic power of a monopoly utility and protects the interests of ratepayers."<sup>46</sup> Competitive bidding does not necessarily disincentivize domestic manufacturing or local labor if there are clear evaluation criteria in place when an RFP is issued.

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<sup>41</sup> BlueGreen Alliance reply comments, p. 3.

<sup>42</sup> OAG comments, p. 12.

<sup>43</sup> Docket No. 20-620.

<sup>44</sup> Docket No. 20-620, Xcel Petition for Approval of Wind Repower Portfolio, Attachment A (Independent Auditor's Final Report: Northern States Power Company 2020 Wind Repowering Solicitation), p. 33 of 74.

<sup>45</sup> Docket No. 15-773 PUC Order Granting Petition In Part and Requiring Reevaluation of Solar Energy Adjustment Rider, p. 6 (February 24, 2016).

<sup>46</sup> MnSEIA comments, p. 3.

## 2. Starting a New Competitive Bidding Process

If the Commission adopts the Department's and the OAG's recommendation to require MP to complete a competitive bidding process, perhaps MP could submit its PPA alongside other bids, and the Commission could ensure that criteria include (1) location in MP's service territory; (2) the use local labor and materials; and (3) diverse suppliers and spending. However, staff questions the feasibility of starting a new RFP process, and doing so could require significant time and cost, as well as perhaps jeopardizing the viability of the projects completely.

Regarding timing, MP first announced the projects approximately 11 months ago, and as staff suggested previously, it is likely that planning began well-before the Commission's May 20, 2020 Notice. This seems to have involved working with local communities who filed support for the Company's proposal and working with organizations such as GRACE Multicultural and Hispanics in Energy to modify the Company's procurement processes.

Regarding cost and project viability, MP has already secured Safe Harbor modules for all of the projects through a contract with Heliene. MP also discussed that the Company is seeking a tax equity investor to utilize the ITCs. The status of finalizing an agreement with a tax equity investor is unclear, but MP could lose that partnership if the resource acquisition process essentially starts over. Since MP has bundled all three projects into one PPA – MP explained that finance partners are typically only interested in larger projects, but have indicated they will participate in a package as low as around \$40 million – losing the financial partnership could put all three projects at risk. MP could develop the projects without a tax equity partnership, but MP explained that because tax equity ownership will create the most value out of the ITCs, it would increase costs for MP to use the ITCs.

Staff would agree that the Department's and the OAG's recommendations reflect what MP *should have done* following the termination of the Blanchard PPA, but staff is reluctant to recommend a new competitive bidding process at this point, given that there are three solar projects with ostensible community support and contracts in place that are ready to begin construction in 2021.

## 3. New Solar Deployment Docket (MnSEIA Recommendations)

MnSEIA has two main recommendations. First, MnSEIA recommends that if the Commission were to deny MP's petition and require a competitive bidding process, that process should require local labor and materials. Staff believes this is a reasonable recommendation. However, staff notes that the term "materials" might need to be clarified. As staff understands it, only the modules will be produced locally; the projects' racking piles, trackers, substation, and inverter skids will not be manufactured locally.<sup>47</sup> Also, instead of requiring local labor and materials, perhaps more flexibility could be incorporated in order to prioritize rate impacts; for example, staff believes Xcel's approach, in which customer value was the main factor, but non-price factors were incorporated into the final score, is preferable to imposing non-price requirements.

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<sup>47</sup> MP Reply Comments, p. 6.

MnSEIA's second recommendation is that the Commission open a new docket to explore near-term solar deployment. It is unclear whether MnSEIA's recommendation would be a docket specific to MP or a broader Commission Investigation into resource acquisition practices, but either way, staff does not support this recommendation.

If the recommendation for a new docket is specific to MP, MP already has a requirement to use competitive bidding, and no party objected to the solar RFP process MP used in 2016 to acquire the Blanchard Project. To the extent that process is now unsatisfactory, it might be a better use of resources to explore resource acquisition practices in MP's IRP. Also, near-term solar deployment and acquisition is generally driven by an identified need. If the PPA is approved, MP will no longer have an immediate need for solar resources to comply with its IRP or SES.

If MnSEIA's recommendation pertains to a broader Commission Investigation into solar acquisition, staff believes it would be highly unlikely to achieve widespread consensus among utilities regarding how they plan to acquire resources. For example, the Commission recently heard Otter Tail Power's Hoot Lake Solar case, in which Otter Tail strongly opposed Xcel Energy's Track 1/Track 2 process, for reasons including but not limited to Otter Tail's multi-jurisdictional approach to resource acquisition. The Commission and utilities may prefer to address how resources shall be acquired as part of individual IRP filings and when needs arise.

## VI. Decision Options

### Minnesota Power recommendations

1. Approve Minnesota Power's request to execute three affiliated interest agreements between the Company and ALLETE Enterprises, Inc. related to the Laskin, Sylvan, and Duluth Solar. Approve the leases of Minnesota Power property near the Sylvan hydroelectric station and in the Laskin Energy Center.
2. Find that the solar projects are in the public interest and approve the projects as a reasonable and prudent way for the Company to continue to work towards meeting its obligations under Minn. Stat. § 216B.1691.
3. Authorize Minnesota Power to recover the PPA and lease costs through Commission-approved methods for solar resources.
4. Waive the solar project RFP requirements set forth in the Camp Ripley Solar Project docket.
5. Approve Minnesota Power's proposed \$40.9 million cost cap and allow the Company to justify in a rate case or other rate proceeding if costs exceed that amount. **AND/OR**
6. Approve Minnesota Power's per megawatt-hour price cap included in Exhibit B of the model PPA. *(Staff notes that MP confirmed with staff that the Company is fine with 5 AND 6.)*

### Department recommendations

7. Deny the Petition.
8. Direct Minnesota Power to issue an RFP for additional solar. *(Staff notes that Decision Option 9, if adopted, could eliminate the need for this option.)*

### OAG Recommendations

9. Require Minnesota Power to complete a competitive bidding process to procure up to 30 MW of solar PPAs, subject to the following conditions:
  - a. Minnesota Power shall employ an independent auditor to oversee the competitive bidding process.
  - b. The competitive-bidding process shall include a request for proposals that is posted publicly, open to any interested developer, and not limited to any specific location.
  - c. Minnesota Power's proposed bidding process, timeline, evaluation criteria, and request-for proposals language shall be filed with the Commission at least one month prior to the issuance of the request for proposals.
  - d. Following its review of the proposals, Minnesota Power shall make a compliance filing detailing the results of the competitive bidding process and its proposed

next steps. The independent auditor's report shall be included as an attachment to the compliance filing.

- e. Require Minnesota Power to use local labor and materials. *(MnSEIA addition)*

### **MnSEIA Recommendation**

- 10. Open a docket to explore what avenues are available for near-term solar deployment that is both outside of these projects and open to competition from developers.

### **Staff Option**

- 11. MP shall file the executed PPA, Sylvan and Laskin Land Leases, and Duluth Land Lease as a compliance filing. *(Staff notes that because this would be a compliance filing, it would not need to come back to the Commission again for approval.)*