

Attachment A

PUC EIP Proposed Findings of Fact – Castle Rock Solar Project

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**STATE OF MINNESOTA  
COURT OF ADMINISTRATIVE HEARINGS  
FOR THE PUBLIC UTILITIES COMMISSION**

**In the Matter of the Application of Castle  
Rock Solar, LLC for a Site Permit for the  
up to 150 MW Castle Rock Solar Project in  
Dakota County, Minnesota**

CAH Docket No. 65-2500-40800  
MPUC Docket No. IP-7137/GS-24-267

**CASTLE ROCK SOLAR'S  
PROPOSED FINDINGS OF FACT,  
CONCLUSIONS OF LAW, AND  
RECOMMENDATIONS**

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**CASTLE ROCK SOLAR, LLC'S  
PROPOSED FINDINGS OF FACT,  
CONCLUSIONS OF LAW, AND  
RECOMMENDATIONS**

This matter was assigned to Administrative Law Judge Ann C. O'Reilly to conduct a public hearing on the Site Permit Application (MPUC Docket No. IP-7137/GS-24-267) (Application) of Castle Rock Solar, LLC (Castle Rock Solar or Applicant) to construct and operate an up to 150 megawatt (MW) photovoltaic (PV) alternating current (AC) solar energy generating facility located in Castle Rock Township in Dakota County, Minnesota (Project). The Minnesota Public Utilities Commission (Commission) also requested that the Administrative Law Judge prepare findings of fact and conclusions of law and provide recommendations, if any, on conditions and provisions of the proposed site permit.

Public hearings on the Application were held on October 22, 2025 (in-person), and October 23, 2025 (remote-access). The factual record remained open until November 3, 2025, for the receipt of written public comments.

Jeremy P. Duehr, Fredrikson & Byron, 60 South Sixth Street, Suite 1500, Minneapolis, Minnesota 55402, and Andrew Campbell appeared on behalf of Castle Rock Solar.

Jacques Harvieux appeared on behalf of the Commission Staff at the in-person and remote-access hearing.

Lauren Agnew appeared on behalf of the Commission's Environmental Review staff (formerly known as DOC-EERA) (PUC-ER).

**STATEMENT OF ISSUES**

Has Castle Rock Solar satisfied the criteria established in Minn. Stat. § 216E.03, subd. 7(b) (2023) and Minn. R. 7850.4100 for a site permit for the Project?

**SUMMARY OF RECOMMENDATIONS**

The Administrative Law Judge concludes that Castle Rock Solar has satisfied the applicable legal requirements and, accordingly, recommends that the Commission GRANT a site permit for the Project, subject to the conditions discussed below.

Based on the evidence in the hearing record, the Administrative Law Judge makes the following:

## **FINDINGS OF FACT**

### **I. APPLICANT**

1. Castle Rock Solar is a wholly owned subsidiary of Atlantica North America, LLC, (Atlantica) which is a wholly owned subsidiary of Atlantica Sustainable Infrastructure, PLC. Castle Rock Solar will own and operate the Project. Atlantica is developing the Project.<sup>1</sup>
2. Atlantica, through its affiliates, develops, constructs, and operates utility scale renewable energy projects across the United States.<sup>2</sup>

### **II. PROCEDURAL HISTORY**

3. On October 31, 2024, Castle Rock Solar filed a Notice of Intent to Submit a Site Permit Application under the alternative permitting procedures of Minn. Stat. § 216E.04 and Minn. R. 7850.2800 - .3900.<sup>3</sup>
4. On January 16, 2025, Castle Rock Solar submitted the Application for the Project.<sup>4</sup>
5. On January 21, 2025, Castle Rock Solar sent a Notice of Filing of Application to persons interested in the Project, the Commission's Energy Facilities General List, Local Officials, Tribes, and Property Owners in accordance with Minnesota R. 7850.2100.<sup>5</sup>
6. On January 22, 2025, the Commission announced a Notice of Comment Period regarding the completeness of the Application, requesting initial comments by February 4, 2025, reply comments by February 11, 2025, and supplemental comments by February 18, 2025. The notice requested comments on whether the Application was complete within the meaning of the Commission's rules; whether there are any contested issues of fact with respect to the representations made in the Application; whether the Commission should appoint an advisory task force; whether the Commission should direct the Executive Secretary to issue an authorization to initiate consultation with the State Historic Preservation Office (SHPO); and whether there were any other issues or concerns that should be considered.<sup>6</sup>
7. On January 31, 2025, Legalectric, Inc., requested an extension of the Comment Period on Application Completeness, asserting insufficient public notice and the need to include the general service list.<sup>7</sup>

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<sup>1</sup> Ex. App.-23 (Acquisition Occurrence Notice).

<sup>2</sup> Ex. App.-23 (Acquisition Occurrence Notice).

<sup>3</sup> Ex. App.-1 (Notice of Intent to Submit a Site Permit Application Under Alternative Review Process).

<sup>4</sup> Exs. App.-2 through App.-17 (Application and Appendices A-N).

<sup>5</sup> Ex. App.-18 (Project Notice Under 7850.2100).

<sup>6</sup> Ex. PUC-1 (Notice of Comment Period on Application Completeness).

<sup>7</sup> Legalectric, Inc. Extension Variance Request (January 31, 2025) (eDockets No. [20251-214787-01](#)).

8. On February 3, 2025, the Commission extended the comment period on application completeness in a Notice of Extended Comment Period, including service to those on the general service list.<sup>8</sup>
9. On February 12, 2025, Castle Rock Solar submitted a Confirmation of Notice Compliance Filing for the Application.<sup>9</sup>
10. On February 14, 2025, International Union of Operating Engineers Local 49 (IUOE Local 49) and North Central States Regional Council of Carpenters (NCSRC of Carpenters) filed comments on Application completeness.<sup>10</sup>
11. Also on February 14, 2025, PUC-ER filed comments recommending that the Commission accept the Application as substantially complete.<sup>11</sup> PUC-ER also requested additional information from the Applicant on a discussion of greenhouse gas (GHG) emissions, Natural Heritage Information System (NHIS) data from the Minnesota Department of Natural Resources (MDNR), and additional information regarding the orientation of a private airstrip.
12. On February 21, 2025, Castle Rock Solar filed reply comments on Application completeness, which included a discussion of GHG emissions associated with the construction, operation, and decommissioning of the Project, NHIS data from MDNR, and additional information about the orientation of the private airstrip.<sup>12</sup> Castle Rock solar explained that the private airstrip is owned by a participating landowner, had not been used in 11 years, and that the landowner has no intention of restoring the airstrip, so no takeoffs or landings would cross over the Project.<sup>13</sup>
13. On February 26, 2025, PUC-ER filed supplemental comments on Application completeness.<sup>14</sup> PUC-ER commented that the Castle Rock Solar reply comments adequately addressed the request for Project GHG emissions, the NHIS report, and private airstrip information.<sup>15</sup> Accordingly, staff reiterated the recommendation that the Commission find Castle Rock Solar's Application to be complete.<sup>16</sup>
14. On February 27, 2025, LIUNA Minnesota and North Dakota (LIUNA) filed supplemental comments agreeing that the Application was substantially complete.<sup>17</sup>
15. On March 18, 2025, the Commission issued an order finding the Application complete, requiring Castle Rock Solar to provide a discussion of GHG emissions associated with the

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<sup>8</sup> Ex. PUC-2 (Notice of Extended Comment Period).

<sup>9</sup> Ex. App.-19 (Confirmation of Notice).

<sup>10</sup> IUOE Local 49 and NCSRC of Carpenters Completeness Comments (February 14, 2025) (eDocket No. [20252-215420-01](#)).

<sup>11</sup> Ex. PUC-ER-1 (Comments on Application Completeness).

<sup>12</sup> Ex. App.-20 (Completeness Reply Comments); Ex. App.-21 (Reply Comments – Attachment B).

<sup>13</sup> Ex. App.-20 (Completeness Reply Comments); Ex. App.-21 (Reply Comments – Attachment B).

<sup>14</sup> Ex. PUC-ER-2 (Response to Reply Comments).

<sup>15</sup> Ex. PUC-ER-2 (Response to Reply Comments).

<sup>16</sup> Ex. PUC-ER-2 (Response to Reply Comments).

<sup>17</sup> LIUNA Completeness Comments (February 27, 2025) (eDockets No. [20252-215808-01](#)).

Project and potential impacts, the full NHIS report including cover page(s) from the MDNR, and additional information regarding the private airstrip near the Project.<sup>18</sup>

16. On March 20, 2025, the Commission filed a letter authorizing Castle Rock Solar to initiate consultation with the SHPO pursuant to Minn. Stat. § 138.665.<sup>19</sup>
17. On March 25, 2025, a Notice of Public Information and Environmental Assessment (EA) and Scoping Meetings was published in the Environmental Quality Board (EQB) Monitor.<sup>20</sup>
18. On March 26, 2025, the Commission filed a Notice of Public Information and EA Scoping Meetings for April 16, 2025 (remote) and April 17, 2025 (in-person). The Commission requested comments on: (1) potential human and environmental impacts of the proposed Project that should be studied in the EA; (2) any methods to minimize, mitigate, or avoid potential impacts of the proposed Project that should be considered in the EA; and (3) any unique characteristics of the proposed Project that should be considered in the EA.<sup>21</sup>
19. On April 15, 2025, the Commission filed a sample site permit.<sup>22</sup>
20. On April 16, 2025, staff held a remote-access public meeting.<sup>23</sup> On May 6, 2025, PUC-ER filed the oral public comments received during the in-person and remote-access Public Information and EA Scoping meetings.<sup>24</sup> Two attendees provided comments at the remote-access hearing. Potential impacts and concerns related to the Project that were raised included the use of local labor and wetland protection.
21. The following evening, April 17, 2025, approximately 13 people attended this meeting.<sup>25</sup> Five attendees provided comments.<sup>26</sup> Commenters identified a preference for use of local labor, discussed changes in tax revenue for the County based on the Project, and asked questions about visual impacts, traffic and road impacts, impacts on a snowmobile trail in the Project Area, decommissioning, and water and septic use for the Project.
22. One commenter was an owner/operator of an organic vegetable farm near the Project Area.<sup>27</sup> She identified that a certain amount of buffer zone is required for organic certification, and asked questions about the impacts of electrical cables and wiring on animals, birds, and people.
23. On April 22, 2025, Castle Rock Solar filed an updated Project Area description.<sup>28</sup> Castle Rock Solar explained that on April 16, 2025, Castle Rock Solar had signed lease agreements with the landowner of PID 070090052013 and PID 070090029010 resulting in the addition of 77 acres

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<sup>18</sup> Commission Order (March 18, 2025) (eDockets No. [20253-216516-01](#)).

<sup>19</sup> Ex. PUC-3 (Authorization to Initiate SHPO Consultation).

<sup>20</sup> Ex. PUC-7 (EQB Monitor - Scoping Meeting Notice).

<sup>21</sup> Ex. PUC-4 (Notice of Public Information and Environmental Assessment Scoping Meetings).

<sup>22</sup> Ex. PUC-5 (Sample Site Permit).

<sup>23</sup> Commission Scoping Meeting Presentation (April 28, 2025) (eDockets No. [20254-218207-01](#))/

<sup>24</sup> Ex. PUC-ER-3 (Oral and Written Public Comments on Scope of Environmental Assessment).

<sup>25</sup> Ex. PUC-ER-5 (Notice of Environmental Scoping Decision).

<sup>26</sup> Ex. PUC-ER-3 (Oral and Written Public Comments on Scope of Environmental Assessment).

<sup>27</sup> Ex. PUC-ER-3 (Oral and Written Public Comments on Scope of Environmental Assessment).

<sup>28</sup> Ex. App.-22 (Update on Project Area Description).

of land. Castle Rock Solar requested the additional land be considered and evaluated in the EA. Accordingly, approximately 1,384 acres were now under lease or easement agreement with Castle Rock Solar.

24. On April 29, 2025, the Administrative Law Judge issued an order scheduling a prehearing conference for June 12, 2025.<sup>29</sup>
25. On May 2, 2025, the MDNR filed scoping comments on the Project.<sup>30</sup> MDNR also filed the Natural Heritage Review Letter.<sup>31</sup>
26. On May 5, 2025, the Commission filed written public comments from Drea Doffing requesting an Environmental Impact Study (EIS) for the Project.<sup>32</sup>
27. On May 6, 2025, PUC-ER filed written public comments received on the scope of the Project.<sup>33</sup>
28. On June 10, 2025, the Administrative Law Judge issued an order rescheduling the prehearing conference for July 7, 2025.<sup>34</sup>
29. A prehearing conference with held on July 7, 2025.<sup>35</sup>
30. On July 9, 2025, PUC-ER issued the EA Scoping Decision for the Project,<sup>36</sup> which set forth the matters proposed to be addressed in the EA and identified certain issues outside the scope of the EA. No site or system alternatives were recommended for study.
31. Also on July 9, 2025, the Commission also filed a notice of legislative changes indicating that on July 1, 2025, the Department of Commerce Energy Environmental Review and Analysis (DOC-EERA) staff moved to the Commission Energy Infrastructure Permitting unit or PUC-ER.<sup>37</sup>
32. On July 11, 2025, PUC-ER filed the Notice of EA Scoping Decision.<sup>38</sup>
33. On July 21, 2025, the Administrative Law Judge filed a Prehearing Order establishing a schedule for the proceeding.<sup>39</sup>
34. On August 19, 2025, Castle Rock Solar filed an acquisition occurrence notice compliance filing.<sup>40</sup>

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<sup>29</sup> Prehearing Order (April 29, 2025) (eDockets No. [20254-218290-01](#)).

<sup>30</sup> MDNR Scoping Comments (May 2, 2025) (eDockets No. [20255-218560-01](#)).

<sup>31</sup> MDNR Natural Heritage Review Letter (May 2, 2025) (eDockets No. [20255-218560-02](#)).

<sup>32</sup> D. Doffing Public Comment (May 5, 2025) (eDockets No. [20255-218574-01](#)).

<sup>33</sup> D. Doffing Public Comment (May 5, 2025) (eDockets No. [20255-218574-01](#)).

<sup>34</sup> Amended Prehearing Order (June 10, 2025) (eDockets No. [20256-219771-01](#)).

<sup>35</sup> Prehearing Transcript Prehearing (September 15, 2025) (eDockets No. 20259-222972-01).

<sup>36</sup> Ex. PUC-ER-4 (EA Scoping Decision).

<sup>37</sup> Ex. PUC-8 (Notice of Legislative Changes).

<sup>38</sup> Ex. PUC-ER-5 (Notice of Environmental Assessment Scoping Decision).

<sup>39</sup> First Prehearing Order (July 21, 2025) (eDockets No. [20257-221245-01](#)).

<sup>40</sup> Ex. App.-24 (Acquisition Occurrence Notice).

35. On September 15, 2025, Castle Rock Solar filed a Site Plan Update.<sup>41</sup>
36. On September 30, 2025, the Administrative Law Judge issued an Amended Prehearing Order setting the schedule for the proceeding.<sup>42</sup>
37. On October 7, 2025, a Notice of Public Hearings and Availability of EA was also published in the EQB Monitor.<sup>43</sup>
38. On October 10, 2025, PUC-ER filed the EA for the Project with Appendices A-H.<sup>44</sup> PUC-ER also filed Distribution of the EA to Agencies and Tribal Historic Preservation Officers (THPOs).<sup>45</sup> The Commission also filed a Notice of Public Hearings and Availability of EA.<sup>46</sup>
39. Also on October 10, 2025, Castle Rock Solar submitted Direct Testimony of Andrew Campbell with Schedules A-C.<sup>47</sup>
40. On October 14, 2025, PUC-ER sent a copy of the EA to the Farmington Library to be made available to the public.<sup>48</sup>
41. On October 17, 2025, Castle Rock Solar filed a letter providing background on an additional, supplemental notice letter that Castle Rock Solar sent to five area landowners.<sup>49</sup>
42. On October 23, 2025, the Commission filed the Public Hearing Presentation.<sup>50</sup>
43. [On October 29, 2025, the Commission filed an affidavit of publication that the notice of public hearings and availability of the EA was published in the Burnsville/Eagan Sun Thisweek newspaper.](#)<sup>51</sup>
44. [Also on October 29, 2025, the Commission received comments from the Vermillion River Watershed Joint Powers Organization.](#)<sup>52</sup>
45. [On October 30, 2025, the Commission received comments from the Minnesota Pollution Control Agency.](#)<sup>53</sup>

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<sup>41</sup> Ex. App.-25 (Site Plan Update).

<sup>42</sup> Amended First Prehearing Order (September 30, 2025) (eDockets No. [20259-223420-01](#)).

<sup>43</sup> Ex. PUC-6 (EQB Monitor - Public Hearing and Availability of Environmental Assessment Notice).

<sup>44</sup> Ex. PUC-ER-6 (EA).

<sup>45</sup> Ex. PUC-ER-7 (Distribution of EA to Agencies and THPOs).

<sup>46</sup> Ex. PUC-8 (Notice of Public Hearings and Availability of Environmental Assessment).

<sup>47</sup> Ex. App.-26 (A. Campbell Direct Testimony with Schedules A-C).

<sup>48</sup> Ex. PUC-ER-8 (Distribution of EA to Local Libraries).

<sup>49</sup> Ex. App.-27 (Supplemental Notice Letter).

<sup>50</sup> Ex. PUC-9 (Public Hearing Presentation).

<sup>51</sup> [PUC Affidavit of Publication \(October 29, 2025\) \(eDockets No. 202510-224386-01\).](#)

<sup>52</sup> [PUC Comments Vermillion River Watershed Joint Powers Organization \(October 29, 2025\) \(eDockets No. 202510-224390-01\).](#)

<sup>53</sup> [PUC Comments Minnesota Pollution Control Agency \(October 30, 2025\) \(eDockets No. 202510-224408-01\).](#)

46. On October 31, 2025, PUC-ER filed hearing comments on the Applicant’s decommissioning plan.<sup>54</sup>
47. Also on October 31, 2025, PUC-ER, on behalf of the interagency Vegetation Management Planning Working Group, filed comments on the Vegetation Management Plan proposed by the Applicant.<sup>55</sup>
48. On November 3, 2025, the MDNR filed comments in response to the EA and in support of specific site permit special conditions.<sup>56</sup>
49. On November 4, 2025, the Commission received comments from Drea Doffing.<sup>57</sup> The Commission also received comments from Susan Ferrozzo.<sup>58</sup>
50. Also on November 4, 2025, LiUNA Minnesota/North Dakota filed comments in response to the EA.<sup>59</sup>
- ~~42.~~51. On November 10, 2025, the Commission received additional comments from Susan Ferrozzo.<sup>60</sup>
- ~~43.~~52. On November 17, 2025, Castle Rock Solar filed a response to public comments.<sup>61</sup>

### **III. DESCRIPTION OF THE PROJECT**

- ~~44.~~53. The proposed Project is an up to 150 MW solar energy conversion facility located in Dakota County, Minnesota.<sup>62</sup> The Project will include solar panels, a tracking rack system, inverters, step-up transformers, MET station, fencing, an electrical collection system, operations & maintenance (O&M) facility, Project substation, and interconnection facilities. Supporting facilities also include a supervisory control and data acquisition (SCADA) system, metering equipment, access roads, several weather stations, stormwater basins, laydown yard, and other infrastructure typical of a utility-scale solar facility.<sup>63</sup>
- ~~45.~~54. The proposed Project will interconnect to the existing Chub Lake to Hampton Corners 345 kV transmission line.<sup>64</sup>

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<sup>54</sup> [PUC EIP Hearing Comments \(October 31, 2025\) \(eDockets No. 202510-224546-01\).](#)

<sup>55</sup> [Minnesota Interagency Vegetation Management Planning Group Hearing Comments \(October 31, 2025\) \(eDockets No. 202510-224536-01\).](#)

<sup>56</sup> [MDNR Comments \(November 3, 2025\) \(eDockets No. 202511-224630-01\).](#)

<sup>57</sup> [PUC Comments \(November 4, 2025\) \(eDockets No. 202511-224656-01\).](#)

<sup>58</sup> [PUC Comments \(November 4, 2025\) \(eDockets No. 202511-224654-01\).](#)

<sup>59</sup> [LIUNA Minnesota/North Dakota Comments \(November 4, 2025\) \(eDockets No. 202511-224637-01\).](#)

<sup>60</sup> [PUC Comments \(November 10, 2025\) \(eDockets No. 202511-224802-01\).](#)

<sup>61</sup> [Castle Rock Solar Response to Public Hearing Comments \(November 17, 2025\) \(eDockets No. \\_\\_\\_\\_\\_\).](#)

<sup>62</sup> Ex. App.-2 at 1 (Application).

<sup>63</sup> Ex. App.-2 at 20 (Application).

<sup>64</sup> Ex. App.-2 at 71 (Application).

~~46.55.~~ The Project will provide up to 150 megawatt alternating current (MWac) of nameplate renewable power capacity.<sup>65</sup>

#### **IV. SITE LOCATION AND CHARACTERISTICS**

~~47.56.~~ The Project is located in Sections 2-4, 9, and 10, Township 113 North, Range 19 West, Castle Rock Township, Dakota County, Minnesota. The City of Farmington city limits is approximately 500 feet to the northwest of the Project Area, the City of Hampton is approximately 2.5 miles east of the Project Area<sup>66</sup>, and the unincorporated community of Castle Rock is approximately 3 miles southwest of the Project Area.<sup>67</sup>

~~48.57.~~ Castle Rock Solar has 100 percent land control of the Land Control Area<sup>68</sup> of approximately 1,442 acres of which approximately 972.24 acres will be developed for the solar facilities.<sup>69</sup>

~~49.58.~~ Land use in the Project Area is dominated by agricultural land uses, scattered farmsteads, and small housing developments, with developed areas in Farmington. Wooded areas are common around the farmsteads. The South Branch Vermillion River flows west to east through the Project.<sup>70</sup>

#### **V. SOLAR RESOURCE CONSIDERATION**

~~50.59.~~ The first step in determining a potential location for a solar project is to locate a point of interconnection (POI) with available capacity. Castle Rock Solar targeted existing transmission infrastructure located within 2 miles of first-, second-, or third-class cities to find an area that would be compliant with the Prime Farmland Rule.<sup>71</sup>

~~51.60.~~ Castle Rock Solar identified the proposed Project location after determining the existing Xcel Energy Chub Lake to Hampton Corners 345 kV transmission line has enough capacity to interconnect to the Project and it is located within two miles of the City of Farmington.<sup>72</sup>

#### **VI. PROJECT SCHEDULE**

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<sup>65</sup> Ex. App.-2 at 9 (Application).

<sup>66</sup> The EA defines "Project Area" as one mile from the land control area and collection line corridor. *See* Ex. PUC-ER-7 at ix (EA).

<sup>67</sup> Ex. App.-2 at 11 (Application).

<sup>68</sup> The EA defines "land control area" as the 1,442-acre area for which Castle Rock Solar is assumed to have site control through ownership, a lease agreement, or an easement. The Application refers to this as the "Site Control Area." For consistency with the EA, this document uses "Land Control Area" to refer to the 1,442-acre area evaluated in the EA. *See* Ex. PUC-ER-7 at viii (EA).

<sup>69</sup> Ex. PUC-ER-6 at 2 (EA).

<sup>70</sup> Ex. PUC-ER-6 at 60 (EA).

<sup>71</sup> Ex. App.-2 at 13 (Application).

<sup>72</sup> Ex. App.-2 at 13 (Application).

[52-61](#). Castle Rock Solar plans to begin construction in the first quarter of 2028, and commercial operation will commence in the fourth quarter of 2029.<sup>73</sup>

## VII. SUMMARY OF PUBLIC COMMENTS

### A. Scoping Comments

[53-62](#). The Public Information and EA Scoping meetings were held on April 16 and 17, 2025. Two members of the public provided oral comments during the Public Information and EA Scoping Meeting (remote-access) held on April 16, 2025. One commenter from LUINA expressed support for the Project, while another commenter from Vermillion River Watershed Joint Powers Organization (VRWJPO) emphasized the need to minimize and mitigate impacts to existing wetlands.<sup>74</sup>

[54-63](#). Four members of the public provided oral comments during the Public Information and EA Scoping Meeting (in-person) held on April 17, 2025. A representative from IUOE Local 49 expressed support for the use of local labor on the Project. A landowner raised questions regarding visual impacts of the site, the exact location of the Project, proposed road routes, potential effects of future bankruptcy, the design of the O&M building, substation placement, site grading, and the status of the existing snowmobile trail. The owner/operator of an organic vegetable farm near the Project site inquired about potential environmental impacts on the river, groundwater, soil, and air, as well as how these might affect her farming operations. She also raised concerns about electromagnetic fields (EMFs) and the decommissioning process. And a representative from the Minnesota Land and Liberty Coalition recommended including figures that illustrate changes to land classification for tax purposes.<sup>75</sup>

[55-64](#). During the scoping comment period, MDNR's filed written comments addressing potential environmental impacts regarding fencing, karst features, loggerhead shrike, lighting, dust, wildlife-friendly erosion control, native plant communities, and recommended that Castle Rock Solar use a Vegetation Management Plan (VMP).<sup>76</sup>

[56-65](#). MDNR recommended the security fence reaches a minimum height of 10 feet around each group of solar arrays to prevent white-tailed deer and other large wildlife from entering the facility and be designed in accordance with the MDNR's *Commercial Solar Siting Guidance and the Fencing Handbook for 10 ft Woven Wire Deer Exclusion Fence*.<sup>77</sup>

[57-66](#). MDNR noted that the Project is partially within a region prone to surface karst feature development and that the Applicant must coordinate with geotechnical experts to limit any potential pollution of this sensitive hydrogeology. The EA should describe how design and construction methods ensure the downward migration of unwanted materials into the groundwater does not occur.<sup>78</sup>

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<sup>73</sup> Ex. App.-26 (A. Campbell Direct Testimony with Schedules A-C).

<sup>74</sup> Ex. PUC-ER-3 (Oral and Written Public Comments on Scope of Environmental Assessment).

<sup>75</sup> Ex. PUC-ER-3 (Oral and Written Public Comments on Scope of Environmental Assessment).

<sup>76</sup> MDNR Scoping Comments (May 2, 2025) (eDockets No. [20255-218560-01](#)).

<sup>77</sup> MDNR Scoping Comments at 1 (May 2, 2025) (eDockets No. [20255-218560-01](#)).

<sup>78</sup> MDNR Scoping Comments at 2 (May 2, 2025) (eDockets No. [20255-218560-01](#)).

- ~~58-67.~~ MDNR recommended that The EA should address potential impacts to the loggerhead shrike (*Lanius ludovicianus*), a state-listed endangered bird that has been documented in the vicinity of the Project site and that if tree clearing cannot be avoided during loggerhead shrike breeding period, a qualified surveyor needs to conduct a survey for active nests before any trees or shrubs will be removed.<sup>79</sup> MDNR attached a Natural Heritage Review Letter regarding details about necessary surveys.<sup>80</sup>
- ~~59-68.~~ MDNR's Commercial Solar Siting Guidance advises the nominal color temperature of lighting installed does not exceed 4,000 kelvin and lighting is downlit and shielded to minimize blue hue, backlight, and glare.<sup>81</sup>
- ~~60-69.~~ MDNR recommends the EA address fugitive dust levels and dust suppression measures that will be taken during construction and once the facility is operational.<sup>82</sup>
- ~~61-70.~~ MDNR recommended the EA discuss wildlife friendly erosion control measures at the Project site. The MDNR also recommended using biodegradable erosion control materials that are flexible and rectangular due to entanglement concerns of small wildlife. Specifically, erosion control blankets should be limited to "bio-netting" or "natural netting" types and should not contain plastic mesh or other plastic components. If the Applicant intends to use hydro-mulches, the MDNR advised using hydro-mulches that do not contain synthetic fibers (plastic) and malachite green dyes which can pose toxicity concerns for fish, wildlife, and insects.<sup>83</sup>
- ~~62-71.~~ MDNR recommends the EA discuss the presence of native plant communities and measures to avoid or minimize impacts to these ecologically significant resources and refer to the Natural Heritage Review letters for specific actions to minimize disturbance to native plant communities.<sup>84</sup>
- ~~63-72.~~ MDNR recommends the EA discuss the construction and vegetation reestablishment phases to minimize stormwater runoff, stabilize soil, and support habitat. The MDNR also recommends the utilization of a VMP throughout the permitted sites. The VMP should be consistent with the MDNR's Prairie Establishment and Maintenance Technical Guidance for Solar Projects. MDNR advises increasing the height of the module to accommodate the growth of high diversity seed mixes and the aim of a VMP should be to develop native seed mixes that suit site conditions and are pollinator-friendly and habitat-friendly.<sup>85</sup>
- ~~64-73.~~ Drea Doffing submitted comments requested preparation of a full EIS for the Project, and asked about an emergency backup plan in case of an unexpected toxin release.<sup>86</sup>

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<sup>79</sup> MDNR Scoping Comments at 2 (May 2, 2025) (eDockets No. [20255-218560-01](#)).

<sup>80</sup> MDNR Natural Heritage Review Letter (May 2, 2025) (eDockets No. [20255-218560-02](#)).

<sup>81</sup> MDNR Scoping Comments at 2 (May 2, 2025) (eDockets No. [20255-218560-01](#)).

<sup>82</sup> MDNR Scoping Comments at 2 (May 2, 2025) (eDockets No. [20255-218560-01](#)).

<sup>83</sup> MDNR Scoping Comments at 2 (May 2, 2025) (eDockets No. [20255-218560-01](#)).

<sup>84</sup> MDNR Scoping Comments at 3 (May 2, 2025) (eDockets No. [20255-218560-01](#)).

<sup>85</sup> MDNR Scoping Comments at 3 (May 2, 2025) (eDockets No. [20255-218560-01](#)).

<sup>86</sup> D. Doffing Public Comment (May 5, 2025) (eDockets No. [20255-218574-01](#)).

~~65~~74. PUC-ER also received written public comments from The Leech Lake Band of Ojibwe, VRWJPO, and Gerald Larson.<sup>87</sup>

~~66~~75. The Leech Lake Band of Ojibwe THPO commented that while they have no recorded historic properties within the area, that does not mean there are no cultural resources present and requested that the tribe be notified if human remains or suspected human remains are encountered.<sup>88</sup>

~~67~~76. Travis Thiel and Kelly Perrine of VRWJPO, recommended Applicant follow the Wetland Conservation Act sequencing process to avoid and minimize onsite wetland impacts before seeking approval for mitigation, after reviewing the wetland delineation report and determining that the proposed layout would impact farm wetlands.<sup>89</sup>

~~68~~77. And Gerald Larson commented on his opposition to placing the Project on prime agricultural land.<sup>90</sup>

## **B. Hearing Comments**

~~69~~78. Public hearings were held on October 22 and October 23, 2025. Eight members of the public provided oral comments during the in-person public hearing held on October 22, 2025. No members of the public commented during the October 23, 2025 virtual public hearing.<sup>91</sup>

~~70~~79. A few commenters present at the in-person public hearing asked questions about the plan in the event of an emergency at the Project, and about Project safety generally. Commenters also asked questions about vegetative screening, panel disposal, the use of livestock grazing for vegetation management, impacts to wildlife and habitat, local labor, setbacks, local ordinances, and property values<sup>92</sup>

~~71~~80. VRWJPO filed comments on the EA regarding soils, surface water, vegetation, potential impacts and mitigation, and recommended edits to various tables and figures.<sup>93</sup>

~~72~~81. The Minnesota Pollution Control Agency (MPCA) commented that it reviewed the EA and has no comments at this time.<sup>94</sup>

~~73~~82. PUC-ER filed comments on the Project and recommended modifications to the draft decommissioning plan and summarized changes between the sample site permit filed by the Commission and the proposed draft site permit (DSP) included in Appendix C of the EA prepared for the Project.<sup>95</sup>

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<sup>87</sup> Ex. PUC-ER-3 (Oral and Written Public Comments on Scope of Environmental Assessment).

<sup>88</sup> Ex. PUC-ER-3 (Oral and Written Public Comments on Scope of Environmental Assessment).

<sup>89</sup> Ex. PUC-ER-3 (Oral and Written Public Comments on Scope of Environmental Assessment).

<sup>90</sup> Ex. PUC-ER-3 (Oral and Written Public Comments on Scope of Environmental Assessment).

<sup>91</sup> Shaddix & Associates Transcripts (October 22, 2025) (eDockets No. 202510-224050-01).

<sup>92</sup> Shaddix & Associates Transcripts (October 22, 2025) (eDockets No. 202510-224050-01).

<sup>93</sup> VRWJPO Comments (October 29, 2025) (eDockets No. [202510-224390-01](#)).

<sup>94</sup> MPCA Comments (October 30, 2025) (eDockets No. [202510-224408-01](#)).

<sup>95</sup> PUC-ER Comments (October 31, 2025) (eDockets No. [202510-224546-01](#)).

- ~~74.~~83. The Vegetation Management Plan Working Group (VMPWG) filed comments on the VMP. The VMPWG does not recommend any action by the Commission at this time but provided comments to facilitate transparency in the record as the VMPWG works with Castle Rock Solar to arrive at a VMP that is adequate to meet pre-construction compliance filing requirements.<sup>96</sup>
- ~~75.~~84. MDNR submitted written comments on November 3, 2025, recommending special permit conditions for security fencing, karst features, loggerhead shrike protections, Northern long-eared bat protections, protections for sites of biodiversity significance, a dewatering plan, coordination about a snowmobile trail within the Project Area, facility lighting, dust control, wildlife friendly erosion control, and a VMP. MDNR requested that the Project's security fence reach a minimum height of 10 feet around each grouping of solar arrays to prevent large wildlife from entering the solar facility and supported section 4.3.32 of the DSP requiring the permittee to coordinate the final security fencing design with the MDNR.<sup>97</sup>
- ~~76.~~85. Drea Droffing commented specifically that the EA was inadequate because it failed to consider impacts on the Vermillion River, specifically, that the EA failed to consider proposed horizontal directional drilling along the South Branch Vermillion River.<sup>98</sup>
- ~~77.~~86. Susan Ferrazzo commented that if the Project proceeds, affected homeowners should receive fair compensation for property devaluation, noise, and visual impacts, and that residents should have input in defining this compensation to ensure equitable treatment.<sup>99</sup>
- ~~78.~~87. LIUNA filed comments regarding the potential for the Project to provide construction employment and career opportunities and the importance of local workforce utilization.<sup>100</sup>
- ~~79.~~88. One commenter, Susan Ferrozzo, submitted comments asking where batteries would be storied and identifying fire hazards associated with batteries.<sup>101</sup>

### C. Reply Comments

- ~~80.~~89. In reply comments, Castle Rock Solar explained that it is committed to following local zoning, building, or land use rules, regulations, or ordinances to the extent practicable. In particular, Castle Rock Solar has applied Castle Rock Township solar setback requirements, in effect at the time the application was submitted, to the design of the Project, and the majority of the Project will be sited outside of the County's designed floodplain or shoreland areas.<sup>102</sup> In addition, Castle Rock Solar noted that Minnesota Stat. § 216E.10, subd. 1, provides that a permit issued under Chapter 216E will, "supersede and preempt all zoning, building, or land use rules, regulations, or ordinances promulgated by regional, county, local and special purpose government."

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<sup>96</sup> VMPWG Comments (October 31, 2025) (eDockets No. [202510-224536-01](#)).

<sup>97</sup> MDNR Comments (November 3, 2024) (eDockets No. [202511-224630-01](#)).

<sup>98</sup> D. Droffing Public Comment (November 4, 2024) (eDockets No. [202511-224656-01](#)).

<sup>99</sup> S. Ferrozzo Public Comment (November 4, 2024) (eDockets No. [202511-224654-01](#)).

<sup>100</sup> LIUNA Comments (November 4, 2025) (eDockets No. [202511-224637-01](#)).

<sup>101</sup> S. Ferrozzo Public Comment (November 10, 2024) (eDockets No. [202511-224802-01](#)).

<sup>102</sup> Ex. App.-2 at 32-33 (Application).

~~81.~~90. The EA discussed impacts on the Vermillion River, including a discussion of horizontal directional drilling locations and aerial spanning of the river corridor. The EA concluded that the use of horizontal directional drilling is a trenchless method that will “reduc[e] ground disturbance impacts to wetlands.”<sup>103</sup> The EA also notes that directional drilling or aerial span of cables across the South Branch Vermillion River will avoid disturbance to the native plant communities in the river corridor.<sup>104</sup>

~~82.~~91. The Project is a large electric power generating plant powered by solar energy, *see* Minn. Stat. § 216E.04, subd. 2(8), and elected to use the alternative review process in Minn. Stat. § 215E.04. By statute, environmental review for the Project is conducted via an EA—not an EIS. Minn. Stat. § 216E.04, subd. 5 (“For the projects identified in subdivision 2 and following these procedures, . . . [t]he environmental assessment shall be the only state environmental review document required to be prepared on the project.”). Castle Rock Solar elected to use the alternative review process set forth in Minn. Stat. § 215E.04, accordingly, the EA prepared for the Project is the only environmental review document required to be prepared for the Project.<sup>105</sup>

~~83.~~92. In response to comments, Castle Rock Solar proposed an amendment to the Site Plan Condition in the Draft Site Permit to add a requirement that the Permittee also provide the Castle Rock Township with a copy of the Site Plan before the pre-construction meeting.<sup>106</sup>

~~84.~~93. Castle Rock Solar has applied for a Site Permit for a solar energy conversion system, and any future addition of a battery energy storage system would require a separate site permit from the Commission. Additional information about batteries would be included if Castle Rock Solar applies for a site permit for a battery energy storage system project, however, Castle Rock Solar notes that battery energy storage technology is evolving rapidly, and that the robust national codes that now govern battery energy storage systems and advancements in battery energy storage design have significantly improved fire safety and reduced risks.<sup>107</sup>

~~85.~~94. Castle Rock Solar explained that the Visual Screening Plan will include details about vegetation establishment and a plan to replace vegetation in the event establishment is not successful. In addition, Castle Rock Solar will continue to develop a VMP in consultation with the VMPWG. A draft VMP was provided with Castle Rock Solar’s Application. The VMPWG provided comments on the VMP and Castle Rock Solar looks forward to working with the VMPWG to address its comments. The VMP will provide additional detail on Castle Rock Solar’s plan for vegetation management.<sup>108</sup>

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<sup>103</sup> Castle Rock Solar Response to Public Hearing Comments (November 17, 2025) (eDockets No. \_\_\_\_\_).

<sup>104</sup> Ex. PUC-ER-6 at 70 (EA).

<sup>105</sup> Castle Rock Solar Response to Public Hearing Comments (November 17, 2025) (eDockets No. \_\_\_\_\_).

<sup>106</sup> Castle Rock Solar Response to Public Hearing Comments (November 17, 2025) (eDockets No. \_\_\_\_\_).

<sup>107</sup> Castle Rock Solar Response to Public Hearing Comments (November 17, 2025) (eDockets No. \_\_\_\_\_).

<sup>108</sup> Castle Rock Solar Response to Public Hearing Comments (November 17, 2025) (eDockets No. \_\_\_\_\_).

~~86.~~95. Castle Rock Solar is also committed to working with landowners prior to construction to discuss the potential for visual impacts on their property, and to identify visual impact mitigation measures to address their concerns.<sup>109</sup>

~~87.~~96. Castle Rock Solar also reviewed Labor & Statistics reporting data submitted in recent dockets, which had a majority of the hours worked completed by local workers.<sup>110</sup>

~~88.~~97. Finally, Castle Rock Solar reiterated that it sent public notice to all adjacent landowners as required by law. Castle Rock Solar also attempted to contact a non-adjacent landowner that indicated concern about a lack of notice to discuss her questions, comments and concerns about the Project.<sup>111</sup>

~~89.~~98. Castle Rock Solar appreciates MDNR's comments and will continue to coordinate with MDNR and Commission staff regarding the Project's security fence.<sup>112</sup>

~~90.~~99. MDNR proposed revisions to the karst features site permit condition. Castle Rock Solar proposed a further modification of the condition to require further coordination with the MDNR to determine appropriate setbacks after Castle Rock Solar conducts a geotechnical investigation to determine the presence of subsurface voids, cavities, fractures or other discontinuities.<sup>113</sup>

## VIII. PERMITTEE

~~91.~~100. The permittee for the Project is Castle Rock Solar, LLC.<sup>114</sup>

## IX. CERTIFICATE OF NEED

~~92.~~101. The Project is exempt from certificate of need requirements pursuant to Minn. Stat. § 216B.2422, subd. 5, and Minn. Stat. § 216B.243, subd. 9 because the Project was selected through a Commission-approved bidding process and intends to meet Minnesota's renewable energy objectives.<sup>115</sup>

## X. SITE PERMIT CRITERIA

~~93.~~102. Large electric power generating plants (LEPGP) are governed by Minn. Stat. ch. 216E (2023) and Minn. R. ch. 7850. Minn. Stat. § 216E.01, subd. 5 (2023), defines a LEPGP as a "electric power generating equipment and associated facilities designed for or capable of operation at a capacity of 50,000 kilowatts or more."

~~94.~~103. On August 2, 2024, Castle Rock Solar requested a size determination for the Project from PUC-ER.<sup>116</sup> On August 19, 2024, PUC-ER informed Castle Rock Solar that, based on the

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<sup>109</sup> Castle Rock Solar Response to Public Hearing Comments (November 17, 2025) (eDockets No. \_\_\_\_\_).

<sup>110</sup> Castle Rock Solar Response to Public Hearing Comments (November 17, 2025) (eDockets No. \_\_\_\_\_).

<sup>111</sup> Castle Rock Solar Response to Public Hearing Comments (November 17, 2025) (eDockets No. \_\_\_\_\_).

<sup>112</sup> Castle Rock Solar Response to Public Hearing Comments (November 17, 2025) (eDockets No. \_\_\_\_\_).

<sup>113</sup> Castle Rock Solar Response to Public Hearing Comments (November 17, 2025) (eDockets No. \_\_\_\_\_).

<sup>114</sup> Ex. App.-2 at 1 (Application).

<sup>115</sup> Ex. App.-2 at 9 (Application); Ex. PUC-ER-6 at 49 (EA).

<sup>116</sup> Ex. App.-2 at 8 (Application).

information provided, the Project is subject to the Commission’s siting authority under Minn. Stat. § 216E.021 (2023). Therefore, a site permit is required prior to construction of the Project.<sup>117</sup>

~~95.~~104. An LEPGP powered by solar energy is eligible for the alternative permitting process under Minn. Stat. § 216E.04 (2023). Castle Rock Solar filed the Application under the alternative process established by the Commission in Minn. R. parts 7850.2800- 7850.3900.<sup>118</sup>

~~96.~~105. Under Minn. Stat. § 216E.04 (2023), for a LEPGP permitted under the alternative permitting process, PUC-ER prepares an EA for the Commission containing information on the human and environmental impacts of the proposed Project and addresses mitigating measures. The EA is the only state environmental review document required to be prepared on the Project.<sup>119</sup>

~~97.~~106. PUC-ER is responsible for evaluating the Application and administering the environmental review process.<sup>120</sup>

## **XI. APPLICATION OF SITING CRITERIA TO THE PROPOSED PROJECT<sup>121</sup>**

### **A. Human Settlement.**

~~98.~~107. Minnesota law requires consideration of the Project’s effects on human settlement, including displacement of residences and businesses, noise created by construction and operation of the Project, and impacts to aesthetics, cultural values, recreation, and public services.<sup>122</sup>

#### *1. Displacement*

~~99.~~108. There are no residences, businesses, or structures such as barns or sheds located within the preliminary development area, and none will be displaced by the Project. Thus, the Project will have no significant impact on displacement.<sup>123</sup>

#### *2. Aesthetics.*

~~100.~~109. The visible elements of the solar facility will consist of new PV panel arrays, transformers and inverters, weather stations, and O&M facility, a new substation, a short transmission line, and security fencing surrounding the Project.<sup>124</sup>

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<sup>117</sup> Ex. App.-2 at 9 (Application).

<sup>118</sup> Ex. App.-1 (Notice of Intent to Submit a Site Permit Application Under Alternative Review Process).

<sup>119</sup> In 2024, the Minnesota Legislature enacted a permitting reform statute. *See* Minn. Stat. ch. 216I. The PUC is reviewing matters initially filed under Minn. Stat. ch. 216E (2023), like this one, under Minn. Stat. ch. 216E. *See* Notice of Legislative Changes (Jul. 7, 2025) (eDockets No. [20257-220799-01](#)).

<sup>120</sup> Ex. PUC-ER-6 at 49 (EA).

<sup>121</sup> *See* Minn. R. 7850.4100.

<sup>122</sup> Minn. R. 7850.4100, subp. A.

<sup>123</sup> Ex. PUC-ER-6 at 195 (EA).

<sup>124</sup> Ex. PUC-ER-6 at 68 (EA).

~~101.~~110. The Project will be a noticeable change in the landscape, converting approximately 934 acres into solar production. Although the change will be noticeable, there are other existing infrastructure features in the landscape including gravel roads and the power plant with supporting infrastructure. How an individual viewer perceives the change from pastureland or cultivated crop land to a field of solar panels depends, in part, on how a viewer perceives solar panels.<sup>125</sup>

~~102.~~111. For residents outside the Project vicinity and for others with low viewer sensitivity, such as those travelling on MN 50, CR 78, CR 79, or local roads, aesthetic impacts are anticipated to be minimal. For these viewers, the solar panels would be relatively difficult to see due to fencing and vegetation or would be visible for a very short period. For residents in the Project vicinity and for others with high viewer sensitivity traveling on local roads in the Project vicinity, such as Biscayne Avenue West, aesthetic impacts are anticipated to be moderate to significant.<sup>126</sup>

~~103.~~112. The Project will include a perimeter fence that will be gated at access points and will include security locks. The Project substation will be fenced according to the National Electrical Code and National Electrical Safety Code. The fence will be properly grounded to avoid any hazards. The substation will also have safety lighting and may have security cameras mounted at fence gates.<sup>127</sup>

~~104.~~113. Fixtures used to light the Project Area will limit lighting of the night sky and will be directed away from adjacent properties and public rights-of-way to prevent light from trespassing or spilling onto those properties. Any lighting used on site will comply with all applicable rules and regulations.<sup>128</sup>

~~105.~~114. The record demonstrates that Castle Rock Solar has taken steps to avoid and minimize visual impacts. Further, Section 4.3.8 of the DSP requires the permittee to consider landowner input with respect to visual impacts and to use care to preserve the natural landscape.<sup>129</sup>

~~106.~~115. In addition, Section 5.1 of the DSP is a special condition that requires a Visual Screening Plan.<sup>130</sup> Section 5.1 would require Castle Rock Solar to coordinate with adjacent landowners on the Visual Screening Plan. Castle Rock Solar has started working with adjacent landowners to develop a Visual Screening Plan.<sup>131</sup>

### 3. Noise.

~~107.~~116. Noise is defined as any undesired sound. It is measured in units of decibels on a logarithmic scale. The A-weighted scale (dBA) is used to duplicate the sensitivity of the human ear. A three dBA change in sound is barely detectable to average human hearing, whereas a

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<sup>125</sup> Ex. PUC-ER-6 at 68 (EA).

<sup>126</sup> Ex. PUC-ER-6 at 63 (EA).

<sup>127</sup> Ex. App.-2 at 20 (Application); Ex. PUC-ER-6 at 33 (EA).

<sup>128</sup> Ex. App.-2 at 20 (Application); Ex. PUC-ER-6 at 34-35 (EA).

<sup>129</sup> Ex. PUC-ER-6, Appendix C at 8 (EA, Appendix C - Draft Site Permit).

<sup>130</sup> Ex. PUC-ER-6, Appendix C at 17 (EA, Appendix C - Draft Site Permit).

<sup>131</sup> Castle Rock Solar Response to Public Hearing Comments (November 17, 2025) (eDockets No. \_\_\_\_\_).

five dBA change is clearly noticeable. A ten dBA change is perceived as a sound doubling in loudness.<sup>132</sup>

~~108.~~117. The MPCA has established standards for the regulation of noise levels. The most restrictive MPCA noise limits are 60–65 dBA during the daytime and 50–55 dBA during the nighttime.<sup>133</sup>

~~109.~~118. In Minnesota, noise standards are based on noise area classifications (NAC) corresponding to the location of the listener, referred to as a receptor. NACs are assigned to areas based on the type of land use activity occurring at that location. Household units, designated camping and picnicking areas, resorts and group camps are assigned to NAC 1; recreational activities (except designated camping and picnicking areas) and parks are assigned to NAC 2; agricultural and related activities are assigned to NAC 3.<sup>134</sup>

~~110.~~119. The ROI for noise is the Project vicinity (1,600 feet). The primary noise receptors are the local residences. Castle Rock Solar identified a total of 154 noise receptors (residences) within 0.5 miles of the Project. There are no residences within the development area, there are five residences located outside of the fenced array area but within the Project boundary that are participating landowners. An additional 149 residences are located on parcels adjacent to or near the Project site. The identified receptors were categorized by distance from the Project; all of the residences are at least 200 feet away from the Project, and the majority of residences (62 percent) are at least 800 feet away from the Project.<sup>135</sup>

~~111.~~120. The proposed Project is in a rural, agriculturally dominated area directly adjacent to city of Farmington. Rural noise levels typically range from 30-55 dBA depending on the activity, time-of-day, weather, and season. The Project vicinity's existing sound character also includes audible traffic sounds from roadways such as Minnesota State Highway 50 (MN 50), which is to the north of the Project. Snowmobile trail 123 is currently routed through the proposed Project. Prior to 1969, snowmobiles emitted sound levels as high as 102 dBA from 50 feet. The Snowmobile Safety and Certification Committee was formed in 1974 to provide safety regulations for the industry. Since 1976, all snowmobiles manufactured and certified must not exceed 78 dBA from 50 feet while traveling at full throttle, and no more than 73 dBA at 50 feet when traveling at 15 mph. During winter seasons, the additional noise from snowmobiles is considered part of the existing sound character of the area.<sup>136</sup>

~~112.~~121. The Project Area is classified as NAC 1. Noise receptors include individuals within their residences, working outside in the Project vicinity, and using the surrounding recreational resources. Fountain Valley Golf Course is 0.1-mile northwest of the Project and snowmobile trail 123 is currently routed through the proposed Project; both are recreation resources open to

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<sup>132</sup> Ex. PUC-ER-6 at 72 (EA).

<sup>133</sup> Minn. R. 7030.0040.

<sup>134</sup> Ex. PUC-ER-6 at 72 (EA).

<sup>135</sup> Ex. PUC-ER-6 at 73 (EA).

<sup>136</sup> Ex. PUC-ER-6 at 74 (EA).

the public that may be potentially impacted by the Project. Other recreation resources are listed in Table 19 of the Application.<sup>137</sup>

~~113.~~122. Potential noise impacts from the Project are associated with construction noise and operational noise.<sup>138</sup>

~~114.~~123. Distinct noise impacts during construction are anticipated to be minimal to significant depending on the activity occurring and equipment being used. Noise from construction will be temporary, intermittent, limited to daytime hours and localized. Sound levels from grading equipment are not dissimilar from the typical tractors and larger trucks used in agricultural communities during harvest. The noise from construction activities would dissipate with distance and be audible at varying decibels, depending on the distance from the equipment to the receptor.<sup>139</sup>

~~115.~~124. Construction noise would likely exceed state noise standards at select times and locations if it is continuous for at least six minutes. Exceedances would be short-term and confined to daytime hours. Even without an exceedance, noise impacts will occur.<sup>140</sup>

~~116.~~125. Sound control devices on vehicles and equipment (e.g., mufflers) conducting construction activities during daylight hours, and running vehicles and equipment only when necessary are common ways to mitigate construction noise impacts.<sup>141</sup>

~~117.~~126. Noise levels during operation of the Project are anticipated to be negligible. The primary source of noise from the solar facility will be from inverters and transformers, typically characterized as a slight hum or buzz, as well as the rotation of the tracking system, although some minor noise may be generated from the short transmission line or from wind blowing through the conductors and structures.<sup>142</sup>

~~118.~~127. Operational noise for individuals using the surrounding recreational resources will be comparable to the background noise levels in the area.<sup>143</sup>

~~119.~~128. The record demonstrates that Castle Rock Solar has taken steps to avoid and minimize noise impacts. Further, Section 4.3.7 of the DSP requires the permittee to comply with noise standards established under Minnesota noise standards as defined under Minnesota R. 7030.010 to 7030.0080, and to limit construction and maintenance activities to daytime hours to the extent practicable.<sup>144</sup>

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<sup>137</sup> Ex. PUC-ER-6 at 74 (EA).

<sup>138</sup> Ex. PUC-ER-6 at 74 (EA).

<sup>139</sup> Ex. PUC-ER-6 at 74 (EA).

<sup>140</sup> Ex. PUC-ER-6 at 75 (EA).

<sup>141</sup> Ex. PUC-ER-6 at 76 (EA).

<sup>142</sup> Ex. PUC-ER-6 at 75 (EA).

<sup>143</sup> Ex. PUC-ER-6 at 76 (EA).

<sup>144</sup> Ex. PUC-ER-6 at 76 (EA); Ex. PUC-ER-6, Appendix C at 8 (EA, Appendix C - Draft Site Permit).

~~120.~~129. Section 5.2 of the DSP is a special condition that requires the permittee to provide notice to adjacent residences detailing when major noise-producing construction activities are planned to occur.<sup>145</sup> Castle Rock Solar did not object to the inclusion of Section 5.2.

#### 4. *Cultural Values.*

~~121.~~130. The Project contributed to the growth of renewable energy and is likely to strengthen and reinforce this value in the area. The Project Area is not located within municipal areas where events typically occur, so impacts on community events are not anticipated.<sup>146</sup>

~~122.~~131. However, the value residents put on the character of the landscape within which they live is subjective, meaning its relative value depends upon the perception and philosophical or psychological responses unique to individuals. Because of this, construction of the Project might—for some residents—change their perception of the area’s character thus potentially eroding their sense of place.<sup>147</sup>

~~123.~~132. There are no conditions in the DSP that directly address mitigation for impacts to cultural values. Section 4.3.23 addresses impacts to cultural properties. No additional mitigation is proposed.<sup>148</sup>

#### 5. *Land Use and Zoning.*

~~124.~~133. Development of a solar farm in this area will temporarily change the land use from predominantly agricultural uses to energy generation for the life of the Project, at least 30 years. The change of land use will have a minimal to moderate impact on the rural character of the surrounding area, and a minimal impact on the county character. Although the land is being converted from primarily agricultural to be used for energy production, the land use is consistent with other infrastructure in the area such as nearby solar farms.<sup>149</sup>

~~125.~~134. The Project would convert approximately 972 acres of cultivated cropland to solar energy production. Although the Project is subject to oversight by the State of Minnesota under the Minnesota Power Plant Siting Act, Castle Rock Solar will continue to coordinate with Dakota County and Castle Rock Township on other potential permits for the Project.<sup>150</sup>

~~126.~~135. Impacts to county zoning can be mitigated by ensuring the Project is consistent, to the greatest extent practicable, with Castle Rock Township’s zoning ordinance, in effect at the time the application was submitted, concerning Solar Electric Systems.<sup>151</sup> Castle Rock Solar will strive to be consistent with Dakota County and Castle Rock Township zoning ordinances and comprehensive plan for development to the extent practicable.<sup>152</sup>

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<sup>145</sup> Ex. PUC-ER-6 at 76 (EA); Ex. PUC—ER-6, Appendix C at 17 (EA, Appendix C - Draft Site Permit).

<sup>146</sup> Ex. PUC-ER-6 at 78 (EA).

<sup>147</sup> Ex. PUC-ER-6 at 78 (EA).

<sup>148</sup> Ex. PUC-ER-6 at 80 (EA).

<sup>149</sup> Ex. PUC-ER-6 at 83 (EA).

<sup>150</sup> Ex. PUC-ER-6 at 84 (EA).

<sup>151</sup> Ex. PUC-ER-6 at 85 (EA).

<sup>152</sup> Castle Rock Solar Response to Public Hearing Comments (November 17, 2025) (eDockets No. \_\_\_\_\_).

~~127.~~136. One commenter noted that Castle Rock Township has an ordinance governing Castle Rock Township road rights-of-way. Castle Rock Township Ordinance 2009-02, an *Ordinance Regulating Township Road Right-Of-Ways and Large Utility Projects Impacting Township Ordinance Regulating Township Road Right-Of-Ways*, governs the use of Castle Rock Township road rights-of-way “by requiring those undertaking utility projects in and near Castle Rock Township’s rights-of-way to obtain a permit from Castle Rock Township. Specifically, a permit is required to “obstruct or excavate any right-of-way.”<sup>153</sup>

~~128.~~137. Castle Rock Solar has committed to working with Castle Rock Township and Dakota County to secure road right-of-way permits contemplated that local road authority permits may be required, as necessary.<sup>154</sup>

~~129.~~138. DSP Section 4.3.18 requires the applicant to prepare an Agricultural Impact Mitigation Plan (AIMP) that details methods to minimize soil compaction, preserve topsoil, and establish and maintain appropriate vegetation to ensure the Project is designed, constructed, operated and ultimately restored in a manner that would preserve soils to allow for the land to be returned to agricultural use. Section 4.3.17 requires the applicant to prepare a vegetation management plan to prevent soil erosion and invest in soil health by establishing a plan to protect soil resources by ensuring perennial cover.<sup>155</sup>

~~130.~~139. Castle Rock Solar has developed an AIMP<sup>156</sup> and a VMP<sup>157</sup> that will be implemented throughout the duration of the Project. The AIMP and VMP identify measures to avoid, minimize, mitigate, and/or repair potential negative agricultural impacts that may result from the construction, operation, or decommissioning of the Project. The AIMP and VMP ensure the Land Control Area may be returned to future agricultural use after the end of the Project’s useful life, including identifying best management practices (BMPs) that will be used during construction.

~~131.~~140. In addition, DSP Section 9 requires the applicant to prepare a decommissioning plan focused on returning the Project site to agricultural use at the end of the Project’s useful life.<sup>158</sup> Castle Rock Solar has prepared a draft Decommissioning Plan.<sup>159</sup>

## 6. Property Values.

~~132.~~141. Impacts to the value of specific properties within the Project vicinity are difficult to determine but could occur.<sup>160</sup> Parcels adjacent to or near the Project could experience minimal

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<sup>153</sup> Ordinance 2009-02 available at [https://irp.cdn-website.com/f48d6b0b/files/uploaded/Ordinance\\_No.\\_2009-2\\_An\\_ordinance\\_regulating\\_township\\_road\\_right-of-ways\\_and\\_large\\_utility\\_projects\\_impacting\\_township\\_right-of-ways.pdf](https://irp.cdn-website.com/f48d6b0b/files/uploaded/Ordinance_No._2009-2_An_ordinance_regulating_township_road_right-of-ways_and_large_utility_projects_impacting_township_right-of-ways.pdf) (reviewed on November 13, 2025).

<sup>154</sup> Ex. App.-2 at 8, 31 (Application); Castle Rock Solar Response to Public Hearing Comments (November 17, 2025) (eDockets No. \_\_\_\_\_).

<sup>155</sup> Ex. PUC-ER-6, Appendix C at 11-12 (EA, Appendix C - Draft Site Permit).

<sup>156</sup> Ex. App.-6 (Application, Appendix D - AIMP)

<sup>157</sup> Ex. App.-7 (Application, Appendix E - VMP)

<sup>158</sup> Ex. PUC-ER-6, Appendix C at 25–26 (EA, Appendix C - Draft Site Permit).

<sup>159</sup> Ex. App.-10 (Application, Appendix H – Decommissioning Plan).

<sup>160</sup> Ex. PUC-ER-6 at 87 (EA).

to moderate property value impacts, but significant negative impacts to property values in the Project vicinity are not anticipated.<sup>161</sup>

~~133.~~142. Because each landowner has a unique relationship and sense of value associated with their property, a landowner's assessment of potential impacts to their property's value is often a deeply personal comparison of the property "before" and "after" a proposed Project is constructed. The landowner's judgments, however, do not necessarily influence the market value of a property.<sup>162</sup>

~~134.~~143. Peer reviewed studies have found that the effects of large-scale solar facilities "on home sale prices depend on many factors that are not uniform across all solar developments or across all states." Studies of the impact of solar facilities on home prices in Minnesota have not find a consistent negative impact of sales value of properties near large solar facilities.<sup>163</sup>

~~135.~~144. Impacts to the value of specific properties within the Project vicinity are difficult to determine but could occur. Because of this uncertainty, and considering the information above, impacts to specific properties are anticipated to be minimal to moderate, but are expected to be within 0.5 miles of the Project and to decrease with distance from the Project and with time.<sup>164</sup>

~~136.~~145. Impacts to property values can be mitigated by reducing aesthetic impacts and impacts to future land use. Impacts can also be mitigated through individual agreements with neighboring landowners; such as through individual vegetation screening plans.<sup>165</sup>

~~137.~~146. Castle Rock Solar will mitigate aesthetic impacts to residences by developing a site-specific Visual Screening Plan in consultation with adjacent landowners.<sup>166</sup> Castle Rock Solar has already started consultation with adjacent landowners to support this effort. DSP Section 5.1 also requires development of a site-specific Visual Screening Plan as mitigation for visual impacts.<sup>167</sup>

## 7. *Tourism and Recreation.*

~~138.~~147. Recreation and tourism in the area are largely related to activities including hiking, hunting, fishing, wildlife viewing, and snowmobiling. Activities in the area are associated with the Hampton Woods Wildlife Management Area (WMA), golf course, city trails, and the snowmobile trail that runs through the Project.<sup>168</sup>

~~139.~~148. Impacts to tourism and recreation are anticipated to be minimal to moderate. During the construction phase of the Project, there will be short-term increases in traffic and noise that

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<sup>161</sup> Ex. PUC-ER-6 at 87 (EA).

<sup>162</sup> Ex. PUC-ER-6 at 85 (EA).

<sup>163</sup> Ex. PUC-ER-6 at 86 (EA).

<sup>164</sup> Ex. PUC-ER-6 at 87 (EA).

<sup>165</sup> Ex. PUC-ER-6 at 88 (EA).

<sup>166</sup> Castle Rock Solar Response to Public Hearing Comments (November 17, 2025) (eDockets No. \_\_\_\_\_).

<sup>167</sup> Ex. PUC-ER-6, Appendix C at 17 (EA, Appendix C - Draft Site Permit).

<sup>168</sup> Ex. PUC-ER-6 at 88 (EA).

could potentially impact recreational activities near the Project. However, these impacts will be temporary.<sup>169</sup>

~~140.~~149. Section 5.3 of the DSP is a special condition that requires the permittee to work with the local snowmobile association and associated clubs responsible for maintaining snowmobile trail 123 to identify alternative routes and interconnections to trails in the area and develop a plan for rerouting the portion of snowmobile trail 123 that falls within the Project fence. Castle Rock Solar will be responsible for sponsoring the reroute efforts.<sup>170</sup>

~~141.~~150. Castle Rock Solar proactively reached out to the snowmobile club that manages trails within the Project Area by sending a map to indicate which trails would be affected, and indicating a willingness to discuss a reroute.<sup>171</sup> As of November 17, Castle Rock Solar had not heard back from the local snowmobile club.<sup>172</sup> Castle Rock Solar committed to continuing to work with the snowmobile club to discuss the Project and potential alternate routes.<sup>173</sup>

#### 8. *Transportation and Public Services.*

~~142.~~151. Large energy projects can impact public services, such as buried utilities or roads, wells, railroads, and housing availability.<sup>174</sup> Potential impacts to utilities are anticipated to be short-term, intermittent, and localized during construction. Permanent impacts to public utilities are not anticipated, and underground utilities will be marked prior to construction start.<sup>175</sup> Potential impacts to wells and pipelines will be mitigated with appropriate planning and site design.<sup>176</sup>

~~143.~~152. There are a number of wells within the Project Area.<sup>177</sup> To protect wells within the solar array area, Castle Rock Solar will either mark the well with flagging and establish a fenced, five-foot protective buffer around the well or fully decommission the well. The wells within the Land Control Area are deep and are likely screened within a deeper aquifer than where pile depths would reach. Pile embedment depths will be evaluated following completion of the geotechnical engineering investigation. Wells found onsite that will not be used must be sealed according to Minnesota R. 1031.301.22<sup>178</sup>

~~144.~~153. During construction, workers and trucks delivering construction material and equipment will use the existing state, county, and township road system to access the Project. Construction traffic will be perceptible to area residents, particularly those residing within and

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<sup>169</sup> Ex. PUC-ER-6 at 90 (EA).

<sup>170</sup> Ex. PUC-ER-6 at 91 (EA).

<sup>171</sup> Castle Rock Solar Response to Public Hearing Comments (November 17, 2025) (eDockets No. \_\_\_\_\_).

<sup>172</sup> Castle Rock Solar Response to Public Hearing Comments (November 17, 2025) (eDockets No. \_\_\_\_\_).

<sup>173</sup> Castle Rock Solar Response to Public Hearing Comments (November 17, 2025) (eDockets No. \_\_\_\_\_).

<sup>174</sup> Ex. PUC-ER-6 at 95–97 (EA).

<sup>175</sup> Ex. PUC-ER-6 at 97 (EA).

<sup>176</sup> Ex. PUC-ER-6 at 91 (EA).

<sup>177</sup> Ex. PUC-ER-6 at 91 (EA).

<sup>178</sup> Ex. PUC-ER-6 at 97 (EA).

around the city of Farmington and the nearby residential developments, as the traffic volume on the surrounding county and township roads is relatively low.<sup>179</sup>

~~145.~~154. Because the average daily traffic within the area is well below the design capacity of a rural two-lane highway, this increased traffic is not expected to affect traffic function. Once construction is complete, traffic impacts will be negligible.<sup>180</sup>

~~146.~~155. Castle Rock Solar will post signage on local roads during construction to notify the general public about construction vehicles entering and exiting the roadway and the presence of construction workers. Appropriate approvals will be obtained prior to equipment deliveries for overweight or oversized loads, as necessary. No changes to existing roadways are anticipated. No impacts to roads are anticipated during the operation; negligible traffic increases would occur for maintenance.<sup>181</sup>

~~147.~~156. There are two natural gas or hazardous liquid pipelines within the Land Control Area. Flint Hills Resources' crude oil pipeline runs east-west along 230th Street before turning northeast to Annetee Avenue. Magellan Pipeline Company's low-vapor-pressure liquid pipeline runs north-south on the east side of the Project.<sup>182</sup>

~~148.~~157. Castle Rock Solar will contact the owner/operator of each pipeline within the Land Control Area and notify them of the Project and timing of construction, should they wish to send a representative to supervise work near the pipeline. Castle Rock Solar will obtain all necessary license agreements from the owner/operator of each pipeline to cross the pipelines.<sup>183</sup>

~~149.~~158. In addition, Section 5.6 of the DSP is a special condition requiring the permittee to coordinate with Flint Hills Resources and Magellan Pipeline Company to determine the location of each existing pipeline within the Land Control Area.<sup>184</sup> [Section 8.12 of the DSP requires the permittee to prepare an Emergency Response Plan in coordination with local emergency responders. PUC-ER staff revised Section 8.12 of the DSP to require the permittee to include specific training and response plans for impacts related to pipeline strike and damage events.](#)

~~150.~~159. No above ground facilities will be located within the easement of either pipeline. Castle Rock Solar will coordinate with each pipeline owner/operator to establish minimum cover requirements for access roads and minimum separation requirements for collection line cable where they cross the pipelines.<sup>185</sup>

~~151.~~160. No long-term impacts to electric utilities will occur because of the Project. Xcel Energy's Chub Lake to Hampton Corners 345 kV line would need to be shut down so the

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<sup>179</sup> Ex. PUC-ER-6 at 95–96 (EA).

<sup>180</sup> Ex. PUC-ER-6 at 95–96 (EA).

<sup>181</sup> Ex. PUC-ER-6 at 98 (EA)

<sup>182</sup> Ex. PUC-ER-6 at 92 (EA).

<sup>183</sup> Ex. PUC-ER-6 at 99 (EA).

<sup>184</sup> Ex. PUC-ER-6, Appendix C at 18 (EA, Appendix C - Draft Site Permit).

<sup>185</sup> Ex. PUC-ER-6 at 99 (EA).

Project interconnection can be established. Local electric customers served by the Chub Lake to Hampton Corners line could experience temporary outages during this time.<sup>186</sup>

~~152.~~161. A temporary shutdown of the Chub Lake to Hampton Corners 345 kV line, which runs east-west through the Project, will be required for interconnection. Prior to the temporary shutdown of the Chub Lake to Hampton Corners 345 kV line, Xcel Energy would coordinate with utilities and landowners and communicate the timing and duration of service interruptions with their customers. Impacts to electrical infrastructure that cross the Project can be mitigated by appropriate coordination with the owners of the existing infrastructure and by following industry best practices. Castle Rock Solar will coordinate the access road crossings of the Chub Lake to Hampton Corners 345 kV line with Xcel Energy.<sup>187</sup>

~~153.~~162. There may be underground utilities within the Project Area. Castle Rock Solar will coordinate with Gopher State One Call to identify the location of underground utilities during engineering surveys and marking the underground utility locations prior to construction. Additionally, Castle Rock Solar indicates they will conduct an American Land Title Association survey to identify the locations of any underground utilities within the Project. If a utility is identified and structural conflicts cannot be avoided, Castle Rock Solar will coordinate with the affected utility to find a solution.<sup>188</sup>

~~154.~~163. No active railroads are within the Project Area; therefore, no mitigation is required.<sup>189</sup>

~~155.~~164. Castle Rock Solar is aware of the limited housing availability in the area around the Project. Temporary construction workers will likely be housed in nearby hotels and vacant housing in the Dakota County and/or Scott County, rather than local vacant housing units. This will maintain housing availability for other individuals who may relocate to the area. No impacts to local housing availability are anticipated, therefore no mitigation is required.<sup>190</sup>

#### 9. *Socioeconomics.*

~~156.~~165. The impact intensity level is anticipated to be minimal to significant and positive. Effects associated with construction will, overall, be short-term and minimal. Significant positive effects may occur for individuals. Impacts from operation will be long-term and significant. Adverse impacts are not anticipated.<sup>191</sup>

~~157.~~166. Castle Rock Solar anticipates supporting 200-375 temporary construction and installation jobs for this Project. Castle Rock Solar will follow the prevailing wage and apprenticeship rules in place under the United States Inflation Reduction Act, a federal public law signed in 2022.<sup>192</sup>

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<sup>186</sup> Ex. PUC-ER-6 at 96 (EA).

<sup>187</sup> Ex. PUC-ER-6 at 97-98 (EA).

<sup>188</sup> Ex. PUC-ER-6 at 98 (EA).

<sup>189</sup> Ex. PUC-ER-6 at 99 (EA).

<sup>190</sup> Ex. PUC-ER-6 at 100 (EA).

<sup>191</sup> Ex. PUC-ER-6 at 100 (EA).

<sup>192</sup> Ex. PUC-ER-6 at 101 (EA).

~~158.~~167. To the greatest extent feasible, Castle Rock Solar will select a contractor that will consider local craft workers, local subcontractors, and local vendors during the construction phase, as this will maximize local economic benefits. Job opportunities created during the construction phase include general skilled and specialized labor positions, equipment operators, and licensed electricians. Long-term positions during the operations and maintenance phase include skilled labor to operate and maintain the Project, snow plowing, and access road and landscape maintenance.<sup>193</sup>

~~159.~~168. Once the Project is operational, Castle Rock Solar will pay property taxes and production taxes on the land and energy production to local governments. Castle Rock Solar estimates average annual solar energy production and property tax revenue of approximately \$185,000 to \$310,000 for Dakota County and approximately \$46,000 to \$76,000 for Castle Rock Township.<sup>194</sup>

~~160.~~169. Section 9.1 of the DSP makes the Project owner financially responsible for decommissioning the Project and its facilities. Castle Rock Solar anticipates providing financial assurance for decommissioning in the form of a surety bond or other agreed upon method of financial assurance that equals the costs to ensure the Project is properly decommissioned. The financial assurance will be posted no earlier than the 10th anniversary from the Project's commercial operation date. From that point, a revised decommissioning estimate and update of financial assurance will be submitted every five years. The revised plans will reflect any new advancements in the techniques, reclamation equipment, and standards related to decommissioning. The revised plans will also include a reassessed and revised decommissioning cost estimate that will reflect any changes in the costs, include the salvage values of materials and equipment. The amount of financial surety will be determined in accordance of the decommissioning plan, as the decommissioning plan is revised in accordance with the site permit, throughout the life of the Project.<sup>195</sup>

#### 10. *Environmental Justice.*

~~161.~~170. Environmental justice (EJ) is “the right of communities of color, Indigenous communities, and low-income communities, to the enjoyment of a healthy environment and to fair treatment with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies.” EJ ensures that all people, regardless of race, color, national origin, or income, experience equal benefits from environmental protections, and receive equal opportunities to participate in the decisions related to the development, implementation, and enforcement of environmental regulations and policies that may impact their environment or health.<sup>196</sup>

~~162.~~171. In Minnesota, environmental justice areas are defined as census tracts:

- in which at least 40 percent of the population is nonwhite

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<sup>193</sup> Ex. PUC-ER-6 at 102 (EA).

<sup>194</sup> Ex. PUC-ER-6 at 104 (EA).

<sup>195</sup> Ex. PUC-ER-6 at 104 (EA).

<sup>196</sup> Ex. PUC-ER-6 at 104–105 (EA).

- in which at least 35 percent of households have income at or below 200 percent of the federal poverty level
- in which at least 40 percent of the population has limited proficiency in English; or
- which are located within Indian Country, as defined in United States Code, title 18, section 1151.<sup>197</sup>

~~163.~~172. The Project is not within EJ communities as defined by Minnesota Statute. The Project will not have disproportionately high and adverse human health or environmental effects on low-income, minority, or tribal populations.<sup>198</sup>

~~164.~~173. Since there are no EJ communities identified in the region, there are no impacts to EJ communities anticipated as a result of the Project. Castle Rock Solar notes that the Project is expected have positive socioeconomic impacts due to the financial benefits to local landowners participating in the Project, and surrounding community benefits due to increased demand for commodities and lodging.<sup>199</sup>

~~165.~~174. This Project is not sited within an EJ community. Therefore, the Project is not anticipated to create disproportionate or adverse impacts to low-income or minority populations. Additional mitigation is not proposed.<sup>200</sup>

## **B. Human Health and Safety.**

~~166.~~175. Minnesota law requires consideration of the Project's potential effect on health and safety.<sup>201</sup>

### *1. Electric and Magnetic Fields (EMF).*

~~167.~~176. Currently, there are no federal regulations regarding allowable extremely low frequency EMF produced by power lines in the United States; however, state governments have developed state-specific regulations.<sup>202</sup>

~~168.~~177. The Commission limits the maximum electric field under high voltage transmission lines in Minnesota to 8.0 kV/m. It has not adopted a standard for magnetic fields.<sup>203</sup>

~~169.~~178. The primary sources of EMF from the proposed Project will be from the solar arrays, electrical collection lines, the transformers installed at each inverter, and the overhead gen-tie line connecting the Project substation to Xcel Energy's Chub Lake to Hampton Corners 345

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<sup>197</sup> Minn. Stat. § 116.065; Ex. PUC-ER-6 at 105 (EA).

<sup>198</sup> Ex. PUC-ER-6 at 104 (EA).

<sup>199</sup> Ex. PUC-ER-6 at 106-107 (EA).

<sup>200</sup> Ex. PUC-ER-6 at 107 (EA).

<sup>201</sup> Minn. Stat. § 216E.03, subd. 7(b)(1); Minn. R. 7850.4100, subp. B.

<sup>202</sup> Ex. PUC-ER-6 at 110 (EA).

<sup>203</sup> Ex. PUC-ER-6 at 110 (EA).

kV transmission line. At these distances both electric and magnetic fields will dissipate to background levels in all cases.<sup>204</sup>

~~170.~~179. No health impacts from EMF are anticipated. EMF diminishes with distance from a source. The nearest solar array is located approximately 341 feet from the nearest residence and the nearest inverter is located approximately 602 feet from the nearest residence. The proposed 200-foot gen-tie line is approximately 700 feet from the nearest residence, the nearest residence to the proposed substation location is approximately 1,026 feet, and the nearest residence to the Project switchyard is 823 feet. No additional mitigation is proposed.<sup>205</sup>

## 2. *Public Safety and Emergency Services.*

~~171.~~180. The Project will be designed and constructed in compliance with applicable electric codes. Electrical inspections will ensure proper installation of all components, and the Project will undergo routine inspection. Electrical work will be completed by trained technicians. Standard industry practices around public safety will be followed during after Project construction, including the installation of a perimeter fence, access gates, and proper signage, and restricting site access to authorized personnel. Fencing will deter public access, and signage will provide appropriate public warnings.<sup>206</sup>

~~172.~~181. The inflow of temporary construction personnel could increase demand for emergency and public health services. On the job injuries of construction workers requiring assistance due to slips, trips or falls, equipment use, or electrocution can create a demand for emergency, public health, or safety services that would not exist if the Project were not to be built.<sup>207</sup>

~~173.~~182. Construction is bound by federal and state Occupational Safety and Health Administration requirements for worker safety, and must comply with local, state, and federal regulations regarding installation of the facilities and qualifications of workers. Established industry safety procedures will be followed during and after construction of the Project. Castle Rock Solar indicates that the Project will be fenced and locked to prevent unauthorized access, and signs will be posted to warn unauthorized persons not to enter fenced area due to the presence of electrical equipment.<sup>208</sup>

~~174.~~183. The preliminary development area will contain native vegetation, which could increase the fire hazard if improperly managed. Due to the proximity of the Project to several residential developments, an uncontrolled fire within the site could become a threat to public safety. The Farmington Fire Department would likely be the initial responder to fires on site, as a small-town fire department they may lack experience or equipment necessary for managing fires in large-scale electrical utilities.<sup>209</sup>

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<sup>204</sup> Ex. PUC-ER-6 at 110 (EA).

<sup>205</sup> Ex. PUC-ER-6 at 111-112 (EA).

<sup>206</sup> Ex. PUC-ER-6 at 112 (EA).

<sup>207</sup> Ex. PUC-ER-6 at 113 (EA).

<sup>208</sup> Ex. PUC-ER-6 at 114 (EA).

<sup>209</sup> Ex. PUC-ER-6 at 114 (EA).

~~175.~~184. Appropriate PV system installation can reduce fire risk resulting from inaccurate construction methods, and proactive maintenance and monitoring of electrical equipment can identify risky system components before a fire occurs. The Project will be designed and constructed in compliance with applicable electric codes. Electrical inspections will ensure proper installation of all components, and the Project will undergo routine inspection. Electrical work will be completed by trained technicians. Data streams from the SCADA equipment will be remotely monitored 24/7, allowing for constant monitoring of, and communication with, the Project and relaying of alarms and communication errors. Compliant system installation along with continual monitoring and a proactive approach to maintenance tasks will reduce fire risk within the site.<sup>210</sup>

~~176.~~185. Castle Rock Solar's VMP provides additional fire risk mitigation. Vegetation will be controlled via mowing, preventing the accumulation of biomass and reducing fire hazard. The use of rotating PV arrays alongside vegetation removal techniques can reduce fire hazards.<sup>211</sup>

~~177.~~186. Section 8.12 of the DSP requires the permittee to prepare an Emergency Response Plan in coordination with local emergency responders. In addition, Castle Rock Solar will share a Fire Safety Protocol with local fire departments and organize cooperation and training meetings with local emergency responders. Section 5.7 of the DSP requires the permittee to develop a Fire Safety Protocol and make it available to local fire departments. Section 5.8 requires the permittee to organize and hold cooperation and training meetings with local emergency response providers to maintain familiarity with site facilities and clear channels of communication.<sup>212</sup>

~~178.~~187. In addition, Castle Rock Solar will ensure that Toxicity Characteristic Leaching Procedure (TCLP) testing has been performed on the panel models used for the Project. TCLP testing is the U.S. Environmental Protection Agency (EPA)-approved method for determining whether a hazardous substance is likely to leach from a manufactured product into the ground and ground water. TCLP testing will confirm that no hazardous materials (including arsenic, barium, cadmium, chromium, lead, mercury, selenium or silver) will leach from the tested products, whether intact, broken or crushed, resulting in leachate concentrations above the EPA's regulatory thresholds. Accordingly, the PV solar panels will not result in pollution to the environment.<sup>213</sup>

### **C. Land-Based Economies.**

~~179.~~188. Minnesota law requires consideration of the Project's potential effect on land-based economies – specifically, agriculture, forestry, tourism, and mining.<sup>214</sup>

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<sup>210</sup> Ex. PUC-ER-6 at 114 (EA).

<sup>211</sup> Ex. PUC-ER-6 at 115 (EA).

<sup>212</sup> Ex. PUC-ER-6 at 115 (EA).

<sup>213</sup> Ex. App.-26 (A. Campbell Direct Testimony with Schedules A-C).

<sup>214</sup> Minn. Stat. § 216E.03, subd. 7(b); Minn. R. 7850.4100, subp. C.

~~180.~~189. The Project is not anticipated to impact mining.<sup>215</sup> Tourism is discussed in Section A(7) above.

*I. Agriculture.*

~~181.~~190. Agricultural use dominates approximately 87 percent of the Land Control Area, with corn and soybeans as the dominant crops.<sup>216</sup> Potential impacts to agricultural producers are anticipated to be minimal to significant — lost farming revenues will be offset by lease or easement agreements.

~~182.~~191. A loss of farmland in Dakota County would occur for the life of the Project. Potential impacts are localized and unavoidable but can be minimized.<sup>217</sup>

~~183.~~192. The Project will result in up to 1,190.2 acres of farmland being removed from agricultural production for the life of the Project. This change in land use would take productive farmland out of production for the life of the Project, representing approximately 0.6 (out of 208,517 acres) percent of existing agricultural land in Dakota County. Castle Rock Solar indicates that the land could be returned to agricultural uses after the Project is decommissioned and the site is restored.<sup>218</sup>

~~184.~~193. Prime farmland is defined by federal regulation in 7 C.F.R. 657.5 (a) (1) (2023) as “land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses.”<sup>219</sup>

~~185.~~194. Subject to certain exceptions, Minn. R. 7850.4400, subp. 4, prohibits a LEPGP from being sited on more than 0.5-acre of prime farmland per MW of net generating capacity unless there is no feasible and prudent alternative. The prime farmland exclusion rule allows use of a site that exceeds the rule’s allowance of 0.5-acre of prime farmland per MW of net generating capacity if there is no feasible or prudent alternative.<sup>220</sup>

~~186.~~195. One exception to the prime farmland rule contained in Minn. R. 7850.4400, subp. 4 relates to land in close proximity to cities. The prime farmland rule does not apply to the area within home rule charter or statutory cities; areas located within two miles of home rule charter or statutory cities of the first, second, and third class; or areas designated for orderly annexation under Minn. Stat. § 414.0325.<sup>221</sup>

~~187.~~196. The Project is primarily sited within two miles of the City of Farmington. The area of the Project within the two-mile buffer is not subject to the Minn. R. 7850.4400, subp. 4.<sup>222</sup>

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<sup>215</sup> Ex. PUC-ER-6 at 197 (EA).

<sup>216</sup> Ex. PUC-ER-6 at 115 (EA).

<sup>217</sup> Ex. PUC-ER-6 at 115 (EA).

<sup>218</sup> Ex. PUC-ER-6 at 119 (EA).

<sup>219</sup> Ex. PUC-ER-6 at 116 (EA).

<sup>220</sup> Ex. App.-2 at 17 (Application).

<sup>221</sup> Ex. App.-2 at 17 (Application).

<sup>222</sup> Ex. PUC-ER-6 at 120 (EA).

~~188.~~197. Approximately 193.3 acres of the preliminary development area is located outside of the two-mile buffer zone; this portion of the Project is subject to Minn. R. 7850.4400, subp. 4. Within the 193.3 acre portion of the preliminary development area subject to the Minn. R. 7850.4400, subp. 4, solar arrays with approximately 33.6 MWac would be sited on approximately 103.1 acres of Prime Farmland. In accordance with Minn. R. 7850.4400, subp. 4, this portion of the Project should impact no more than 16.8 acres of prime farmland. This is less than the actual acreage of prime farmland affected, which is conservatively estimated to be 103.1 acres of prime farmland.<sup>223</sup>

~~189.~~198. Castle Rock Solar conducted a site selection analysis to inform its Project location choice.<sup>224</sup> Castle Rock Solar identified a POI, and sited the majority of its Project, within an area that is not subject to Minn. R. 7850.4400, subp. 4. Castle Rock Solar was not able to find enough suitable land, for the entire Project, that did not encroach upon city development, residential areas, and annexation areas owned by landowners willing to lease/easement within the 2-mile buffer. However, Castle Rock Solar determined it critical for the Project to maximize the full 150MWac available at the POI and for the Project to be as contiguous as possible to ensure efficient use of resources.<sup>225</sup>

~~190.~~199. No alternatives to Castle Rock Solar's proposed site were presented at the public meeting or during the public comment period.<sup>226</sup>

~~191.~~200. There is no feasible or prudent alternative for the Project given the nameplate capacity, access to transmission for this Project at this location and proximity of the Project to an area not subject to Minn. R. 7850.4400, subp. 4.<sup>227</sup>

~~192.~~201. Drain tile is an important agricultural practice in the Midwest. Drain tile can be particularly useful to improve crop productivity of poorly drained soils. Soil classified as "Prime farmland if drained" makes up approximately one-tenth of the Land Control Area and a notable amount of the neighboring properties.<sup>228</sup>

~~193.~~202. While drain tile appears to be minimal in the area, there are two private agricultural drainage ditches present within the Land Control Area.<sup>229</sup>

~~194.~~203. Castle Rock Solar will implement BMPs during construction to minimize and mitigate long-term impacts to agricultural lands, including performing regular inspections during any earthmoving phases, preventing soil profile mixing, monitoring compaction, halting construction during wet weather conditions, ensuring proper site drainage and erosion control, and limiting the spread of noxious weeds and invasive species by cleaning construction equipment.<sup>230</sup>

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<sup>223</sup> Ex. PUC-ER-6 at 120 (EA).

<sup>224</sup> Ex. PUC-ER-6 at 120 (EA).

<sup>225</sup> Ex. App.-2 at 18 (Application).

<sup>226</sup> Ex. PUC-ER-4 (EA Scoping Decision).

<sup>227</sup> Ex. PUC-ER-6 at 116 (EA).

<sup>228</sup> Ex. PUC-ER-6 at 121 (EA).

<sup>229</sup> Ex. PUC-ER-6 at 122 (EA).

<sup>230</sup> Ex. PUC-ER-6 at 124 (EA).

- ~~195.~~204. Section 4.3.18 of the DSP requires the permittee to develop an AIMP with Minnesota Department of Agriculture. Castle Rock Solar’s draft AIMP (details methods to minimize soil compaction, preserve topsoil, control noxious weeds and invasive species, maintain the existing drainage conditions through appropriate maintenance and repair of existing drain tile, and establish and maintain appropriate vegetation to ensure the Project is designed, constructed, operated and ultimately restored in a manner that would preserve soils to allow for the land to be returned to agricultural use.<sup>231</sup>
- ~~196.~~205. In addition, DSP Section 4.3.29 requires the permittee to fairly restore or compensate landowners for damages to crops, fences, drain tile, etc. during construction.<sup>232</sup>
- ~~197.~~206. Lengsfeld’s Organic Gardens is a certified organic crop operation that produces crops on two parcels along 230th Street East, adjacent to the Project.<sup>233</sup> Lengsfeld’s Organic Gardens was certified organic by the Midwest Organic Services Association, a U.S. Department of Agriculture (USDA) accredited agency, on July 25, 2002. The operation is certified under the USDA’s National Organic Program.<sup>234</sup>
- ~~198.~~207. The EA noted that herbicide drift into an adjacent certified-organic operation could restrict organic market access and impact farming revenues, but that these impacts can be mitigated with appropriate planning, design, and, in the event of drift, financial compensation.<sup>235</sup>
- ~~199.~~208. USDA Organic Regulations require a buffer zone around an organic farm. Buffers on organic farms are usually 50 feet, but they can increase or decrease in size based on risk. A buffer zone is “an area located between a certified production operation or portion of a production operation and an adjacent land area that is not maintained under organic management. A buffer zone must be sufficient in size or other features (e.g., windbreaks or a diversion ditch) to prevent contact by prohibited substances applied to adjacent land areas.” 7 C.F.R. § 205.2. USDA Organic Regulations require that the certified organic farm, not adjoining landowners, create and maintain a buffer zone between the organic uses and adjoining land uses as part of the organic standards.<sup>236</sup>
- ~~200.~~209. Shortly after the public hearings, Castle Rock Solar attempted to contact the owners of the organic farm to discuss their buffer zones and any specific concerns, but as of November 17, 2025, had not received a response from the owners of the organic farm.<sup>237</sup>
- ~~201.~~210. In addition, after the public hearings, Castle Rock Solar reviewed the site plan and has determined that—to ensure that no herbicides applied to the Project vegetation would drift onto

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<sup>231</sup> Ex. PUC-ER-6 at 124 (EA).

<sup>232</sup> Ex. PUC-ER-6, Appendix C at 15 (EA, Appendix C - Draft Site Permit).

<sup>233</sup> Ex. PUC-ER-6 at 117 (EA).

<sup>234</sup> Ex. PUC-ER-6 at 118 (EA).

<sup>235</sup> Ex. PUC-ER-6 at 123 (EA).

<sup>236</sup> Castle Rock Solar Response to Public Hearing Comments (November 17, 2025) (eDockets No. \_\_\_\_\_).

<sup>237</sup> Castle Rock Solar Response to Public Hearing Comments (November 17, 2025) (eDockets No. \_\_\_\_\_).

the neighboring organic farm—a portion of the southeast corner will be removed from the Site Permit boundary.<sup>238</sup>

~~202-~~211. Because Castle Rock Solar amended the Project Area to create a significant buffer and effectively negate concerns about herbicide drift from the Project to the organic farm, the proposed DSP conditions related to the Organic Farm (Sections 5.9, 5.10, and 5.11) are not supported by the record.

#### **D. Archaeological, Cultural, and Historic Resources.**

~~203-~~212. Minnesota law requires consideration of the Project’s potential effects on historic and archaeological resources.<sup>239</sup>

~~204-~~213. Section 4.3.23 of the DSP addresses archeological resources and requires the permittee to avoid impacts to archaeological and historic resources where possible and to mitigate impacts where avoidance is not possible.<sup>240</sup>

~~205-~~214. Castle Rock Solar hired a contractor to conduct a Phase Ia literature review for the Land Control Area and 1-mile Project Area radius. The survey examined records from the SHPO and Minnesota Office of the State Archeologist. In addition, the National Register of Historic Places database, was consulted, along with a review of available historic maps.<sup>241</sup>

~~206-~~215. Castle Rock Solar provided the historic architectural survey report to the SHPO for concurrence on October 31, 2024, and received determination from the SHPO on December 12, 2024, that “there are no properties listed in the National or State Registers of Historic Places, or within the Historic Sites Network, that will be affected by this Project.”<sup>242</sup>

~~207-~~216. Castle Rock Solar provided the Phase Ia Archaeological Investigation report to the SHPO for concurrence on October 31, 2024, and received concurrence from the SHPO on December 12, 2024, that “there are no known or suspected archaeological resources that will be affected by this Project.”<sup>243</sup>

~~208-~~217. Castle Rock Solar also hired a contractor to conduct a literature review and Phase I archeological survey on the two additional parcels on April 15, 2025. The literature review identified no previously recorded archaeological sites or historic resources located within the survey area. The survey identified one concentration of twentieth century historic material that consisted of two Bristol stoneware shards, two whiteware sherds, two flat glass fragments, one glass bottle base, one machine-made bead bottle finish, and one solarized manganese pressed glass rim. The concentration was dated to the twentieth century based on the machine-made bottle finish and manganese glass. No historic structures related to the artifact concentration were identified in historical documents. The lack of associated historic structures and scarce amount of historic material suggests that this artifact concentration represents trash dumping

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<sup>238</sup> Castle Rock Solar Response to Public Hearing Comments (November 17, 2025) (eDockets No. \_\_\_\_\_).

<sup>239</sup> Minn. Stat. § 216E.03, subd. 7(b); Minn. R. 7850.4100, subp. D.

<sup>240</sup> Ex. PUC-ER-6, Appendix C at 13-14 (EA, Appendix C - Draft Site Permit).

<sup>241</sup> Ex. PUC-ER-6 at 130 (EA).

<sup>242</sup> Ex. PUC-ER-6 at 128 (EA).

<sup>243</sup> Ex. PUC-ER-6 at 131 (EA).

within the field and did not warrant further investigation. Castle Rock Solar submitted the supplemental survey results to SHPO for review in July 2025.<sup>244</sup>

~~209~~218. On September 5, 2025, SHPO responded, concluding that, “[b]ased on the results of the survey, we have determined that there are no known or suspected archaeological resources that will be affected by the revised project and that there are no properties listed in the National or State Registers of Historic Places, or within the Historic Sites Network, that will be affected by this project.”<sup>245</sup>

~~210~~219. In addition, Castle Rock Solar has prepared an Unanticipated Discovery Plan (UDP) that details the steps to be taken if unrecorded cultural resources or human remains are encountered during construction. As part of the UDP, construction and contractor personnel will be required to participate in a training program prior to commencement of work on the Project that covers the historical context of the Project Area, identification information for archaeological materials and skeletal remains, and procedures to follow if unanticipated discoveries of cultural properties, including gravesites, are made during construction.<sup>246</sup>

#### **E. Natural Resources.**

~~211~~220. Minnesota law requires consideration of the Project’s potential effects on the natural environment, including effects on air and water quality resources and flora and fauna.<sup>247</sup>

##### *1. Air Quality.*

~~212~~221. Minimal intermittent air emissions are expected during construction of the Project. Air emissions associated with construction are highly dependent upon weather conditions and the specific activity occurring. For example, traveling to a construction site on a dry gravel road will result in more fugitive dust than traveling the same road when wet. Once operational, neither the generating facility nor the gen-tie line will generate criteria pollutants or carbon dioxide.<sup>248</sup>

~~213~~222. Dust control measures, such as the application of water or other commercially available dust control agents on unpaved areas, can be implemented during construction to reduce the potential for slow moving dust clouds to increase particulate matter and degrade air quality. Castle Rock Solar is committed to using non-chloride dust control measures to prevent harm to wetland and river systems.<sup>249</sup>

~~214~~223. As a component of the construction stormwater permit that will be obtained for the Project, a National Pollutant Discharge Elimination System/State Disposal System construction

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<sup>244</sup> Ex. PUC-ER-6 at 131 (EA).

<sup>245</sup> Ex. App.-26 (A. Campbell Direct Testimony with Schedules A-C) (SHPO Response provided as Attachment C).

<sup>246</sup> Ex. PUC-ER-6 at 132 (EA).

<sup>247</sup> Minn. Stat. § 216E.03, subd. 7(b); Minn. R. 7850.4100, subp. E.

<sup>248</sup> Ex. PUC-ER-6 at 136 (EA).

<sup>249</sup> Ex. PUC-ER-6 at 136 (EA).

stormwater permit and an associated SWPPP will be developed and implemented prior to construction in order to minimize the potential for fugitive dust emissions.<sup>250</sup>

~~215.~~224. Exhaust emissions can be minimized by using modern equipment with lower emissions ratings and properly functioning exhaust systems, not running the equipment unless necessary, and minimizing the number of driving trips. Standard construction practices to minimize dust and emissions include watering exposed surfaces, covering open-bodied haul trucks, reducing speed limits on unpaved roads, containing excavated materials and treating stockpiles, and protecting and stabilizing soils. Castle Rock Solar can implement best management practices during construction and operation of the Project to minimize dust and emissions.<sup>251</sup>

## 2. *Geology and Groundwater.*

~~216.~~225. Potential impacts to geology and groundwater can occur directly or indirectly. Direct impacts to groundwater are generally associated with construction, for example, structure foundations that could penetrate shallow water tables or groundwater usage. The tracking racks, switchyard, inverters, substation, and O&M building may require some concrete foundations, geochemical testing will determine the final foundation installation process. If concrete foundations are used, some portion of the soluble components of the cement paste might leach into groundwater prior to the setting and hardening of the concrete. This will change the pH of groundwater around the surface of the concrete but should not extend far from the foundation.<sup>252</sup>

~~217.~~226. The Land Control Area was reviewed for EPA designated sole source aquifers, wells listed on the Minnesota Well Index (MWI) and Minnesota Department of Health (MDH) Wellhead Protection Areas. The MDH maintains the MWI, which provides basic information (e.g., location, depth, geology, construction, and static water level) for wells and borings drilled in Minnesota. The MWI identifies four documented wells within the Land Control Area, and Dakota County records identify four unknown and/or unlocated wells within the Land Control Area. The documented wells in the Land Control Area are used for both domestic and irrigation purposes and range from 120 feet to 240 feet in depth. Three of the four documented wells in the Land Control Area are currently active, the fourth well's status is unknown. In addition, there are 98 wells outside of the Land Control Area within approximately one-half mile of the Project, ranging from 16 to 420 feet in depth: 94 active wells (one commercial well, one test well, one monitoring well, one unknown well, seven irrigation wells, and 83 domestic wells), three sealed wells (one domestic well and two monitor wells), and one unknown scientific investigation well.<sup>253</sup>

~~218.~~227. Because of the presence of potential karst in the Project, there is potential for both direct and indirect impacts to groundwater because of construction and operation of the Project. Direct and indirect impacts are anticipated to be minimal to significant, as domestic water wells and the high-vulnerability Hastings Drinking Water Supply Management Area occur within the

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<sup>250</sup> Ex. PUC-ER-6 at 137 (EA).

<sup>251</sup> Ex. PUC-ER-6 at 136-137 (EA).

<sup>252</sup> Ex. PUC-ER-6 at 143 (EA).

<sup>253</sup> Ex. PUC-ER-6 at 141 (EA).

site. Impacts to geology could occur from bedrock excavation and are anticipated to be minimal to moderate. Indirect impacts from surface waters might occur during construction. Impacts can be mitigated through adherence to BMPs for construction and stormwater management in karst areas.<sup>254</sup>

~~219.~~228. The EA concluded that, “generally, a minimum 150-foot radius buffer can be used from the edges around any potential karst features to reduce the risk of karst potential for the solar arrays,” but did not cite a source for this proposition.<sup>255</sup>

~~220.~~229. A 150-foot radius buffer from all potential karst features is not based on BMPs for karst, nor was supporting documentation found in the EA or was otherwise found in leading literature on karst geography.<sup>256</sup> [The 150-foot setback has been adopted for a prior solar project site permit granted by the Commission<sup>257</sup> and is supported by the MDNR.<sup>258</sup>](#)

~~221.~~230. ~~Accordingly, a condition prohibiting Castle Rock Solar from locating project infrastructure within 150 feet of documented active karst features and avoiding all construction activity within 150 feet of documented active karst features is not supported by the record.~~

~~222.~~231. Prior to construction, Castle Rock Solar will conduct a geotechnical investigation to confirm the depth to bedrock, potential karst features, and subsurface properties. Generally, a buffer can be used from the edges around any potential karst features to reduce the risk of karst potential for the solar arrays. Castle Rock Solar will coordinate with the MDNR to develop appropriate mitigation measures for any identified karst features.<sup>259</sup>

~~223.~~232. BMPs for karst geography are to conduct a geology assessment that can be used to assess site-specific risks. A geology assessment is the best way to identify karst geology, and should be used to determine appropriate setbacks and mitigation measures.<sup>260</sup>

~~224.~~233. Because of the shallow depth to groundwater in some areas of the Project, dewatering may be required during construction. Dewatering will be discharged to the surface to allow it to infiltrate back into the ground, minimizing impacts. If dewatering exceeds 10,000 gallons of water per day, a MDNR water appropriation permit will be required. Castle Rock Solar has committed to developing a dewatering plan that will be implemented on site.<sup>261</sup>

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<sup>254</sup> Ex. PUC-ER-6 at 137 (EA).

<sup>255</sup> Ex. PUC-ER-6 at 145 (EA).

<sup>256</sup> Castle Rock Solar Response to Public Hearing Comments (November 17, 2025) (eDockets No. \_\_\_\_\_).

<sup>257</sup> [PUC, Order Granting Certificate of Need and Issuing Site and Route Permits \[Byron Solar Project\], May 1, 2023, eDocket No. 20235-195471-02, see special permit condition 5.1 requiring a 150-foot buffer from documented active karst features.](#)

<sup>258</sup> [MDNR Comments \(November 3, 2025\) \(eDockets No. 202511-224630-01\).](#)

<sup>259</sup> Ex. PUC-ER-6 at 145 (EA); Castle Rock Solar Response to Public Hearing Comments (November 17, 2025) (eDockets No. \_\_\_\_\_).

<sup>260</sup> Ex. PUC-ER-6 at 145 (EA); Castle Rock Solar Response to Public Hearing Comments (November 17, 2025) (eDockets No. \_\_\_\_\_).

<sup>261</sup> Ex. PUC-ER-6 at 144 (EA).

~~225~~234. Due to the presence of shallow bedrock, excavation of bedrock may be necessary in portions of the Project.<sup>262</sup>

~~226~~235. The MPCA prefers the use of swale stormwater management systems in sites with shallow bedrock, such as the Project site. Castle Rock Solar has designed a stormwater management system that largely consists of vegetated swales and ditch checks, save for one retention pond located near the substation and switchyard.<sup>263</sup>

~~227~~236. Because the Project will disturb more than one acre, Castle Rock Solar must obtain a Construction Stormwater (CSW) Permit from the MPCA. The CSW Permit will identify BMPs for erosion prevention and sediment control. As part of the CSW Permit, Castle Rock Solar will also develop a SWPPP that describes construction activity, temporary and permanent erosion and sediment controls, BMPs, and permanent stormwater management that will be implemented during construction and through the life of the Project. Implementation of the protocols outlined in the SWPPP will minimize the potential for soil erosion and detail stormwater management methods during construction and operation of the facility.<sup>264</sup>

~~228~~237. A National Pollutant Discharge Elimination System (NPDES) permit application to discharge stormwater from construction facilities will also be acquired by Castle Rock Solar from the MPCA. BMPs will be used during construction and operation of the Project to protect topsoil and adjacent resources and to minimize soil erosion.<sup>265</sup>

~~229~~238. Castle Rock Solar indicates that solar panels will be mounted above the ground with a perennial seed mix underneath, allowing water to filter into vegetation and soil prior to discharging.<sup>266</sup>

~~230~~239. DSP Section 4.5.2 would require Castle Rock Solar to comply with all other applicable state statutes and rules and would require Castle Rock Solar to obtain all required permits for the Project and comply with the conditions of those permits.<sup>267</sup>

~~231~~240. In addition, DSP Sections 5.13, 5.14, 5.15, and 5.16 would require Castle Rock Solar address well impacts, karst features, bedrock, and dewatering.<sup>268</sup>

### 3. Soils.

~~232~~241. Primary impacts to soils include compaction from construction equipment, soil profile mixing during grading and pole auguring, rutting from tire traffic, drainage interruptions, and soil erosion. Impacts to soils are likely to be greatest with the below-ground electrical collection

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<sup>262</sup> Ex. PUC-ER-6 at 144 (EA).

<sup>263</sup> Ex. PUC-ER-6 at 144 (EA).

<sup>264</sup> Ex. PUC-ER-6 at 145 (EA).

<sup>265</sup> Ex. PUC-ER-6 at 145 (EA).

<sup>266</sup> Ex. PUC-ER-6 at 144 (EA).

<sup>267</sup> Ex. PUC-ER-6, Appendix C at 16 (EA, Appendix C - Draft Site Permit).

<sup>268</sup> Ex. PUC-ER-6, Appendix C at 19-20 (EA, Appendix C - Draft Site Permit).

system. Potential impacts will be positive and negative, and short- and long-term. Isolated moderate to significant negative impacts associated with high rainfall events could occur.<sup>269</sup>

~~233.~~242. Construction of the solar facility will disturb approximately 972 acres within the Land Control Area.<sup>270</sup>

~~234.~~243. BMPs to prevent soil erosion will be implemented, including temporary and permanent seeding, mulching, filter strips, erosion blankets, and sod stabilization. Once Project construction is complete, Castle Rock Solar will restore any disturbed areas to pre-construction conditions to the extent possible.<sup>271</sup>

~~235.~~244. Sections 4.3.9, 4.3.11, 4.3.16, 4.3.17, and 4.3.18 of the DSP address soil-related impacts from the Project.<sup>272</sup>

#### 4. *Surface Water and Floodplains.*

~~236.~~245. The Project is designed to avoid direct impacts to surface waters by avoiding placement of Project components such as access roads, solar arrays, inverters, or transmission structures in surface waters. Direct impacts to surface waters are not expected. Indirect impacts to surface waters might occur, such as during increased rain events.<sup>273</sup>

~~237.~~246. Castle Rock Solar will develop the Project in compliance with NPDES permit requirements, develop a SWPPP, and utilize BMPs during construction to control soil erosion and sedimentation, minimizing the impact on surface waters. Castle Rock Solar indicates that the installation of vegetated buffers surrounding wetlands and streams alongside the addition of perennial vegetative cover throughout the Project will likely improve infiltration, prevent soil erosion and other potential pollution from entering public waters, and decrease water and soil runoff. This will reduce the volume of water draining into surface waters, the floodway, and floodplains, and could improve stream conditions for trout downstream.<sup>274</sup>

~~238.~~247. Castle Rock Solar will manage stormwater by installing a series of vegetated swales with ditch checks throughout the Project.<sup>275</sup>

~~239.~~248. There are three road crossings and six collection line crossings in wetlands and two collection line crossings across the South Branch Vermillion River and the associated floodway and floodplain. Castle Rock Solar will avoid impacts to the South Branch Vermillion River, floodway, and floodplains by boring or spanning the collection line crossings beneath or above the watercourse.<sup>276</sup>

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<sup>269</sup> Ex. PUC-ER-6 at 147-148 (EA).

<sup>270</sup> Ex. PUC-ER-6 at 148 (EA).

<sup>271</sup> Ex. PUC-ER-6 at 149 (EA).

<sup>272</sup> Ex. PUC-ER-6 at 149 (EA).

<sup>273</sup> Ex. PUC-ER-6 at 155 (EA).

<sup>274</sup> Ex. PUC-ER-6 at 156 (EA).

<sup>275</sup> Ex. PUC-ER-6 at 156 (EA).

<sup>276</sup> Ex. PUC-ER-6 at 156 (EA); Ex. PUC-ER-6, Appendix C at 20 (EA, Appendix C - Draft Site Permit).

~~240.~~~~249.~~ Castle Rock Solar or its engineering, procurement, and construction contractor will work to identify and locate drain tile within the Land Control Area. During construction, care will be taken to avoid drain tile, re-route drain tile away from locations where it could be damaged, or, in the case of fields with pattern tile networks, coordinate with applicable landowners to establish acceptable criteria for rerouting, replacing, or abandoning in place drain tile that is within a solar array area. Castle Rock Solar plans to maintain drainage system integrity during construction, including repair or other methods outlined in the AIMP filed with the Application.<sup>277</sup>

~~241.~~~~250.~~ The record demonstrates that Castle Rock Solar has taken steps to avoid and minimize surface water and floodplain impacts. Further, Sections 4.3.11, 4.3.16, 4.3.17, 4.3.25, and 8.12 of the DSP address potential impacts to surface waters.<sup>278</sup> [Section 8.12 of the DSP requires the permittee to prepare an Emergency Response Plan in coordination with local emergency responders. PUC-ER staff revised Section 8.12 of the DSP to require the permittee to include specific training and response plans for impacts related to 100-year storm and flooding events.](#)

## 5. Wetlands.

~~242.~~~~251.~~ Castle Rock Solar states that no fill or excavation is proposed in wetland areas for installation of collection line poles, and all staging and stringing areas will be kept out of wetlands. Castle Rock Solar mentions both horizontal directional drilling and vibratory plow as methods that may be utilized for underground wetland crossings. Both methods proposed are trenchless, reducing ground disturbance impacts to wetlands. There is potential for temporary, short-term impacts to wetlands that occur during ground disturbing activities during installation of collection lines. No long-term impacts are anticipated from collection lines.<sup>279</sup>

~~243.~~~~252.~~ Castle Rock Solar states that it will avoid use of heavy equipment within wetlands.<sup>280</sup>

~~244.~~~~253.~~ Castle Rock Solar proposes constructing solar panel arrays on approximately 1.19 acres of wetland area, based on the results of field wetland delineations.<sup>281</sup>

~~245.~~~~254.~~ Castle Rock Solar will obtain any necessary permits and coordinate with the appropriate agency, such as the USACE under Section 404 and 401 of the Federal Clean Water Act and the Dakota County SWCD under the Minnesota Wetland Conservation Act, prior to construction.<sup>282</sup>

~~246.~~~~255.~~ The record demonstrates that Castle Rock Solar has taken steps to avoid and minimize impacts to wetlands. Further, Section 4.3.13 of the DSP prohibits placement of the solar energy generating system or associated facilities in public waters and public waters wetlands.<sup>283</sup>

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<sup>277</sup> Ex. PUC-ER-6 at 156-157 (EA).

<sup>278</sup> Ex. PUC-ER-6 at 157 (EA).

<sup>279</sup> Ex. PUC-ER-6 at 161 (EA).

<sup>280</sup> Ex. PUC-ER-6 at 161 (EA).

<sup>281</sup> Ex. PUC-ER-6 at 161 (EA).

<sup>282</sup> Ex. PUC-ER-6 at 162 (EA).

<sup>283</sup> Ex. PUC-ER-6 at 162-163 (EA).

## 6. *Vegetation.*

~~247.~~256. Construction of the solar facility will eliminate vegetative cover, including temporary vegetation removal and permanent tree removal, and create impermeable surfaces at access roads, inverter skids, the substation and switchyard, O&M building, and laydown yards. Removal of vegetative cover exposes soils and could result in soil erosion. Vegetation removal in the vicinity of the South Branch Vermillion River, the FEMA-designated floodplain, or the wetlands and open water feature within the Land Control Area could be particularly impactful, as it could result in bank erosion and/or increased sedimentation into surface water systems. Temporary or permanent removal of vegetation also has the potential to affect wildlife habitat. Any tall growing woody vegetation in the preliminary development area will be removed.<sup>284</sup>

~~248.~~257. Non-impervious portions of agricultural land within the solar facility would be converted to a native, low-growing vegetative cover in accordance with the Project's VMP. The establishment of native vegetation will be compatible with the Project's operations and beneficial to the natural areas within and adjacent to the site, resulting in a net benefit in vegetative cover for the life of the Project.<sup>285</sup>

~~249.~~258. Castle Rock Solar plans to use two seed mixes to establish perennial vegetation throughout the Project.<sup>286</sup>

~~250.~~259. Control of invasive species and noxious weeds will be ongoing during the construction and operation of the Project.<sup>287</sup>

~~251.~~260. Castle Rock Solar will require construction equipment arriving on site to be free of soil and existing vegetation, such as leaves. Designated cleaning areas will be used to remove noxious weeds and/or seeds from equipment, and the cleaning areas will be monitored for the presence of invasive species. Prior to departing the site, construction equipment will be cleaned, and all soil and existing vegetation will be removed.<sup>288</sup>

~~252.~~261. The record demonstrates that Castle Rock Solar has taken steps to avoid and minimize impacts to vegetation. Further, Sections 4.3.17, 4.3.18, and 4.3.15 of the DSP address impacts to vegetation.<sup>289</sup>

## 7. *Wildlife and Habitat.*

~~253.~~262. The Project landscape is dominated by agriculture and developed areas (roads, housing communities, urban areas, and farmsteads). The City of Farmington is located approximately 500 feet from the Project. Landscape types and vegetation communities vary throughout the local vicinity. Fencerows and ditches, riparian areas, as well as small pockets of wetlands and trees, provide habitat for terrestrial and avian wildlife. Directly east of the Project, the Hampton Woods WMA provides habitat for terrestrial wildlife. Additional terrestrial and

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<sup>284</sup> Ex. PUC-ER-6 at 164 (EA).

<sup>285</sup> Ex. PUC-ER-6 at 164 (EA).

<sup>286</sup> Ex. PUC-ER-6 at 165 (EA).

<sup>287</sup> Ex. PUC-ER-6 at 166 (EA).

<sup>288</sup> Ex. PUC-ER-6 at 167 (EA).

<sup>289</sup> Ex. PUC-ER-6 at 166 (EA).

aquatic wildlife habitat is found approximately 2.25 miles north of the Project in the Vermillion River Complex.<sup>290</sup>

~~254.~~263. The impact intensity level on wildlife and habitat is expected to be minimal to moderate. Impacts could be positive or negative and depend on species type. Potential impacts will be short- and long-term and can be mitigated.<sup>291</sup>

~~255.~~264. Individual wildlife may be displaced to adjacent habitats during construction. Because the Land Control Area does not provide critical habitat, this should not impact life cycle functions, for example, nesting. Direct significant impacts to individuals might occur, that is, small species might be crushed or otherwise killed during construction. Population level impacts are not anticipated.<sup>292</sup>

~~256.~~265. Birds are also susceptible to electrocution from transmission lines. Electrocution is a risk if the conductors or ground wires are close enough together that a bird can touch two conductors simultaneously with its wings or other body parts. Independent of the risk of electrocution, birds might be injured or killed by colliding with transmission line structures and conductors. The risk of collision is influenced by several factors including habitat, flyways, foraging areas, and bird size. Waterfowl, especially larger waterfowl such as swans and geese, are more likely to collide with transmission lines. If the final Project design includes aerial span collection lines over the South Branch Vermillion River, the potential of these impacts occurring would be greater. Castle Rock Solar states that they will use avian diverters on the collection line if the aerial span method is chosen.<sup>293</sup>

~~257.~~266. Aquatic Wildlife habitats present within the Land Control Area include the South Branch Vermillion River, its tributaries, and its associated floodplains and wetlands. Drainage systems within Project boundaries connect to the South Branch Vermillion River, extending the range of potential impacts to downstream habitats in the Vermillion River.<sup>294</sup>

~~258.~~267. Castle Rock Solar has indicated they plan to use water or other dust control agents to suppress fugitive dust. Dust control agents used during construction frequently contain chloride, which can persist in the environment and accumulate to toxic levels. Chlorides readily spread through water systems and harm aquatic wildlife. Low concentrations of chloride exposure can impact growth, reproduction, and physiology, while high concentrations can result in death. Castle Rock Solar states that they are committed to using non-chlorine dust control measures. No road construction is proposed over live stream channels and there will be no unpaved road stream crossings, therefore there are no impacts anticipated from travel on unpaved roads.<sup>295</sup>

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<sup>290</sup> Ex. PUC-ER-6 at 167 (EA).

<sup>291</sup> Ex. PUC-ER-6 at 168 (EA).

<sup>292</sup> Ex. PUC-ER-6 at 168 (EA).

<sup>293</sup> Ex. PUC-ER-6 at 172 (EA).

<sup>294</sup> Ex. PUC-ER-6 at 172 (EA).

<sup>295</sup> Ex. PUC-ER-6 at 174 (EA).

~~259~~268. The presence of facility lighting has the potential to interrupt the daily cycle of light and dark for animals in the surrounding area. All temporary and permanent lighting will follow MDNR’s facility lighting guidance.<sup>296</sup>

~~260~~269. Overall, the Project does not contribute to significant habitat loss or degradation.<sup>297</sup>

#### 8. *Climate Change.*

~~261~~270. Construction emissions will have a short- term negligible increase in GHGs that contribute to climate change. Overall, the Project will generate energy that can be used to displace energy otherwise generated by carbon-fueled sources. The total GHG emissions produced by construction and operation of the Project will be minimal when compared to the reduction in GHG emissions long-term. The Project’s design incorporates design elements that minimize impacts from the increase in extreme weather events such as increased flooding, storms, and heat wave events that are expected to accompany a warming climate.<sup>298</sup>

#### **F. Rare and Unique Natural Resources.**

~~262~~271. Minnesota law requires consideration of the Project’s potential effects on rare and unique natural resources.<sup>299</sup>

~~263~~272. There are several Minnesota Biological Survey (MBS) sites of biodiversity significance throughout the area. An MBS site of outstanding biodiversity significance, Castle Rock 1, which contains a Bitternut Hickory Forest native plant community (NPC), is located approximately 0.4 miles east of the Project, and an MBS site of biodiversity significance ranked below, Castle Rock 15, is located approximately 0.95 miles south of the Project. There is one MBS site of moderate biodiversity significance located within the Land Control Area, as noted by the MDNR in the Natural Heritage Review Letter.<sup>300</sup> The MBS site within the Project, Castle Rock 10, is along the South Branch Vermillion River and contains a sedge meadow NPC. Sedge meadows are associated with streams and drainage ways, and consist of open wetlands with abundant broad-leaved graminoids, with shrub cover typically making up less than one-quarter of the area.<sup>301</sup>

~~264~~273. Castle Rock Solar coordinated with the MDNR to identify state-listed species within the area. The MDNR’s NHIS database identified no state listed species within the Land Control Area; however, four state-listed species were identified within one mile of the site. One of the identified species, the Rusty Patched Bumble Bee (RPBB), is a watchlist species in the state. The RPBB is a federally listed species and is discussed above. The largely agricultural landcover within the site suggests that suitable RPBB nesting habitat is likely limited in the Land Control Area. In addition, the native seed mixes designed for the Project include a variety

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<sup>296</sup> Ex. PUC-ER-6 at 175 (EA).

<sup>297</sup> Ex. PUC-ER-6 at 178 (EA).

<sup>298</sup> Ex. PUC-ER-6 at 190 (EA).

<sup>299</sup> Minn. Stat. § 216E.03, subd. 7(b); Minn. R. 7850.4100, subp. F.

<sup>300</sup> MDNR, Natural Heritage Review Letter, May 2, 2025, eDockets No: 20255-218560-02.

<sup>301</sup> Ex. PUC-ER-6 at 181 (EA).

of forb species; once vegetation has been established the Project can provide valuable foraging habitat for RPBB.<sup>302</sup>

~~265-274.~~ The Land Control Area is primarily agricultural lands with little forested habitat, and the Northern Long-Eared Bat (NLEB) would be limited to shelterbelts or windbreaks. According to the MDNR and U. S. Fish and Wildlife Service (USFWS), there are two known hibernacula for NLEBs in Dakota County, neither of which are located within Castle Rock Township. The preferred mitigation strategy to avoid impacts to the NLEB is avoidance of tree-clearing to the extent possible. When tree clearing is necessary, it should be done outside the pup rearing season from June 1 to July 31 and outside the active NLEB season from April 1 to October 31.<sup>303</sup>

~~266-275.~~ DSP Section 5.23 would require Castle Rock Solar to comply with USFWS and MDNR guidance and requirements in effect regarding NLEB, including tree clearing restrictions if applicable.<sup>304</sup>

~~267-276.~~ Bald eagles typically nest in mature trees near large lakes or streams. No eagle nests were observed within or adjacent to the Land Control Area during habitat assessment. The USFWS will coordinate appropriate mitigation measures for bald eagles for the Project, if necessary. Mitigation measure may include setbacks from nests, timing restriction for construction activities, and possibly seeking a USFWS permit for removal of a nest.<sup>305</sup>

~~268-277.~~ The loggerhead shrike is a state-listed endangered species. Impacts to individual loggerhead shrikes could occur if clearing or construction takes place when the species is breeding, nesting in trees and shrubs within the landscape. Loggerhead shrikes and their offspring may be injured or killed if occupied trees and shrubs are cleared during this active window. Tree and shrub clearing activities conducted when the species is not breeding will not directly impact loggerhead shrikes, however, it could result in indirect impacts due to the removal of suitable nesting or prey-impaling habitat. The preferred mitigation strategy to avoid impacts to the loggerhead shrike is avoidance of tree- and shrub-clearing during the breeding season.<sup>306</sup>

~~269-278.~~ DSP Section 5.24 requires the permittee to avoid tree and shrub removal during the Loggerhead Shrike breeding season, April through July. If avoidance is not feasible, the permittee must identify a qualified surveyor to conduct a survey for active nests before any trees or shrubs are removed. The qualified surveyor must be on the MDNR certified list of surveyors, and the surveys must be conducted in accordance with MDNR survey requirements.<sup>307</sup>

~~270-279.~~ Castle Rock Solar states that it will minimize impacts to these sensitive ecological resources by avoiding habitat features such as wetlands and waterways to the extent possible.

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<sup>302</sup> Ex. PUC-ER-6 at 188 (EA).

<sup>303</sup> Ex. PUC-ER-6 at 184 (EA).

<sup>304</sup> Ex. PUC-ER-6, Appendix C at 20 (EA, Appendix C - Draft Site Permit).

<sup>305</sup> Ex. PUC-ER-6 at 187 (EA).

<sup>306</sup> Ex. PUC-ER-6 at 188 (EA).

<sup>307</sup> Ex. PUC-ER-6, Appendix C at 20–21 (EA, Appendix C - Draft Site Permit).

MBS sites and NPCs will be avoided and collection lines crossing the NPC will be bored or aerial spanned to avoid disturbance.<sup>308</sup>

~~271.~~280. Castle Rock Solar has secured 100% land control within the Project through leases or easements, and the Project is comprised entirely of private land. The Project avoids lands actively enrolled in conservation programs or with conservation easements, such as Conservation Reserve Enhancement Program or RIM; there is one expired RIM easement within the site. The nearest active conservation easement is a RIM more than 5.5 miles southwest of the site. Impacts to conservation easements are not anticipated.<sup>309</sup>

~~272.~~281. The record demonstrates that Castle Rock Solar has taken steps to avoid and minimize impacts to rare and unique resources. Further, Sections 5.22, 5.23, and 5.24 of the DSP specify measures that will minimize impacts to rare species.<sup>310</sup>

### **G. Application of Various Design Considerations.**

~~273.~~282. Minnesota law requires consideration of the application of design options that maximize energy efficiencies, mitigate adverse environmental effects, and could accommodate expansion of transmission or generating capacity.<sup>311</sup>

~~274.~~283. Castle Rock Solar is not required to propose alternative sites pursuant to Minn. Stat. § 216E.04, subd. 2(8), and as specified in Minn. R. 7850.2800 to 7850.3900.<sup>312</sup>

### **H. Use of Existing Infrastructure.**

~~275.~~284. Minnesota law requires consideration of the use of existing rights of way and transmission infrastructure.<sup>313</sup>

~~276.~~285. Xcel Energy's existing Chub Lake to Hampton Corners 345 kV line runs east-west through the Project.<sup>314</sup> Castle Rock Solar sited the Project after identifying that this line had capacity, to make use of existing transmission infrastructure.<sup>315</sup>

### **I. Electrical System Reliability**

~~277.~~286. Minnesota law requires consideration of electrical system reliability.<sup>316</sup>

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<sup>308</sup> Ex. PUC-ER-6 at 189 (EA).

<sup>309</sup> Ex. PUC-ER-6 at 182 (EA).

<sup>310</sup> Ex. PUC-ER-6 at 190 (EA).

<sup>311</sup> Minn. R. 7850.4100, subp. G.

<sup>312</sup> Ex. App.-2 at 9 (Application).

<sup>313</sup> Minn. R. 7850.4100 (H)–(J).

<sup>314</sup> Ex. PUC-ER-6 at 92 (EA).

<sup>315</sup> Ex. App.-2 at 13 (Application).

<sup>316</sup> Minn. R. 7850.4100(K).

~~278.~~287. Castle Rock Solar will select solar panel modules for the Project that are designed to withstand weather events typically experienced in the area.<sup>317</sup> The Project will produce 150 MW of reliable energy—enough to provide power to 20,750 homes.<sup>318</sup>

## **J. Unavoidable Impacts.**

~~279.~~288. Minnesota law requires consideration of the adverse human and natural environmental effects that cannot be avoided.<sup>319</sup> Resource impacts are unavoidable when an impact cannot be avoided even with mitigation strategies.<sup>320</sup>

~~280.~~289. As discussed above, most of the unavoidable impacts are associated with construction and therefore temporary. Unavoidable adverse effects associated with construction of the Project (in some instances a specific phase of construction) would last through construction and include:

- Fugitive dust.
- Noise disturbance to nearby residents and recreationalists.
- Visual disturbance to nearby residents and recreationalists.
- Soil compaction and erosion.
- Vegetative clearing (loss of shelter belts).
- Disturbance and temporary displacement of wildlife, as well as direct impacts to wildlife inadvertently struck or crushed.
- Minor amounts of marginal habitat loss, including temporary wetland impacts.
- Possible traffic delays.
- Minor GHG emissions from construction equipment and workers commuting.<sup>321</sup>

~~281.~~290. Unavoidable adverse impacts associated with the operation would last as long as the life of the Project, and could include:

- Visual impacts of the Project.
- Cultural impacts due to a change in the sense of place for local residents.
- Loss of land for agricultural purposes.

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<sup>317</sup> Ex. PUC-ER-6 at 193 (EA).

<sup>318</sup> Ex. App.-2 at 2 (Application).

<sup>319</sup> Minn. Stat. § 216E.03, subd. 7(b)(6); Minn. R. 7850.4100, subp. M.

<sup>320</sup> Ex. PUC-ER-6 at 194 (EA).

<sup>321</sup> Ex. PUC-ER-6 at 194 (EA).

- Injury or death of birds that collide with PV panels, Gen-Tie equipment, or collection lines spanned over the South Branch Vermillion River.
- Injury or death of birds and mammals from fencing.
- Minor amounts of marginal habitat loss, including permanent wetland impacts.
- Infrequent vehicle trips from maintenance vehicles.
- Potential decrease to property values.<sup>322</sup>

~~282.~~291. As discussed in detail above, the unavoidable impacts can be mitigated, and the DSP conditions will mitigate the unavoidable adverse impacts to the extent possible.

### **K. Irreversible and Irretrievable Impacts.**

~~283.~~292. Minnesota law requires consideration of the irreversible and irretrievable commitments of resources that are necessary for the Project.<sup>323</sup> Resource commitments are irreversible when it is impossible or very difficult to redirect that resource to a different future use; an irretrievable commitment of resources means the resource is not recoverable for later use by future generations.<sup>324</sup>

~~284.~~293. Irreversible and irretrievable resource commitments are primarily related to Project construction, including the use of water, aggregate, hydrocarbons, steel, concrete, wood, and other consumable resources. Some, like fossil fuel use, are irretrievable. Others, like water use, are irreversible. Still others might be recyclable in part, for example, the raw materials used to construct PV panels would be an irretrievable commitment of resources, excluding those materials that may be recycled at the end of the panels' useful life. The commitment of labor and fiscal resources to develop, construct, and operate the Project is considered irretrievable.<sup>325</sup>

~~285.~~294. Project infrastructure has been designed to avoid or minimize impacts on residences, the environment, and other sensitive resources. Nearby environmentally sensitive resources include wetlands, streams, and rivers, and the Project is not anticipated to cause any irretrievable or irreversible impacts to these resources.<sup>326</sup>

~~286.~~295. The irreversible and irretrievable commitments of resources are typical for a solar project, and as discussed above, the DSP addresses the irreversible and irretrievable commitments of resources with permit conditions, to the extent possible.

## **XII. SITE PERMIT CONDITIONS**

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<sup>322</sup> Ex. PUC-ER-6 at 194-195 (EA).

<sup>323</sup> Minn. Stat. § 216E.03, subd. 7(b)(11); Minn. R. 7850.4100(N).

<sup>324</sup> Ex. PUC-ER-6 at 195 (EA).

<sup>325</sup> Ex. PUC-ER-6 at 195 (EA).

<sup>326</sup> Ex. PUC-ER-6 at 195 (EA).

~~287.~~296. The DSP includes a number of proposed permit conditions, many of which have been discussed above. The conditions apply to site preparation, construction, cleanup, restoration, operation, maintenance, abandonment, decommissioning, and other aspects of the Project.

~~288.~~297. In response to public comments, Castle Rock Solar proposed an amendment to the Site Plan condition to require providing the Site Plan to the township, in addition to the County, as follows:

### **8.3 Site Plan**

At least 14 days prior to the pre-construction meeting, the Permittee shall file with the Commission, and provide ~~counties~~ the county and township where the Project will be constructed, a Site Plan that includes specifications and drawings for site preparation and grading; specifications and locations of the solar energy generating system and associated facilities; and procedures for cleanup and restoration. The documentation shall include maps depicting the Designated Site, solar energy generating system, and associated facilities layout in relation to that approved by this site permit.

The Permittee may not commence construction until the earlier of (i) 30 days after the pre-construction meeting or (ii) or until the Commission staff has notified the Permittee in writing that it has completed its review of the documents and determined that the planned construction is consistent with this site permit.

If the Commission notifies the Permittee in writing within 30 days after the pre-construction meeting that it has completed its review of the documents and planned construction, and finds that the planned construction is not consistent with this site permit, the Permittee may submit additional and/or revised documentation and may not commence construction until the Commission has notified the Permittee in writing that it has determined that the planned construction is consistent with this site permit.

If the Permittee intends to make any significant changes in its Site Plan or the specifications and drawings after submission to the Commission, the Permittee shall notify the Commission, ~~and county staff,~~ and the township staff at least five days before implementing the changes. No changes shall be made that would be in violation of any of the terms of this site permit.<sup>327</sup>

298. PUC-ER staff support the inclusion of Section 8.3, as amended by the Applicant.

299. The record supports the inclusion of Section 8.3, as amended by the Applicant.

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<sup>327</sup> Castle Rock Solar Response to Public Hearing Comments (November 17, 2025) (eDockets No. \_\_\_\_\_).

~~289.~~300. Castle Rock Solar also proposed an amendment to Condition 8.5 of the DSP, to reflect its commitment to maximize use of local, craft labor, in relevant part, as follows:

The Permittee shall notify the Commission in writing if the Permittee intends to deviate from its commitment to select a contractor that will maximize use of local, craft, ~~union~~ construction employees to the greatest extent feasible. This notification shall include a detailed explanation of the rationale for the deviation.<sup>328</sup>

301. PUC-ER staff support the inclusion of Section 8.5, as amended by the Applicant.

302. The record supports the inclusion of Section 8.5, as amended by the Applicant.

~~290.~~303. In addition, the DSP includes a number of special conditions. Castle Rock Solar objected to the inclusion of three of the Special Conditions: 5.9, 5.10, and 5.11, all of which relate to the organic farm.

304. DSP Special Conditions 5.9, 5.10, and 5.11 are not reasonable and are not supported by the record because Castle Rock Solar updated the Project design to remove the southeastern corner from the Project Area, avoiding any potential impacts to Lengsfeld's Organic Farm. PUC-ER staff agree that the Applicant's updated Project design minimize the potential for herbicide drift to impact Lengsfeld's Organic Farm. PUC-ER staff do not object to the removal of DSP Special Conditions 5.9, 5.10, and 5.11.

~~291.~~305. In response to public comments, PUC-ER staff proposed an amendment to DSP Special Condition 5.1, to require providing copies of the vegetative screening plans to the township, as follows:

### **5.1 Visual Screening Plan**

The Permittee shall develop a site-specific Visual Screening Plan. The Visual Screening Plan shall be designed and managed to mitigate visual impacts to adjacent residences and roadsides. The Visual Screening Plan shall at a minimum include:

- (a) objectives for screening of nearby residences and roadsides; and
- (b) a description of the types of trees and shrub species to be used, the location of plantings, and plans for installation, establishment, and maintenance.

The location of trees and shrubs included in the Visual Screening Plan that are located within the Permittee's site control shall be included in the Site Plan filed under Section 8.3. The Permittee is required to maintain and ensure the successful growth, health, and maintenance of the vegetation for 3 years.

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<sup>328</sup> Castle Rock Solar Response to Public Hearing Comments (November 17, 2025) (eDockets No. \_\_\_\_\_).

At least 14 days prior to the pre-construction meeting, the Permittee shall file with the Commission and provide the township where the project will be constructed:

- (a) the Visual Screening Plan;
- (b) documentation of coordination between adjacent landowners; and
- (c) an affidavit of its distribution of the Visual Screening Plan to adjacent landowners.

~~292.~~306. The record supports the inclusion of Special Condition 5.1, as amended by PUC-ER staff.

~~293.~~307. MDNR commented in support of Special Condition 5.14 of the DSP, which directs the Permittee to file a geotechnical report prior to construction and limits construction activity within 150 feet of documented karst features. MDNR recommended that Special Condition 5.14 also direct the Permittee to conduct a survey of surface karst features within the Project boundary that are mapped by the MDNR's Minnesota Regions Prone to Surface Karst Feature Development, as follows:

The Permittee shall survey for surface karst features within areas mapped by the DNR as Regions Prone to Surface Karst Feature Development. The Permittee shall not locate project infrastructure within 150 feet of documented active karst features and avoid all construction activity within 150 feet of documented active karst features. Active karst is Areas prone to surface karst feature development are defined as areas underlain by carbonate bedrock with less than 50 feet of sediment cover.<sup>329</sup>

~~294.~~308. The EA did not cite a source to support a 150 foot setback. ~~The 150 foot setback in proposed Special Condition 5.14 is not supported by the record.~~ The 150 foot setback has been adopted in a prior solar project site permit granted by the Commission.<sup>330</sup>

~~295. However, a karst condition is supported by the record. Castle Rock Solar proposed an alternative condition to require geotechnical analysis as follows:~~

~~The Permittee shall conduct karst geology assessments in compliance with ASTM D8512-23 (Standard practice for Preliminary Karst assessments for land development) and detailed site investigations which may include geophysical and or geotechnical subsurface investigations. If the preliminary karst assessment indicates that karst features may impact, or be impacted by, the proposed site development, then a detailed site investigation which may include geophysical and/or geotechnical subsurface investigations may be recommended If a karst~~

<sup>329</sup> MDNR Comments (November 3, 2025) (eDockets No. [202511-224630-01](#)).

<sup>330</sup> [PUC, Order Granting Certificate of Need and Issuing Site and Route Permits \[Byron Solar Project\], May 1, 2023, eDocket No. 20235-195471-02, see special permit condition 5.1 requiring a 150-foot buffer from documented active karst features.](#)

~~feature is encountered, the Permittee shall report the findings to the Minnesota Department of Natural Resources (MDNR), and the Permittee shall develop appropriate mitigation measures in coordination with the MDNR.~~

~~296.309.~~ ~~Castle Rock Solar's~~ PUC-ER's proposed Special Condition 5.14 is reasonable and supported by the record and the MDNR.<sup>334</sup><sup>332</sup> PUC-ER staff support Special Condition 5.14, as amended by MDNR and PUC-ER staff:

#### **5.14 Karst Geology**

The Permittee shall file a geotechnical investigation report prepared for the Project construction area by a third-party geotechnical engineer or authorized representative. The report shall include methodology, results, and conclusions drawn from the geotechnical investigation with recommendations on project design and construction. The Permittee shall file the geotechnical report with the Commission at least 14 days prior to the pre-construction meeting.

The Permittee shall conduct a survey for surface karst features within areas mapped by the DNR as Minnesota Regions Prone to Surface Karst Feature Development. The Permittee shall file the survey results with the Commission and submit the survey results to the DNR's Karst Feature Inventory at least 14 days prior to the pre-construction meeting.

The Permittee shall not locate project infrastructure within 150 feet of documented active karst features and avoid all construction activity within 150 feet of documented active karst features. ~~Active karst is~~ Areas prone to surface karst development are defined as areas underlain by carbonate bedrock with less than 50 feet of sediment cover.

~~297.310.~~ Castle Rock Solar did not object to the remaining special conditions.

~~298.311.~~ MDNR also supported the inclusion of DSP Sections 5.3 (Snowmobile Trail), 5.16 (Dewatering), 5.22 (Sites of Biodiversity Significance), 5.23 (Northern Long-Eared Bat), 5.24 (Loggerhead Shrike).<sup>333</sup>

312. Special Conditions 5.1, as amended by PUC-ER staff, 5.2 to 5.8 and 5.12-5.13, and 15.15-5.24 are reasonable and supported by the record. Special Condition 5.14, as ~~amended~~ proposed by ~~Castle Rock Solar~~ MDNR and PUC-ER staff, is also reasonable and supported by the record.

<sup>334</sup> ~~Castle Rock Solar Response to Public Hearing Comments (November 17, 2025) (eDockets No. \_\_\_\_\_).~~

<sup>332</sup> MDNR Comments (November 3, 2025) (eDockets No. 202511-224630-01).

<sup>333</sup> MDNR Comments (November 3, 2025) (eDockets No. 202511-224630-01).

~~299.~~313. [Conditions 8.3 and 8.5, as amended by the Applicant, are reasonable and supported by the record.](#)

~~300.~~314. Many of the conditions contained in the Draft Site Permit, as revised by PUC-ER, Castle Rock Solar, and MDNR, were established as part of the site permit proceedings of other solar projects permitted by the Commission. Comments received by the Commission have been considered in development of the permit conditions for this Project.

### **XIII. NOTICE**

~~301.~~315. Minnesota statutes and rules require an applicant to provide certain notice to the public and local governments before and during the Application process.<sup>334</sup>

~~302.~~316. The Application was filed on January 16, 2025.<sup>335</sup> On January 24, 2025, Castle Rock sent public notice to all adjacent landowners, as required by law.<sup>336</sup>

~~303.~~317. Castle Rock Solar provided notices to the public and local governments in satisfaction of Minnesota statutory and rule requirements.<sup>337</sup>

~~304.~~318. PUC-ER and the Commission likewise provided notices in satisfaction of Minnesota Statutes and Rules.<sup>338</sup>

### **XIV. COMPLETENESS OF EA**

~~305.~~319. The EA process is the alternative environmental review approved by the EQB for LEPGPs. The Commission is required to determine the completeness of the EA. An EA is complete if it and the record address the issues and alternatives identified in the Scoping Decision.<sup>339</sup>

~~306.~~320. The evidence in the record demonstrates that the EA is complete because the EA and the record created at the public hearing and during the subsequent comment period address the issues and alternatives raised in the Scoping Decision.<sup>340</sup>

Based on the foregoing Findings of Fact and the record in this proceeding, the Commission makes the following:

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<sup>334</sup> Minn. Stat. § 216E.03, subps. 3a, 4; Minn. R. 7850.3300; Minn. R. 7850.2100, subps. 2, 4.

<sup>335</sup> Ex. App.-2 (Application).

<sup>336</sup> Ex. App.-18 (Project Notice Under 7850.2100); Letter Regarding Notice (Oct. 17, 2025) (eDockets No. [202510-224050-01](#)).

<sup>337</sup> Ex. App.-1 (Notice of Intent to Submit a Site Permit Application Under Alternative Review Process); Ex. App.-18 (Project Notice Under 7850.2100).

<sup>338</sup> Ex. PUC-4 (Notice of Public Information and EA Scoping Meetings); Ex. PUC-8 (Notice of Public Hearings and Availability of EA).

<sup>339</sup> Minn. R. 4410.4400, subp. 3; Minn. R. 7850.3900, subp. 2.

<sup>340</sup> Ex. PUC0ER-4 (EA Scoping Decision).

## CONCLUSIONS OF LAW

1. Any of the forgoing Findings of Fact more properly designated as Conclusions of Law are hereby adopted as such.
2. The Commission and the Administrative Law Judge have jurisdiction over the Application for a site permit for the up to 150 MW proposed Project pursuant to Minn. Stat. §§ 216E.02 and 216E.03 (2023).
3. The Commission accepted the Application as complete on March 18, 2025.<sup>341</sup>
4. Castle Rock Solar has substantially complied with the procedural requirements of Minn. Stat. Ch. 216E (2023) and Minn. R. Ch. 7850.
5. The Commission has substantially complied with the procedural requirements of Minn. Stat. Ch. 216E (2023) and Minn. R. Ch. 7850.
6. PUC-ER has conducted an appropriate environmental analysis of the Project for purposes of the Site Permit proceeding pursuant to Minn. R. 7850.3700.
7. Public hearings were held on October 22, 2025 (in-person) and October 23, 2025 (remote-access). Proper notice of the public hearings was provided, and the public was given an opportunity to speak at the hearings and to submit written comments.
8. The EA prepared for the Project and the record created at the public hearing address the issues identified in the EA scoping decision.
9. The Commission has the authority under Minn. Stat. § 216E.03 (2023) to place conditions in a LEPPG site permit.
10. The DSP, as revised by PUC-ER staff, MDNR, and Castle Rock Solar, contains a number of important mitigation measures and other reasonable conditions.
11. It is reasonable to amend the DSP to include the changes proposed by PUC-ER staff in the EA and the subsequent changes proposed by MDNR, ~~and~~ Castle Rock Solar, and PUC-ER staff as described above.
12. The record in this proceeding demonstrates that Castle Rock Solar has satisfied the criteria for a Site Permit as set forth in Minn. Stat. § 216E.03 (2023) and Minn. R. Ch. 7850 and all other applicable legal requirements.
13. The Project, with the permit conditions discussed above, satisfies the Site Permit criteria for an LEPPG in Minn. Stat. § 216E.03 (2023) and meets all other applicable legal requirements.

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<sup>341</sup> PUC Order Accepting Application as Complete (Mar. 18, 2025) (eDockets No. [20253-216516-01](#)).

14. The Project, with the permit conditions discussed above, does not present a potential for significant adverse environmental effects pursuant to the Minnesota Environmental Rights Act and/or the Minnesota Environmental Policy Act.
15. Any of the foregoing conclusions of law which are more properly designated findings of fact are hereby adopted as such.

**RECOMMENDATIONS**

Based upon these Conclusions, the Administrative Law Judge recommends that the Commission issue a Site Permit to Castle Rock Solar, LLC to construct and operate the Project and associated facilities in Dakota County, Minnesota and that the permit include the draft permit conditions amended as set forth in the Conclusions above.

THIS REPORT IS NOT AN ORDER AND NO AUTHORITY IS GRANTED HEREIN. THE MINNESOTA PUBLIC UTILITIES COMMISSION WILL ISSUE THE ORDER THAT MAY ADOPT OR DIFFER FROM THE PRECEDING RECOMMENDATION.

Dated: \_\_\_\_\_

Ann C. O'Reilly  
Administrative Law Judge