

2.0 PROJECT DESCRIPTION

2.1 Overall Project Description

Regal Solar is currently developing the Regal Solar Project, an up to 100 MW solar PV facility located in northwest Benton County, Minnesota. The Project would interconnect into the Platte River Substation, which is adjacent to the Project. Regal selected this location based on a number of factors, but a key consideration in the selection process was the Project's proximity to existing electrical and transportation infrastructure, including the Platte River Substation which is directly adjacent to the Project Site. Existing infrastructure in the immediate vicinity allows Regal to minimize the need to construct ancillary facilities beyond the main Project footprint.

2.2 Size and Location

Regal is proposing to build its solar facility in Sections 12 and 13, Township 38 North, Range 32 West, and Sections 18 and 19, Township 38 North, Range 31 West, Benton County, Minnesota (Figure 1 – Project Location). Regal has a purchase option for 802 acres of privately-owned land (Land Control Area). Based on preliminary design, Project facilities will cover approximate 711 acres (Preliminary Development Area). There are approximately 91 acres of the Land Control Area for which Regal has site control, but are currently not contemplated for occupation by solar facilities (Figure 2 – Land Control and Preliminary Development Areas). The total nameplate capacity for the proposed Project facilities is up to 100 MW AC.

The Project is directly west of U.S. Highway 10, approximately 1.5 miles southeast of Royalton and about 230 feet west of the municipal boundary of Rice. Regal selected the specific Land Control Area based on significant landowner interest, transmission and interconnection suitability, optimal solar resource, and minimal impact on environmental resources (see Section 2.3).

In this Application, Regal is providing a preliminary Project layout for both a below-ground electrical collection system (Figures 3 – Below-Ground Preliminary Project Layout and 4a-4e – Detailed Below-Ground Preliminary Project Layout; and displayed in more detail in Appendix B – Site Plan) and an above-ground electrical collection system (Figures 5 – Above-Ground Preliminary Project Layout and 6a-6e – Detailed Above-Ground Preliminary Project Layout). A hybrid Project layout with a combined below-ground and above-ground electrical system would have an array layout consistent with the Below-Ground Preliminary Project Layout. All layouts under consideration are within the Preliminary Development Area and subject to final micro-siting. The Project's facilities are currently anticipated to be located within the Preliminary Development Area and include solar panels and racking, inverters, security fencing, laydown areas, Project substation, an Operation and Maintenance building (O&M), on-site below-ground or above-ground electrical collection and communication lines, and up to two weather stations (up to 20 feet tall). This preliminary Project layout within the Preliminary Development Area reflects Regal's effort to maximize the energy production of the Project, follow applicable setbacks, while minimizing impacts to the land, environment, and surrounding community. The final site layout may, however, differ from the preliminary layout and the current boundaries of the Preliminary Development Area set forth in this Application, but will not extend beyond the outer boundaries of the Land Control Area. While Regal expects that the final layout will remain considerably

similar to and could include a combination of the preliminary layout presented in Figures 3 and 5 (Below-Ground Preliminary Project Layout and Above-Ground Preliminary Project Layout) and Appendix B (Site Plan), changes may occur as a result of ongoing site evaluation, permitting process, neighboring landowner preferences, and micro-siting activities. Project facilities are described in more detail in Section 3.0.

Regal has entered into a Purchase Option Agreement with the landowner for all of the parcels on which the Project would be constructed. Regal would exercise its purchase option and hold title to all the property after the Site Permit is issued and prior to the start of construction.

2.3 Prohibited and Exclusion Sites

Minnesota Rules 7850.4400 subp. 1 prohibits power generating plants from being sited in several prohibited areas, including: national parks; national historic sites and landmarks; national historic districts; national wildlife refuges; national monuments; national wild, scenic and recreational riverways; state wild, scenic, and recreational rivers and their land use districts; state parks; nature conservancy preserves; state scientific and natural areas; and state and national wilderness areas. The Project facilities are not located within any prohibited areas.

Additionally, Minnesota Rules 7850.4400 subp. 3 requires that applicants avoid siting power generating plants in several exclusion areas unless there is no feasible and prudent alternative. These exclusion areas include: state registered historic sites; state historic districts; state Wildlife Management Areas (WMAs); county parks; metropolitan parks; designated state and federal recreational trails; designated trout streams; and state water trails. The Project facilities are not located within any exclusion areas.

Subject to certain exceptions, Minnesota Rules 7850.4400, subp. 4 prohibits large energy power generating plants 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. There is no prime farmland in the Land Control Area. Soils are discussed in further detail in Section 4.5.3.

2.4 Alternatives Considered but Rejected

Per Minn. Stat. 216E.04, Subd. 2(8), the Project qualifies for the alternative review process specified in Minn. R. 7850.2800-7850.3900. Accordingly, Regal is not required to analyze alternative sites pursuant to 7850.3100. Regal did not consider alternative sites other than the Project site because of the proximity of the site to electrical transmission infrastructure, a willing Project participant, and the minimal environmental impacts expected from the construction of the Regal Solar Project at the Project site.

2.5 Cost Analysis

The total installed capital costs for the Project are estimated to be approximately \$146 million, with Project cost depending on variables including, but not limited to, construction costs, taxes, tariffs, and panel selection, along with associated electrical and communication systems, and access roads. Costs associated with the various Project components are detailed in Table 2.5-1.

Table 2.5-1 Estimated Project Costs	
Project Components	Cost
Engineering, Procurement, Construction Contractor	\$122.8 million
Development Expense	\$7.3 million
Interconnection	\$9 million
Financing	\$6.9 million
Project Total	\$146 million

2.6 Future Expansion

Regal's interconnection request is for 100 MW, the planned output of the Project. Regal does not anticipate expanding the proposed Project at this time.