

## Staff Briefing Papers

**Meeting Date**    **March 19, 2026**

**Agenda Item 1\***

**Company**            Crane Energy Storage LLC, Sandhill Energy Storage LLC

**Docket No.**        IP-7148/ESS-24-406, IP-7149/ESS-24-407

In the Matter of the Application of Crane Energy Storage LLC for a Site Permit for the up to 200 MW Crane Energy Storage Project in Olmsted County, Minnesota

In the Matter of the Application of Sandhill Energy Storage LLC for a Site Permit for the up to 200 MW Sandhill Energy Storage Project in Olmsted County, Minnesota

**Issues**

1. Should the Commission adopt the Administrative Law Judge’s Finding of Fact, Conclusion of Law, and Recommendations?
2. Should the Commission find that the environmental assessment and the record created at the public hearings address the issues identified in the scoping decision?
3. Should the Commission issue a site permit for both 200-MW Crane and Sandhill energy storage facilities?

**Staff**

Jacques Harvieux

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651-201-2233

### ✓ **Relevant Documents**

**Date**

Crane Energy Storage LLC and Sandhill Energy Storage LLC – Site Permit Application (8 parts)

March 5, 2025

Jeremy Andrist (SE Minnesota Trades President) – Public Comment

March 25, 2025

PUC EIP Comments on Completeness

March 25, 2025

Order Accepting Application as Complete

April 29, 2025

Crane Energy Storage LLC and Sandhill Energy Storage LLC – Draft Vegetation Management Plan

May 13, 2025

IUOE Local 49/NCSRCC – Comments

July 10, 2025

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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.

| <b>✓ Relevant Documents</b>   | <b>Date</b>       |
|---|-------------------|
| MN DNR – Comments and Natural Heritage Review Letter (2 parts)  | July 10, 2025     |
| PUC EIP – Environmental Assessment Scoping Decision   | August 15, 2025   |
| PUC EIP – Environmental Assessment  | November 7, 2025  |
| Crane Energy Storage LLC and Sandhill Energy Storage LLC – Direct Testimony of J. Hingston                                    | November 25, 2025 |
| MN DNR – Comments   | December 16, 2025 |
| PUC EIP – Comments  | December 16, 2025 |
| Crane Energy Storage LLC and Sandhill Energy Storage LLC – Proposed Findings of Fact, Conclusions of Law, and Recommendations | December 23, 2025 |
| Crane Energy Storage LLC and Sandhill Energy Storage LLC – Comments – Response to Public Hearing Comments                     | December 23, 2025 |
| PUC EIP – Comments – EIP Comments on Proposed Findings of Fact  | January 13, 2026  |
| PUC – Ex Parte Communication – Leonard Wabasha  | February 6, 2026  |
| CAH – Findings of Fact , Conclusions of Law, and Recommendation   | February 12, 2026 |
| PUC EIP – Exceptions to ALJ   | February 23, 2026 |
| Applicant Exceptions to ALJ Report  | February 27, 2026 |

## **Attachments**

Table 1: Proposed Site Permit Language  
Attachment A: Proposed Site Permits

### **Statement of Issues**

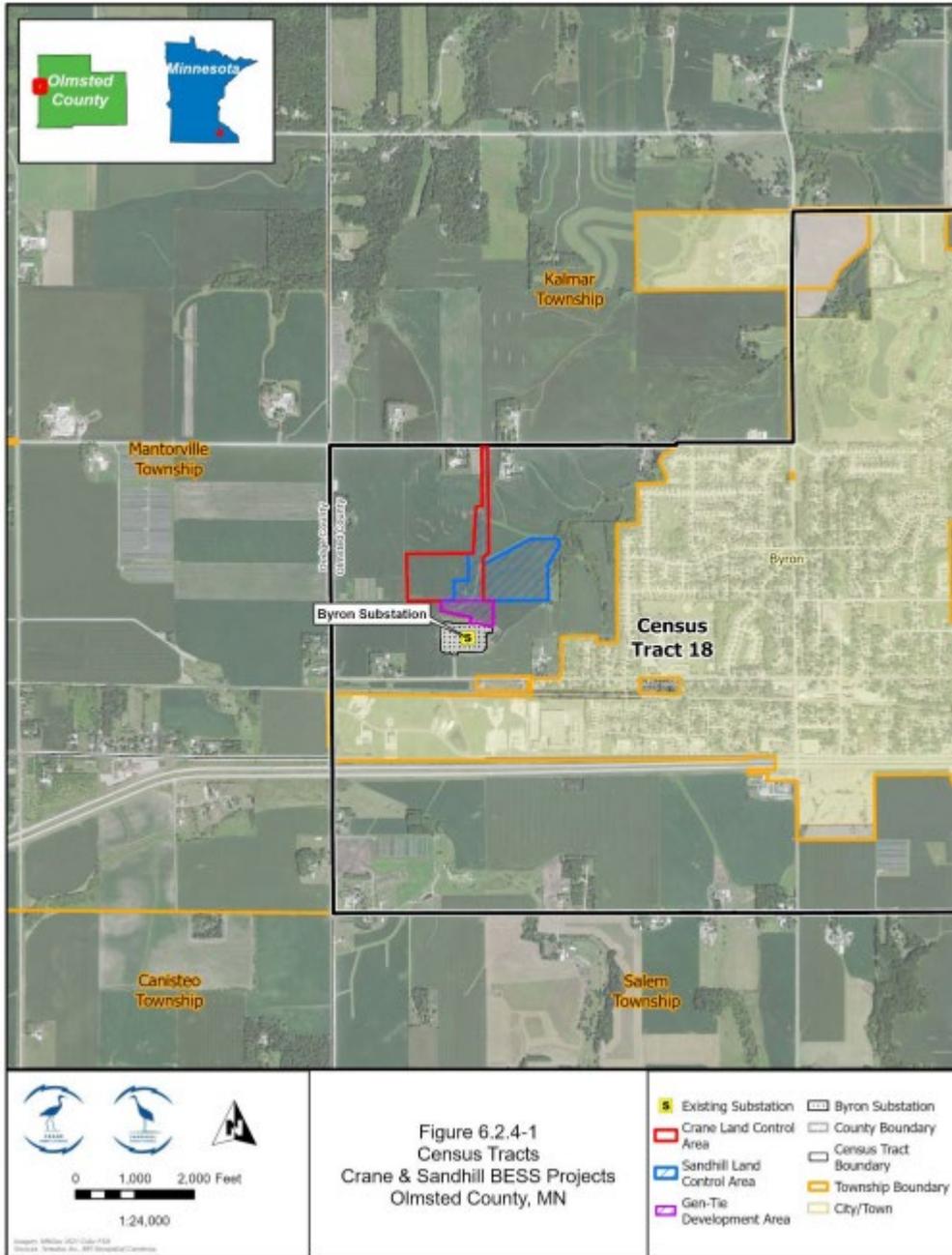
1. Should the Commission adopt the Administrative Law Judge’s Finding of Fact, Conclusion of Law, and Recommendations?
2. Should the Commission find that the environmental assessment and the record created at the public hearings address the issues identified in the scoping decision?
3. Should the Commission issue site permits for both the 200-MW Crane and 200-MW Sandhill energy storage projects?

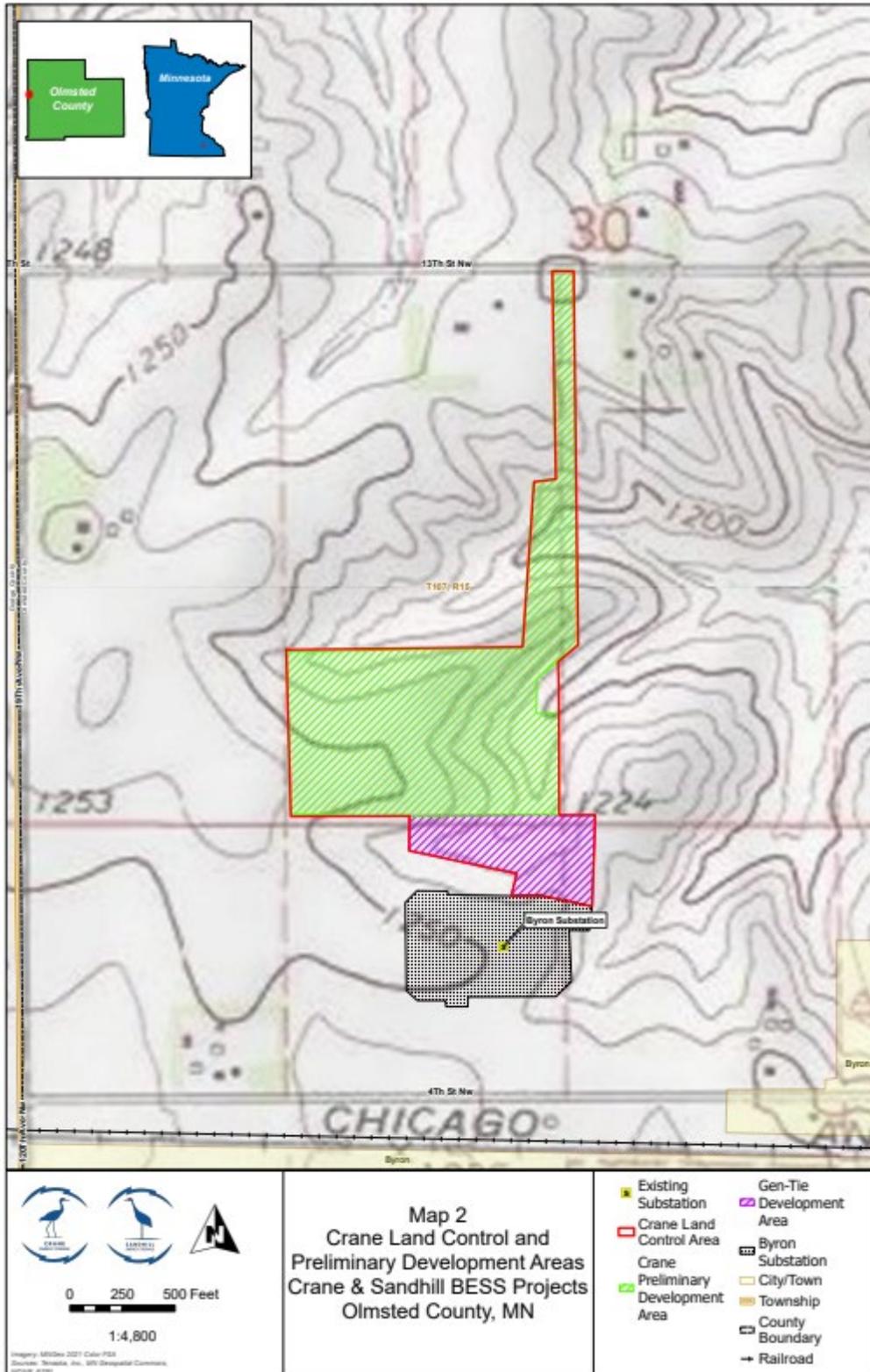
### **Project Description**

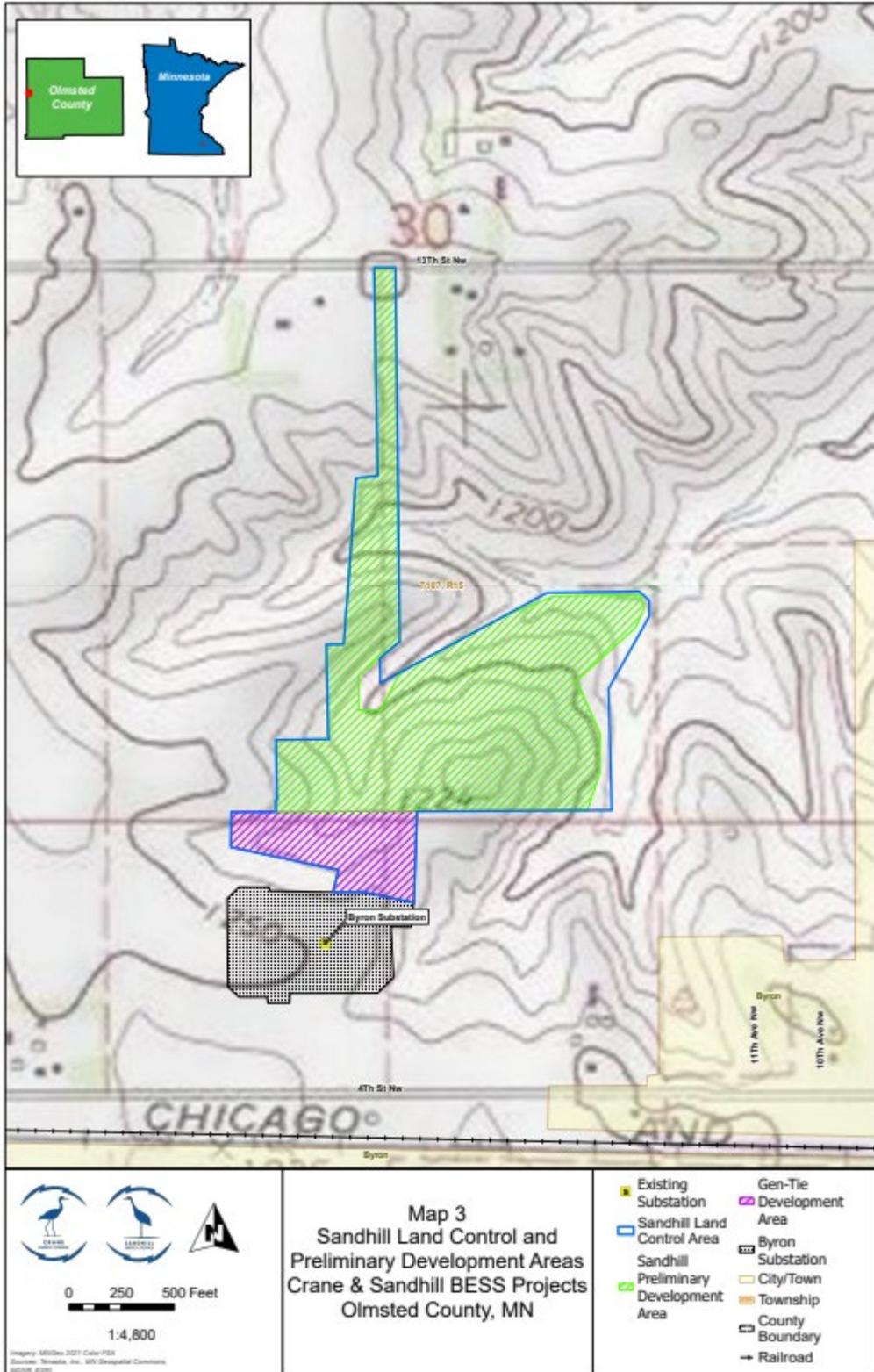
The projects are being proposed by Crane Energy Storage LLC (Crane) and Sandhill Energy Storage LLC (Sandhill), both companies are wholly owned subsidiaries of Copenhagen Infrastructure Partners (CIP). The project itself includes two battery energy storage system facilities, an approximately 700-foot 161-kilovolt (kV) transmission line to connect to the point of interconnection at the Byron substation owned by Southern Minnesota Municipal Power. Each facility will house approximately 236 self-contained battery energy storage system (BESS) enclosures. The Crane project will utilize a development area of approximately 35.6 acres of which 14.8 acres will host permanent infrastructure. The Sandhill project will utilize a development area of approximately 39.9 acres, of which approximately 13.3 acres will host permanent infrastructure.

Each of the battery storage systems will be capable of storing up to 800-megawatt hours (MWh) with a maximum injection capacity of up to 200 MW back into the electrical grid during times of increased demand or brief power outages. Each project is estimated to cost \$340 – 440 million (\$680 – 880 million total). There currently are a total of 7 adjacent landowners, 4 of which are directly participating in the development area of the project(s).

### Project Site Maps







## Statutes and Rules

### Site Permit

Under Minn. Stat. § 216E.03, subd. 1 (2023),<sup>1</sup> in Minnesota, no person may construct an energy storage system (ESS) without a site permit from the Commission. Minn. Stat. § 216E.01, subd. 3a (2023), defines an ESS as equipment and associated facilities designed with a nameplate capacity of 10 MW or more and capable of storing generated electricity for a period of time and delivering electricity for use after storage. Crane and Sandhill as proposed will each have a nominal power rating of up to 200 MW AC and therefore require a site permit from the Commission.

### Environmental Document

Minn. Stat. § 216E.04, subd. 5 (2023), requires preparation of an Environmental Assessment (EA) for projects being reviewed under the alternative permitting process. The Minnesota Department of Commerce (currently PUC-EIP<sup>2</sup>) is responsible for preparing the EA on behalf of the Commission. The EA must provide information on the human and environmental impacts of the proposed project and of alternative sites; the feasibility of each alternative site considered; and mitigative measures that could reasonably be implemented to eliminate or minimize any adverse impacts identified. Under Minn. Stat. § 216E.04, subd. 2 (2023), an ESS facility, qualifies for review under the alternative permitting process described in Minnesota Statute 216E.04 and MN Rule 7850.2800 – .3900.

### Certificate of Need

The Projects are exempt from certificate of need requirements pursuant to Minn. Stat. § 216B.243, subd. 8(a)(9) because a certificate of need is not required for energy storage systems.

## Procedural History

On February 21, 2025, Applicants filed a Notice of Intent to Submit a Joint Site Permit Application under the alternative permitting procedures of Minn. Stat. § 216E.04 (2023) and

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<sup>1</sup> In 2024, the Minnesota Legislature revised and recodified Minnesota Statutes Chapter 216E (Power Plant Siting Act) in Chapter 216I (Energy Infrastructure Permitting Act). [2024 Minn. Laws ch. 126, Art. 7, §§ 14–16](#). Those revisions became effective on July 1, 2025, for projects filed on or after the effective date. Applications filed prior to July 1, 2025 (including the Crane and Sandhill BESS projects) continue to be reviewed under Chapter 216E.

<sup>2</sup> [Notice of Legislative Changes](#)

Minn. R. 7850.2800 - .3900 (2023).<sup>3</sup>

On March 5, 2025, Applicants submitted the Joint Application for Site Permits for the Projects with maps and appendices A-F.

On March 11, 2025, the Commission announced a Notice of Comment Period regarding the completeness of the Application, requesting initial comments by March 25, 2025, reply comments by April 1, 2025, and supplemental comments by April 8, 2025.

On March 25, 2025, PUC-EIP filed comments recommending that the Commission accept the Application as substantially complete, require Applicants to file a draft Vegetation Management Plan (VMP) by the end of the Environmental Assessment (EA) scoping comment period, request the Commission not appoint an advisory task force at this time, and request a full Administrative Law Judge (ALJ) report with findings, conclusions, and recommendations for the Projects' hearing.

Also on March 25, 2025, the Commission also filed a public comment from Jeremy Andrist, a business manager of Local #6 Union, who encouraged the Commission to support the Projects, and recognized the value of projects like these for Minnesota laborers.

On April 1, 2025, Applicants filed reply comments on Application completeness, agreeing with PUC-EIP recommendations and noting that the VMP is currently in progress. Applicants requested that the Commission accept the Application as substantially complete.

On April 29, 2025, the Commission issued an order finding the Application complete, requiring Applicants to file a draft VMP into the record by the end of the EA scoping comment period, declining to appoint an advisory task force at this time, requesting a full Administrative Law Judge's report with findings, conclusions, and recommendations for the Projects' public hearing, and directing the Executive Secretary to issue authorization to Applicants to initiate consultation with SHPO.

On May 13, 2025, Applicants submitted a draft VMP before the EA scoping comment period began.

On June 2, 2025, the Commission filed a letter authorizing Applicants to initiate consultation with the SHPO pursuant to Minn. Stat. § 138.665.

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<sup>3</sup> The Minnesota Legislature repealed rules in Chapter 7850 for applications submitted after July 1, 2025, but these rules continue to apply to applications submitted before that date including the Crane and Sandhill BESS projects. See [2024 Minn. Laws ch. 126, Art. 7, § 15](#).



On June 6, 2025, the Commission filed a Notice of Public Information and EA Scoping Meeting.

On June 9, 2025, the Commission filed a revised Notice of Public Information and EA Scoping Meeting for June 25, 2025 (in-person), and June 26, 2025 (virtual).

On June 24, 2025, the Commission filed a sample site permit for a battery energy storage system (BESS), in both dockets.

On June 25, 2025, Applicants filed an Affidavit of Publication of Notice of Public Hearings and Availability of EA.

Also on June 25, 2025, staff held an in-person public EA scoping meeting.

On June 26, 2025, staff held a virtual public EA scoping meeting.

On July 9, 2025, the Commission filed a notice<sup>4</sup> of legislative changes indicating that on July 1, 2025, the DOC-EERA moved to Commission to become the PUC-EIP. The Commission also indicated that matters like this one, which were initially filed prior to July 1, 2025, would continue to be reviewed under Minn. Stat. § 216E (2023) or Minn. Stat. § 216F (2023), as applicable. As noted, the alternative permitting procedures of Minn. Stat. § 216E.04 and MN Rule 7850.2800 - .3900 apply here.

On July 10, 2025, the Minnesota Department of Natural Resources (MDNR) filed and submitted the Natural Heritage Review Letter. IUOE Local 49 and North Central States Regional Council of Carpenters (NCSRC of Carpenters) also filed scoping comments in support of the Application.

On July 17, 2025, PUC-EIP filed the public comments received during the in-person and virtual EA scoping meetings and filed a summary of written comments.

On July 24, 2025, PUC-EIP submitted a revised summary of written comments on the scope of the EA that also included Jeremy Andrist's Public Comment filed on March 25, 2025. PUC-EIP also filed comments recommending the Commission authorize PUC-EIP to include only the proposed BESS sites identified by the Applicants in the EA scoping decision. No alternative sites were suggested during the scoping comment period.

On August 15, 2025, PUC-EIP filed the EA scoping decision in eDockets.

On August 21, 2025, the Commission filed a notice of the EA scoping decision in eDockets.

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<sup>4</sup> [Notice of Legislative Changes](#)

On October 1, 2025, the Administrative Law Judge filed the First Prehearing Order to establish a schedule for the proceeding.

On November 7, 2025, PUC-EIP filed the EA for the Projects.

On November 12, 2025, the Commission filed a Notice of Public Hearings and Availability of EA.

On November 13, 2025, the Commission filed the Public Information and Scoping Meeting Notice in the EQB Monitor.

On November 25, 2025, Applicants filed the Direct Testimony of J. Hingston.

On December 1, 2025, the Applicants filed the Proposed Exhibit List.

On December 2, 2025, an in-person public hearing was held. All proposed exhibits were admitted into the record.

On December 3, 2025, a virtual public hearing was held.

On December 11, 2025, the Applicants filed the Final Exhibit List reflecting exhibits admitted at the December 2, 2025, public hearing.

On December 16, 2025, PUC-EIP filed comments summarizing changes between the sample site permit and Draft Site Permits (DSPs), recommending modifications to the draft decommissioning plan, and addressing the Applicants' direct testimony.

Also on December 16, 2025, MDNR filed comments concluding that the EA adequately addressed wildlife concerns, and expressed its support of the special conditions included in the DSPs.

On December 23, 2025, the Applicants filed Reply Comments responding to comments from PUC-EIP and MDNR and indicating that Power Purchase Agreements (PPAs) had been entered with Xcel Energy for both Projects.

## **Comments**

### **Pre-Application Coordination**

The Applicants, in preparation of their application, reached out to local, State, and Federal agencies, as well as sent letters to the 11 tribal communities in the State of Minnesota. The

Shakopee Mdewakanton Sioux Community (SMSC) requested a review of archeological literature from the Applicants when it was available.

In a follow-up to Staff (filed as Ex-Parte<sup>5</sup>), the SMSC indicated that they had no concerns.

### **Public Information and Environmental Scoping Comments**

Scoping meetings were held June 25, 2025 (in-person) and June 26, 2025 (virtual), and a comment period was opened until July 10, 2025.

#### ***Don Voll***

Don Voll provided oral comments, expressing concerns about the safety measures, cooperation with the Fire Department, and had a question about connecting to the substation. The Applicants' fire safety expert, Michael Townsend, responded to questions about fire safety, explaining fire safety as it pertains to BESS systems and the Applicant's coordination with the local fire department.

#### ***IUOE Local 49 & NCSRCC***

The local carpenters 49 and NCSRCC gave oral comments at the virtual scoping meeting, emphasizing the importance of considering the potential impact of the Projects on local construction workers in the EA, and also filed comments in support of the project.

#### ***MN DNR***

The DNR filed comments and a Natural Heritage Review letter. The DNR in their Natural Heritage letter identified the Loggerhead Shrike as the single rare feature that may be impacted due to the project. Additionally, they asked for the following topics to be addressed in the EA and draft site permit:

- Security Fencing
- Lighting
- Dust
- Wild-life Friendly Erosion
- Vegetation Management Plan

In their hearing comments, the DNR expressed appreciation and support for the inclusion of the topics and conditions mentioned above.

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<sup>5</sup> [Ex-Parte Leonard Wabasha](#)

## **Public Hearing Comments**

Public hearings were held on December 2, 2025 (in-person), and December 3, 2025 (virtual), and a comment period was opened until December 16, 2025.

### ***IUOE Local 49 & NCSRCC***

During the in-person hearing, Nathan Runke commented, on behalf of IUOE Local 49, that projects like the Crane Project and Sandhill Project are important to the over 15,000 heavy equipment operators, mechanics, and stationary engineers that are members of IUOE Local 49.

### ***LIUNA***

During the virtual hearing, Lucas Franco commented on behalf of LIUNA Minnesota and North Dakota, a construction union of about 14,000 members, to “express strong support for these projects and enthusiasm in general for the projects,” which are “exciting and innovative energy projects that will generate great work opportunities for the local workers.”

### ***MN DNR***

The DNR filed additional comments during the hearing comment period. In their comments they reiterated their support for the previously mentioned permit conditions inclusion in the draft site permit (DSP). They further explained that the EA adequately addressed their concerns regarding the Loggerhead Shrike. Lastly, the DNR recommended continued coordination with the Vegetation Management Plan Working Group (VMPWG) to further refine the plan.

### ***PUC-EIP***

PUC-EIP filed comments explaining changes between the sample site permit and the DSPs included in Appendices C and D of the EA prepared for the Projects to reflect changes in governing law and noting on Applicants’ commitment to accommodate MDNR’s preference for a ten-foot fence height. They recommended updates to the Decommissioning Plan before construction, included updates to the discussion of scheduled updates, updates to the Project description, updates to reflect where generation will be used, updates to reflect a preliminary list of permits required for decommissioning, and updates to clarify responsibilities, including by identifying the beneficiary of the financial assurance. Lastly, they also recommended the inclusion of the special permit conditions 5.1 – 5.13 (see table 1).



Staff notes that the Loggerhead Shrike was evaluated in the EA<sup>6</sup>, and it was determined that it would be unlikely for the bird to be located in the area of the proposed project, because there is no typical habitat. Subsequently, there is no Loggerhead Shrike special permit condition.

### ***Applicants' Direct Testimony***

In the Applicants' direct testimony<sup>7</sup> the Applicants indicate that the Sandhill project has been nominated by Xcel Energy for inclusion in the Midcontinent Independent System Operator's (MISO) Expedited Resources Additions Study (ERAS) and is currently awaiting approval from MISO to be admitted into the queue. ERAS<sup>8</sup> is a MISO pathway to fast-track interconnection for near-term resources needed for system reliability and capacity. Due to this the earliest Sandhill could reach a GIA could have been mid-February 2026 (this year). If the project was not selected for ERAS, then the earliest a GIA could be reached is August 2026. Similarly, the Applicants anticipate entering into a GIA for the Crane project in the first quarter of 2026. The construction of the projects is estimated to generate \$17 million each (\$34 million for both projects) for the State of Minnesota and \$1.3 million each (\$2.6 million) for Olmsted County as a result of sales and use taxes during construction. In total the Applicants estimate that the projects will generate a combined \$8,000 annually in property tax revenue for Olmsted County and a combined \$1,520 annually for Kalmar Township. Construction is anticipated to begin for both projects in the first quarter of 2027, with commercial operation beginning in the second quarter of 2028.

### ***Applicant Reply Comments***

In reply comments<sup>9</sup>, the Applicants indicated that a Power Purchase Agreement (PPA) had been reached with Xcel Energy for the Crane Project and for the Sandhill Project. The Applicants also noted PUC-EIP's comments on the Decommissioning Plan and indicated that they would make the recommended updates and provide them as required before construction. The Applicants agreed with PUC-EIP's changes to the DSPs to reflect changes in governing law. The Applicants reiterated their commitment to meet the MDNR's recommendation for a ten-foot fence height. The Applicants also agreed with MDNR's comments that the EA adequately addressed the issues raised in scoping, and agreed that the conditions in the DSPs are reasonable. The Applicants also noted that they would continue to coordinate with the VMPWG on the Projects' VMP.

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<sup>6</sup> [Loggerhead Shrike EA](#)

<sup>7</sup> [Applicant Direct Testimony](#)

<sup>8</sup> [ERAS Informational Guide](#)

<sup>9</sup> [Applicant Reply Comments](#)

### **Administrative Law Judge Report**

The Commission requested an ALJ from the Court of Administrative Hearings preside over public hearings and prepare a report containing findings of fact, conclusions of law, and a recommendation on the merits of the proposed projects, including the special permit conditions to be included in the site permits. The ALJ's recommended special permit conditions are included in the attached table 1.

The ALJ recommended that the Commission issue a Site Permit to the Applicants to construct and operate the project and associated facilities in Olmsted County, Minnesota. In addition, the permit should include the draft permit conditions as included in the EA and in reply comments.

The ALJ concluded that:

- The Commission and the Administrative Law Judge have jurisdiction over the Joint Site Permit Application pursuant to Minn. Stat. §§ 216E.02 and 216E.03.
- The Commission accepted the Application as complete on April 29, 2025.
- Applicants have substantially complied with the procedural requirements of Minn. Stat. Ch. 216E and Minn. R. Ch. 7850.
- The Commission has substantially complied with the procedural requirements of Minn. Stat. Ch. 216E and Minn. R. Ch. 7850.
- PUC-EIP has conducted an appropriate environmental analysis of the Projects for purposes of the Site Permits proceeding pursuant to Minn. R. 7850.3700.
- Public hearings were conducted virtually and in a community near the Projects. Proper notice of the public hearings was provided, and members of the public had the opportunity to speak at the hearing and to submit written comments.
- The EA prepared for the Projects and the record created at the public hearing address the issues identified in the EA scoping decision.
- The Commission has the authority under Minn. Stat. § 216E.03 to place conditions in LEPGP site permits.
- The DSPs, as revised by EIP staff, contain a number of important mitigation measures and other reasonable conditions.



- It is reasonable to amend the DSPs to include the changes proposed by EIP staff in the EA and in reply comments.
- The record in this proceeding demonstrates that Applicants have satisfied the criteria for Site Permits as set forth in Minn. Stat. § 216E.03 and Minn. R. Ch. 7850 and all other applicable legal requirements.
- The Projects, with the permit conditions discussed above (and included in attached table 1), satisfy the Site Permit criteria for an LEPGP in Minn. Stat. § 216E.03 and meet all other applicable legal requirements.
- The Projects, with the permit conditions discussed above (and included in attached table 1), do not present a potential for significant adverse environmental effects pursuant to the Minnesota Environmental Rights Act and/or the Minnesota Environmental Policy Act.

### **Exceptions**

On February 23, 2026, PUC-EIP filed a letter stating they had no exceptions to the ALJ report.

On February 27, 2026, the Applicants filed a letter stating they had no exceptions to the ALJ report.

### **Staff Discussion**

Staff has proposed a modified special permit condition 5.2 (Modified Pre-Construction Noise Modeling and Impact Assessment) which requires the Applicants to create a website that informs the public of where and when significant noise creating activities during construction will occur, and permit condition 5.14 (Tree Replacement) to replace any trees that may be removed during construction.

### **Whether to adopt the ALJ report**

Staff agrees with the findings, conclusions, and recommendations reached by the ALJ. Staff finds that the ALJ Report is a sound and reasonable ruling that is reflective of the case record. The ALJ Report documents that the procedural requirements were followed and presents findings of fact for each of the decision criteria that must be met for the project. Therefore, staff recommends that the Commission adopt the ALJ Report to the extent it is consistent with the Commission's final decisions in these matters.

Alternatively, the Commission may, at its own discretion, modify or reject the ALJ Report.

### **Whether to find the Environmental Assessment Complete**

Staff agrees with the ALJ that the Environmental Assessment and the record created at the public hearings and during the subsequent comment period address the issues identified in the Scoping Decision. The Environmental Assessment includes the items required by Minn. R. 7850.3700, subs. 3 and 4.

Staff further notes:

- The Environmental Assessment did not identify any unique or significant environmental impacts from the construction and operation of the project that could not be properly mitigated.
- No information was submitted into the record that contested the information and analysis contained in the Environmental Assessment.

Alternatively, if the Commission finds the Environmental Assessment incomplete, it must identify the reasons and request that it be revised or supplemented. In this case, a schedule for revising or supplementing the Environmental Assessment would need to be established, and the Commission would revisit its decisions once completed.

### **Whether to Issue a Site Permit**

Staff agrees with the ALJ's conclusions that the procedural requirements and decision criteria set forth in Minn. Stat. Ch. 216E and Minn. R. Ch. 7850 have been satisfied and that the Commission should issue a site permit to Crane Energy Storage, LLC, and Sandhill Energy Storage, LLC, for the respective up to 200-megawatt battery energy storage facilities. Staff further agrees with the inclusion of the permit conditions recommended by the ALJ.

## Decision Options

### ALJ Report

1. Adopt the Administrative Law Judge's Findings of Fact, Conclusions of Law, and Recommendation to the extent they are consistent with the Commission's decision. (ALJ, PUC-EIP, Staff, applicants)

### Environmental Assessment

2. Determine that the Environmental Assessment and the record created at the public hearings and subsequent comment period address the issues identified in the Scoping Decision. (ALJ, PUC-EIP, Staff, applicants)

[Or, if the Commission does not select Option 2, it must identify the reasons and request that the Environmental Assessment be revised or supplemented.]

3. Determine that the Environmental Assessment and the record created at the public hearings and the subsequent comment period do not address the issues identified in the Scoping Decision for the following reasons:  
[identify the reasons] **and**
4. Request that PUC-EIP prepare a supplement to the Environmental Assessment that addresses the identified deficiencies.

### Site Permits

5. Issue the Proposed Site Permits attached to these briefing papers for the Crane Energy Storage and Sandhill Energy Storage projects in Olmsted County, Minnesota. (ALJ, PUC-EIP, Staff, Applicants)

### And

6. Adopt the following permit conditions (see Table 1 attached to these briefing papers):
  - a. P1: Lighting (DNR, PUC-EIP, Applicant, ALJ)
  - b. P3: Noise Standards and Noise Mitigation (PUC-EIP, Applicant, ALJ)
  - c. P4: Hazard Mitigation Analysis (PUC-EIP, Applicant, ALJ)
  - d. P5: Natural Gas Pipeline (DNR, PUC-EIP, Applicant, ALJ)
  - e. P6: Vegetation Management Plan (DNR, PUC-EIP, Applicant, ALJ)
  - f. P7: Unanticipated Discoveries Plan (PUC-EIP, Applicant, ALJ)
  - g. P8: Security Fencing (DNR, PUC-EIP, Applicant, ALJ)



- h. P9: Wildlife-Friendly Erosion Control (**DNR, PUC-EIP, Applicant, ALJ**)
- i. P10: Dust Control (**DNR, PUC-EIP, Applicant, ALJ**)
- j. P11: Battery Augmentation (**PUC-EIP, Applicant, ALJ**)
- k. P12: Offtake Agreement (**PUC-EIP, Applicant, ALJ**)
- l. P13: Annual Report (**PUC-EIP, Applicant, ALJ**)
- m. P14: Modified Pre-Construction Noise Modeling and Impact Assessment (**Staff**)
- n. P15: Tree Replacement (**Staff**)

Or

7. Do not issue a site permit.

#### **Administrative**

8. Delegate authority to the Executive Secretary to modify the Site Permits to correct any typographic and formatting errors, to reflect recent changes in energy infrastructure permitting legislation as applicable, and to ensure consistency with the Commission's order.

Staff Recommendation: 1, 2, 5, 6a-n, and 8

| Proposed Permit Condition Table 1 |   |                    |              |                          |   |                       |                        |
|-----------------------------------|---|--------------------|--------------|--------------------------|---|-----------------------|------------------------|
| ID                                | Issue   | ALJ Report Finding | Sponsor      | Location in Draft Permit | Recommended Permit Condition Language   | Proposed Modification | Comments               |
| P1                                | Lighting  | 54, 58, 70, 88, 90 | DNR, PUC-EIP | 5.1                      | Permittees must use shielded and downward facing lighting and LED lighting that minimizes blue hue at the gate locations, BESS enclosures, and along fence lines. Downward facing lighting must be clearly visible on the plan and profile submitted for the Project.                                   |                       | <b>ALJ Recommended</b> |
| P2                                | Pre-Construction Noise Modeling and Impact Assessment | 102, 128           | DNR, PUC-EIP | 5.2                      | The Permittee shall file a noise impact assessment at least 14 days prior to the pre-construction meeting. The noise impact assessment shall summarize the results from noise propagation modeling that incorporates noise inputs from the selected equipment and the facility layout shown in the site |                       | <b>ALJ Recommended</b> |

|    |                              |              |              |     |  |                        |
|----|------------------------------|--------------|--------------|-----|--|------------------------|
|    |                              |              |              |     | plans required in Section 8.3 of this permit. The permittee shall file an updated noise impact assessment including any revisions to selected equipment or facility layout prior to any modifications to the facility over its operating life.   |                        |
| P3 | Noise Studies and Mitigation | 98, 103, 128 | DNR, PUC-EIP | 5.3 | The BESS facilities and associated facilities shall be placed and operated such that the Permittee shall, at all times, comply with noise standards established by the MPCA. Operation of the facility shall be modified, or project components shall be removed from service if necessary to comply with these noise standards. | <b>ALJ Recommended</b> |
| P4 | Hazard Mitigation Analysis   | 171          | DNR, PUC-EIP | 5.4 | The Permittee shall file a Hazard Mitigation Analysis detailing the results of the equipment testing, and the risks associated with the technology at least 30   | <b>ALJ Recommended</b> |

|    |                            |               |              |     |   |                        |
|----|----------------------------|---------------|--------------|-----|---|------------------------|
|    |                            |               |              |     | days prior to the pre-construction meeting.   |                        |
| P5 | Natural Gas Pipeline       | 132, 140, 141 | DNR, PUC-EIP | 5.5 | The Permittee shall confer with the Northern Natural Gas Company to avoid impacts to the gas transmission pipeline that intersects the primary access road and further develop mitigation measures as needed.   | <b>ALJ Recommended</b> |
| P6 | Vegetation Management Plan | 5, 71         | DNR, PUC-EIP | 5.6 | The amended VMP must include the following:<br>(a) management objectives addressing short term (year 0-5, seeding and establishment) and long term (year 5 through the life of the Project) goals;<br>(b) a description of planned restoration and vegetation management activities, including how the site will be prepared, timing of activities, how seeding will occur (e.g., broadcast, drilling, etc.), and the types of seed mixes to be used; | <b>ALJ Recommended</b> |

|  |  |  |  |  |   |  |  |
|--|--|--|--|--|---|--|--|
|  |  |  |  |  | <p>(c) a description of how the site will be monitored and evaluated to meet management goals;</p> <p>(d) a description of the management tools used to maintain vegetation (e.g., mowing, spot spraying, hand removal, fire, grazing, etc.), including the timing and frequency of maintenance activities;</p> <p>(e) identification of the third-party (e.g., consultant, contractor, site manager, etc.) contracted for restoration, monitoring, and long-term vegetation management of the site;</p> <p>(f) identification of on-site noxious weeds and invasive species (native and non-native) and the monitoring and management practices to be utilized; and</p> <p>(g) a marked-up copy of the Site Plan showing</p> |  |  |
|--|--|--|--|--|---|--|--|

|    |                                |     |         |     |   |                        |
|----|--------------------------------|-----|---------|-----|---|------------------------|
|    |                                |     |         |     | how the site will be revegetated and that identifies the corresponding seed mixes. Best management practices should be followed concerning seed mixes, seeding rates, and cover crops.  |                        |
| P7 | Unanticipated Discoveries Plan | 192 | PUC-EIP | 5.7 | <p>Prior to construction, the Permittee shall survey areas of construction activity within undisturbed land that have not been surveyed.</p> <p>The Permittee shall develop an Unanticipated Discoveries Plan (UDP) to identify guidelines to be used in the event previously unrecorded archeological or historic properties, or human remains, are encountered during construction, or if unanticipated effects to previously identified archaeological or historic properties occur during</p> | <b>ALJ Recommended</b> |



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|    |                  |                 |              |     | <p>construction. This is in addition to and not in lieu of any other obligations that may exist under law or regulation relating to these matters. The UDP shall describe how previously unrecorded, non-human burial, archaeological sites found during construction shall be marked and all construction work must stop at the discovery location. The Permittee shall file the UDP with the Commission at least 14 days prior to the preconstruction meeting.</p> |                        |
| P8 | Security Fencing | 56, 68, 69, 237 | DNR, PUC-EIP | 5.8 | <p>The Permittee shall design the security fence surrounding the energy storage system to minimize the visual impact of the Project while maintaining compliance with the National Electric Safety Code. The Permittee shall develop a final fence plan for the</p>  | <b>ALJ Recommended</b> |

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|     |                           |                 |              |      | specific site in coordination with the DNR. The final fence plan shall be submitted to the Commission as part of the Site Plan pursuant to Section 8.3.   |                        |
| P9  | Wildlife-Friendly Erosion | 55, 60, 70, 238 | DNR, PUC-EIP | 5.9  | The Permittee shall use only “bio-netting” or “natural netting” types of erosion control materials and mulch products without synthetic (plastic) fiber additives.  | <b>ALJ Recommended</b> |
| P10 | Dust Control              | 70              | DNR, PUC-EIP | 5.10 | The Permittee shall minimize and avoid, if possible, the use or chloride-based dust control chemicals (i.e., calcium chloride, magnesium chloride).   | <b>ALJ Recommended</b> |
| P11 | Battery Augmentation      | 104, 128        | PUC-EIP      | 5.11 | The Permittee shall notify the Commission of scheduled augmentation at least 30 days prior to commencing augmentation activities. In its filing, the Permittee shall describe the number and types of batteries | <b>ALJ Recommended</b> |

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|     |                   |   |         |      | included in the augmentation. The Permittee shall indicate the location of the augmentation on the project Site Plan. In its filing the Permittee shall demonstrate compliance with the noise impact assessment submitted to the Commission as required in Section 5.2 of this permit.  |                        |
| P12 | Offtake Agreement | 72, 73, 74, Conclusions of Law (pg. 51 & 52). | PUC-EIP | 5.12 | In the event the Permittee does not have an offtake agreement, or some other enforceable mechanism for sale of energy capacity provided by the Project at the time this site permit is issued, the Permittee shall provide notice to the Commission when it obtains a commitment for the energy capacity. This site permit does not authorize construction of the Project until the Permittee has obtained an offtake agreement, or | <b>ALJ Recommended</b> |

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|     |               |                                   |         |      | <p>some other enforceable mechanism for energy capacity provided by the Project. In the event the Permittee does not obtain an offtake agreement or some other enforceable mechanism for the energy capacity provided by the Project within four years of the issuance of this site permit, the Permittee must advise the Commission of the reason for not having such commitment. In such event, the Commission may determine whether this site permit should be amended or revoked. No amendment or revocation of this site permit may be undertaken except in accordance with Minn. Stat. § 216I.09 or Minn. Stat. § 216I.14.</p> |                        |
| P13 | Annual Report | Conclusions of Law (pg. 51 & 52). | PUC-EIP | 5.13 | The Permittee shall, by February 1st following each complete or partial year of Project operation,   | <b>ALJ Recommended</b> |

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|  |  |  |  |  | <p>file a report with the Commission on the monthly availability of the facility including:</p> <ol style="list-style-type: none"><li>1. the installed nameplate capacity of the permitted facility;</li><li>2. the monthly and annual availability of the facility;</li><li>3. the operational status of the facility and any major outages, major repairs, incidents that required an emergency response, battery augmentation, or performance improvements occurring in the previous year; and</li><li>4. any other information reasonably requested by the Commission.</li></ol> <p>The Permittee shall file this information in a format recommended by the Commission. This information shall be</p> |  |  |
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|  |  |  |       |     | considered public and must be filed electronically.  |   |  |
| <b>Staff Proposed Permit Condition</b> |  |  |       |     |  |   |  |
| P14                                    | Modified Pre-Construction Noise Modeling and Impact Assessment |  | Staff | 5.2 | The Permittee shall file a noise impact assessment at least 14 days prior to the pre-construction meeting. The noise impact assessment shall summarize the results from noise propagation modeling that incorporates noise inputs from the selected equipment and the facility layout shown in the site plans required in Section 8.3 of this permit. The permittee shall file an updated noise impact assessment including any revisions to selected equipment or facility layout prior to any modifications to the facility over its operating life. | The Permittee shall file a noise impact assessment at least 14 days prior to the pre-construction meeting. The noise impact assessment shall summarize the results from noise propagation modeling that incorporates noise inputs from the selected equipment and the facility layout shown in the site plans required in |  |

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|  |  |  |  |  |  | <p>Section 8.3 of this permit. The permittee shall file an updated noise impact assessment including any revisions to selected equipment or facility layout prior to any modifications to the facility over its operating life. <u>The Permittee shall maintain a webpage identifying days, times and areas where construction crew will be doing pile driving during construction. The Permittee shall provide all neighboring</u></p> |  |
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|     |                  |  |       |      |  | <p><u>landowners and the township a link to the website prior to construction and shall update the website frequently during construction to keep landowners informed where pile driving will be occurring.</u></p> |  |
| P15 | Tree Replacement |  | Staff | 5.14 | The permittee in coordination with the Department of Natural Resources, Olmsted County, and the City of Byron, develop a plan to replace any trees that are removed for the construction of the Project and file the plan with the |   |  |

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|  |  |  |  |  | Commission at least 14 days before the pre-construction meeting. Replacement trees can be planted as part of the required Visual Screening Plan or may be planted on public lands with the permission of the public entity/owner. |  |  |
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