

Revised September 6, 2019

Minnesota Public Utilities Commission

# Application for a Site Permit

PUC Docket No. IP7003/GS-19-395

## Regal Solar Project

Benton County, Minnesota

Submitted by:

Regal Solar, LLC

7650 Edinborough Way

Suite 725

Edina, MN 55435



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***Public Utilities Commission  
Application for a Site Permit for the  
Regal Solar Project***

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**7650 Edinborough Way  
Suite 725  
Edina, MN 55435**

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Appendix B – Site Plan  
Appendix C – Agricultural Impact Mitigation Plan (AIMP) and Vegetation Management Plan  
Appendix D – Phase 1 Archaeological Reconnaissance Survey Report  
Appendix E – Wetland Delineation Report

**ACRONYM LIST**

|                   |                                                                                                    |
|-------------------|----------------------------------------------------------------------------------------------------|
| AADT              | Annual Average Daily Traffic                                                                       |
| AC                | alternating current                                                                                |
| AIMP              | Agricultural Impact Mitigation Plan                                                                |
| Applicant         | Regal Solar, LLC                                                                                   |
| Application       | Site Permit Application                                                                            |
| AQI               | Air Quality Index                                                                                  |
| Area M            | Area M Consulting                                                                                  |
| ARMER             | Allied Radio Matrix for Emergency Response                                                         |
| BCC               | Birds of Conservation Concern                                                                      |
| BCR               | Bird Conservation Region                                                                           |
| BGEPA             | Bald and Golden Eagle Protection Act                                                               |
| BMPs              | best management practices                                                                          |
| CAA               | Clean Air Act                                                                                      |
| CO                | carbon monoxide                                                                                    |
| Commission        | Minnesota Public Utilities Commission                                                              |
| CON               | Certificate of Need                                                                                |
| CWI               | County Well Index                                                                                  |
| dB                | decibels                                                                                           |
| dBA               | A-weighted decibels                                                                                |
| DC                | direct current                                                                                     |
| ECS               | Ecological Classification System                                                                   |
| EMF               | electromagnetic field                                                                              |
| EPA               | U.S. Environmental Protection Agency                                                               |
| ESA               | Endangered Species Act                                                                             |
| FAA               | Federal Aviation Administration                                                                    |
| FEMA              | Federal Emergency Management Agency                                                                |
| GAP               | Gap Analysis Program                                                                               |
| Geronimo          | Geronimo Energy, LLC                                                                               |
| GPS               | Global Positioning System                                                                          |
| GIS               | Geographic Information System                                                                      |
| IPaC              | Information for Planning and Conservation                                                          |
| kV                | kilovolt                                                                                           |
| Land Control Area | Approximate 802-acre area of privately-owned land for which Regal Solar, LLC has a purchase option |
| L <sub>10</sub>   | ten percent of any hour                                                                            |
| L <sub>50</sub>   | fifty percent of any hour                                                                          |



|                                 |                                                                                                          |
|---------------------------------|----------------------------------------------------------------------------------------------------------|
| LGU(s)                          | local government unit(s)                                                                                 |
| MBTA                            | Migratory Bird Treaty Act                                                                                |
| MBS                             | Minnesota Biological Survey                                                                              |
| MDH                             | Minnesota Department of Health                                                                           |
| mG                              | milliGauss                                                                                               |
| MISO                            | Midcontinent Independent System Operator                                                                 |
| MNBBA                           | Minnesota Breeding Bird Atlas                                                                            |
| MNDNR                           | Minnesota Department of Natural Resources                                                                |
| MDA                             | Minnesota Department of Agriculture                                                                      |
| MNDOT                           | Minnesota Department of Transportation                                                                   |
| MPCA                            | Minnesota Pollution Control Agency                                                                       |
| MW                              | megawatt                                                                                                 |
| NAAQS                           | National Ambient Air Quality Standards                                                                   |
| NHIS                            | Natural Heritage Information System                                                                      |
| NIEHS                           | National Institute of Environmental Health Sciences                                                      |
| NLEB                            | northern long-eared bat                                                                                  |
| NO <sub>2</sub>                 | nitrogen dioxide                                                                                         |
| NPC                             | native plant community                                                                                   |
| NPDES                           | National Pollutant Discharge Elimination System                                                          |
| NRCS                            | Natural Resources Conservation Service                                                                   |
| NRHP                            | National Register of Historic Places                                                                     |
| NWI                             | National Wetlands Inventory                                                                              |
| NWP                             | Nationwide Permit                                                                                        |
| O&M building                    | operations and maintenance building                                                                      |
| O <sub>3</sub>                  | ozone                                                                                                    |
| Pb                              | lead                                                                                                     |
| PEM                             | palustrine emergent wetland                                                                              |
| PM                              | particulate matter                                                                                       |
| Preliminary<br>Development Area | Approximate 711-acre area where Regal Solar, LLC proposes to<br>build the Regal Solar Project facilities |
| Project                         | Regal Solar Project                                                                                      |
| PV                              | photovoltaic                                                                                             |
| Regal/Regal Solar               | Regal Solar, LLC                                                                                         |
| SCADA                           | Supervisory Control and Data Acquisition                                                                 |
| SDWA                            | Safe Drinking Water Act                                                                                  |
| SHPO                            | State Historic Preservation Office                                                                       |
| SGCN                            | Species of Greatest Conservation Need                                                                    |

|                 |                                          |
|-----------------|------------------------------------------|
| SO <sub>2</sub> | sulfur dioxide                           |
| SOBS            | Sites of Biodiversity Significance       |
| SSA             | sole source aquifer                      |
| SSURGO          | Soil Survey Geographic Database          |
| SWAP            | State Wildlife Action Plan               |
| SWPPP           | Stormwater Pollution Prevention Plan     |
| TEP             | Benton County Technical Evaluation Panel |
| TWh             | terawatt hour                            |
| USACE           | U.S. Army Corps of Engineers             |
| USDA            | U.S. Department of Agriculture           |
| USDOT           | U.S. Department of Transportation        |
| USFWS           | U.S. Fish and Wildlife Service           |
| USG             | unhealthy for sensitive groups           |
| USGS            | U.S. Geological Survey                   |
| VMP             | Vegetation Management Plan               |
| WCA             | Wetland Conservation Act                 |
| WHPA            | Wellhead Protection Area                 |
| WMA             | Wildlife Management Area                 |
| WNS             | white-nose syndrome                      |

## Application Content Requirements Completeness Checklist

| Project Permit Application Requirements<br>(Minn. Rules 7850.1900, Subp. 1)                                                                                                                                          | Application Section                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| A. a statement of proposed ownership of the facility as of the day of filing and after commercial operation;                                                                                                         | 1.2                                 |
| B. the precise name of any person or organization to be initially named as permittee or permittees and the name of any other person to whom the permit may be transferred if transfer of the permit is contemplated; | 1.2                                 |
| C. at least two proposed sites for the proposed large electric power generating plant and identification of the applicant's preferred site and the reasons for preferring the site;                                  | 2.4                                 |
| D. a description of the proposed large electric power generating plant and all associated facilities, including the size and type of the facility;                                                                   | 3.1, 3.2                            |
| E. the environmental information required under subpart 3;                                                                                                                                                           | See Environmental Information below |
| F. the names of the owners of the property for each proposed site;                                                                                                                                                   | 1.2                                 |
| G. the engineering and operational design for the large electric power generating plant at each of the proposed sites;                                                                                               | 3.1, Appendix B                     |
| H. a cost analysis of the large electric power generating plant at each proposed site, including the costs of constructing and operating the facility that are dependent on design and site;                         | 2.5                                 |
| I. an engineering analysis of each of the proposed sites, including how each site could accommodate expansion of generating capacity in the future;                                                                  | 2.6 and 3.1                         |
| J. identification of transportation, pipeline, and electrical transmission systems that will be required to construct, maintain, and operate the facility;                                                           | 3.1.7 and 3.1.8                     |
| K. a listing and brief description of federal, state, and local permits that may be required for the project at each proposed site; and                                                                              | 1.4.2                               |
| L. a copy of the Certificate of Need for the project from the Public Utilities Commission or documentation that an application for a Certificate of Need has been submitted or is not required.                      | 1.4.1                               |

| Environmental Information Requirements<br>(Minn. Rules 7850.1900, Subp. 3)                                                                                                                                                                                            | Application Section |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| A. a description of the environmental setting for each site or route;                                                                                                                                                                                                 | 4.1                 |
| B. a description of the effects of construction and operation of the facility on human settlement, including, but not limited to, public health and safety, displacement, noise, aesthetics, socioeconomic impacts, cultural values, recreation, and public services; | 4.2                 |
| C. a description of the effects of the facility on land-based economies, including, but not limited to, agriculture, forestry, tourism, and mining;                                                                                                                   | 4.3                 |
| D. a description of the effects of the facility on archaeological and historic resources;                                                                                                                                                                             | 4.4                 |
| E. a description of the effects of the facility on the natural environment, including effects on air and water quality resources and flora and fauna;                                                                                                                 | 4.5                 |
| F. a description of the effects of the facility on rare and unique natural resources;                                                                                                                                                                                 | 4.5.8               |
| G. identification of human and natural environmental effects that cannot be avoided if the facility is approved at a specific site or route; and                                                                                                                      | 4.6                 |
| H. a description of measures that might be implemented to mitigate the potential human and environmental impacts identified in items A to G and the estimated costs of such mitigative measures.                                                                      | 4.1 – 4.5           |