

ATTACHMENT B

Draft Route Permit

STATE OF MINNESOTA PUBLIC UTILITIES COMMISSION

ROUTE PERMIT FOR A
HIGH-VOLTAGE TRANSMISSION LINE AND ASSOCIATED FACILITIES

IN
DODGE AND OLMSTED COUNTIES

ISSUED TO
BYRON SOLAR, LLC

PUC DOCKET NO. IP7041/TL-20-765

In accordance with the requirements of Minnesota Statutes Chapter 216E and Minnesota Rules Chapter 7850 this route permit is hereby issued to:

Byron Solar, LLC

~~[Permittee] is authorized by this route permit to construct and operate [Provide a description of the project authorized by the Minnesota Public Utilities Commission].~~

By this route permit, Byron Solar is hereby authorized to construct and operate approximately three or 4.5 miles of new overhead 345 kilovolt (kV) transmission line, which will connect the proposed Byron Solar, LLC Substation in

Section 35 of Mantorville Township OR
Section 13 of Canisteo Township

in Dodge County to the existing Byron Substation located west of the City of Byron in Olmsted County, Minnesota.

The high-voltage transmission line and associated facilities shall be built within the route identified in this permit and as portrayed on the route maps and in compliance with the conditions specified in this permit.

Approved and adopted this __ day of
BY ORDER OF THE COMMISSION

Daniel P. Wolf, William Seuffert Executive Secretary

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ATTACHMENTS

Attachment 1 – Complaint Handling Procedures for Permitted Energy Facilities

Attachment 2 – Compliance Filing Procedures for Permitted Energy Facilities

Attachment 3 – Route Maps

1 ROUTE PERMIT

The Minnesota Public Utilities Commission (Commission) hereby issues this route permit to Byron Solar, LLC (Permittee) pursuant to Minnesota Statutes Chapter 216E and Minnesota Rules Chapter 7850. This permit authorizes the Permittee to construct and operate an approximately three OR four and one-half miles of new overhead 345-kilovolt (kV) transmission line, which will connect the proposed Byron Solar, LLC Substation to Southern Minnesota Municipal Power's existing Byron Substation located just west of the City of Byron, Minnesota, and as identified in the attached route maps, hereby incorporated into this document (Byron Solar Project, henceforth known as Project).

1.1 Preemption

Pursuant to Minn. Stat. § 216E.10, this permit shall be the sole route approval required to be obtained by the Permittee for construction of the transmission facilities, and this permit shall supersede and preempt all zoning, building, or land use rules, regulations, or ordinances promulgated by regional, county, local and special purpose governments.

2 PROJECT DESCRIPTION

The Project consists of approximately three (Blue Route) or 4.5 miles (Red Route) of 345 kV transmission between the newly constructed Byron Solar, LLC substation on a parcel in

The SE1/4 SE1/4 of Section 35, Township 106 N, Range 16 W

OR

The E1/2, SE1/4 of Section 13, Township 107N, Range 16W

and the existing Byron Substation in Section 31 of Kalmar Township in Olmsted County. The Project is located in the following:

Blue Route

<u>County</u>	<u>Township Name</u>	<u>Township</u>	<u>Range</u>	<u>Section</u>
<u>Dodge</u>	<u>Mantorville</u>	<u>107N</u>	<u>16W</u>	<u>25, 35, 36</u>
<u>Olmsted</u>	<u>Kalmar</u>	<u>107N</u>	<u>15W</u>	<u>31</u>

OR

Red Route

<u>County</u>	<u>Township Name</u>	<u>Township</u>	<u>Range</u>	<u>Section</u>
<u>Dodge</u>	<u>Canisteo</u>	<u>106N</u>	<u>16W</u>	<u>13</u>
<u>Olmsted</u>	<u>Salem</u>	<u>106N</u>	<u>15W</u>	<u>6, 7, 18</u>
<u>Olmsted</u>	<u>Kalmar</u>	<u>107N</u>	<u>15W</u>	<u>31</u>

2.1 Project Location

2.2 Substations and Associated Facilities

¹http://mn.gov/commerce/energyfacilities/documents/Engsements%20Fact%20Sheet_08.05.14.pdf

2.3 Structures

2.1 Structures

The new 345-kV line will consist of single circuit, weathering steel monopole structures spaced approximately 230 to 975 feet apart. Transmission structures will typically range in height from 90 to 170 feet above ground depending upon the terrain and environmental constraints (such as stream crossings and required angle structures).

2.4 Conductors

2.2 Conductors

The table below details specifics on the various structure and conductor types as presented in the route permit application.

Line Type	Conductor	Structure		Foundation	Height	Span
		Type	Material			

The single-circuit structures will have three single-conductor phase wires and additional shield/communication wires. The phase wires will have a diameter of approximately 795 kcmil and will be a composed of several wire strands of different metals. The Permittee will use a single 48 fiber optical ground wire (OPGW) and an additional 3/8” EHS 7-strand steel overhead ground wire (OHGW) for additional shielding.

3 DESIGNATED ROUTE

The route designated by the Commission in this permit is the route described below and shown on the route maps attached to this permit. The route is generally described as follows:

Blue Route

The route begins at the project substation located in Section 36 of Mantorville Township, just south of U.S. Highway 14 near 640th St and 265th Ave. From the project substation the route travels north crossing U.S. Highway 14 and then through agricultural fields for about 0.6 miles, crosses County Road 34 and then turns east for approximately one mile along a railroad, turning north along a section line for approximately 0.25 miles, before turning east for approximately one mile.

OR

Red Route

The Red Route begins at the project substation located in Section 13 of Canisteo Township and travels east for approximately 0.4 miles, before turning north for approximately three miles along a section line to parallel an existing 345 kV transmission line towards the Byron Substation. Just south of US Highway 14, the Red Route jogs to the northwest for approximately 0.25 miles to avoid the congestion, before proceeding northward for approximately 0.6 miles before turning east and then south for the last 0.25 miles to enter the Byron Substation from the north.

⁴http://mn.gov/commerce/energyfacilities/documents/Equipments%20Fact%20Sheet_08.05.14.pdf

The identified route widths on the attached route maps provide the Permittee with flexibility for minor adjustments of the alignment or right-of-way to accommodate landowner requests and unforeseen conditions. The final alignment (i.e., permanent and maintained rights-of-way) must be located within this designated route unless otherwise authorized by this permit or the Commission.

4 RIGHT-OF-WAY

This ~~P~~ermit authorizes the Permittee to obtain a new permanent right-of-way for the transmission line up to 150 feet in width. The permanent right-of-way is typically 75 feet on both sides of the transmission line measured from its centerline.

The Project's anticipated alignment is intended to minimize potential impacts relative to criteria identified in Minn. R. 7850.4100. The actual right-of-way will generally conform to the anticipated alignment identified on the ~~R~~oute ~~M~~aps, unless changes are requested by individual landowners and agreed to by the Permittee or for unforeseen conditions that are encountered or as otherwise provided for by this permit.

Any right-of-way modifications within the designated route shall be located so as to have comparable overall impacts relative to the factors in Minn. R. 7850.4100, as does the right-of-way identified in this permit, and shall be specifically identified and documented in and approved as part of the plan and profile submitted pursuant to Section 9.1 of this permit.

Where the transmission line parallels existing highway and other road rights-of-way, the transmission line right-of-way shall occupy and utilize the existing right-of-way to the maximum extent possible; consistent with the criteria in Minn. R. 7850.4100 and the other requirements of this permit; and for highways under the jurisdiction of the Minnesota Department of Transportation, the procedures for accommodating utilities in trunk highway rights-of-way.

4.1 Route Width Variations

Route width variations may be allowed to accommodate the potential site-specific constraints listed below. These constraints may arise from any of the following:

- (a) ~~U~~nforeseen circumstances encountered during the detailed engineering and design process;
- (b) ~~F~~federal or state agency requirements; or
- (c) ~~E~~existing infrastructure within the route, including but not limited to railroads, natural gas and liquid pipelines, high voltage electric transmission lines, or sewer and water lines.

~~Any~~The Permittee must request any alignment modifications arising from these site-specific constraints that would result in right-of-way placement outside of the designated route ~~shall to~~ specifically reviewed by the Commission under Minn. R. 7850.4900.

5 GENERAL CONDITIONS

The Permittee shall comply with the following conditions during construction and operation of the

⁴http://mn.gov/commerce/energyfacilities/documents/Essements%20Fact%20Sheet_08.05.14.pdf

transmission line and associated facilities over the life of this permit.

5.1 Permit Distribution

Within 30 days of permit issuance, the Permittee shall send a copy of the permit and the complaint procedures to any regional development commission, county auditor and environmental office, and city and township clerk in which any part of the site is located.

Within 30 days of permit issuance, the Permittee shall provide all affected landowners with a copy of this permit and the complaint procedures. In no case shall the landowner receive this route permit and complaint procedures less than five days prior to the start of construction on their property. An affected landowner is any landowner or designee that is within or adjacent to the permitted route.

At the time of first contact, the Permittee shall also provide all affected landowners with a copy of the Department of Commerce's *Rights-of-Way and Easements for Energy Facility Construction and Operation Fact Sheet*¹.

Within 30 days of permit issuance, the Permittee shall file with the Commission an affidavit of its distribution of this permit, complaint procedures and fact sheet.

5.2 Access to Property

The Permittee shall contact the landowners prior to entering ~~the property~~ or conducting maintenance within the ~~route~~ landowner's property, unless otherwise negotiated with the affected landowner. The Permittee shall keep records of compliance with this section and provide them upon the request of Department of Commerce or Commission staff.

5.3 Construction and Operation Practices

The Permittee shall ~~follow those specific~~ comply with the construction practices, operation and maintenance practices, and material specifications described in the ~~[Route Permit Application date and title]~~, and record of the proceedings unless this permit establishes a different requirement in which case this permit shall prevail.

5.3.1 Field Representative

The Permittee shall designate a field representative responsible for overseeing compliance with the conditions of this permit during construction of the ~~p~~Project. This person shall be accessible by telephone or other means during normal business hours throughout site preparation, construction, cleanup, and restoration. The Permittee shall file with the Commission the name, address, email, phone number, and emergency phone number of the field representative 14 days prior to commencing construction.

The Permittee shall provide the field representative's contact information to affected landowners, residents, local government units and other interested persons ~~14 days prior to commencing construction~~. The Permittee may change the field representative at any time upon notice to the Commission, affected landowners, local government units and other interested persons. The Permittee shall file an affidavit of distribution of its field representative's contact information with

¹http://mn.gov/commerce/energyfacilities/documents/Easements%20Fact%20Sheet_08.05.14.pdf

the Commission at least 14 days prior to commencing construction and upon changes to the field representative.

5.3.2 ~~Employee Training and Education~~ of Permit Terms and Conditions

The Permittee shall ~~inform and educate~~ train all employees, contractors, and other persons involved in the Project construction and ~~ongoing~~ operation of the ~~transmission line~~ of the terms and conditions of this permit. The Permittee shall keep records of compliance with this section and provide them upon request of Department of Commerce or Commission staff.

5.3.3 Public Services and Public Utilities

During construction, the Permittee shall minimize any disruption to public services and public utilities. To the extent disruptions to public services or public utilities occur, these will be temporary, and the Permittee will restore service promptly. Where any impacts to utilities have the potential to occur, the Permittee ~~will~~ shall work with both landowners and local agencies to determine the most appropriate transmission structure placement.

The Permittee shall consult with landowners, townships, cities, and counties along the route and consider concerns regarding tree clearing, distance from existing structures, drain tiles, pole depth and placement in relationship to existing roads and road expansion plans.

The Permittee shall cooperate with county and city road authorities to develop appropriate signage and traffic management during construction. The Permittee shall keep records of compliance with this section and provide them upon the request of Department of Commerce or Commission staff.

5.3.4 Temporary Work Space

The Permittee shall limit temporary easements to special construction access needs and additional staging or lay-down areas required outside of the authorized right-of-way. Temporary space shall be selected to limit the removal and impacts to vegetation. Temporary easements outside of the authorized transmission line right-of-way will be obtained from affected landowners through rental agreements and are not provided for in this permit.

~~Temporary~~ The Permittee may construct temporary driveways ~~may be constructed~~ between the roadway and the structures to minimize impact using the shortest route possible. ~~Construction mats should be used~~ The Permittee shall use construction mats to minimize impacts on access paths and construction areas.

5.3.5 Noise

The Permittee shall comply with noise standards established under Minn. R. 7030.01000010 to 7030.0080, at all times at all appropriate locations during operation of the ~~facility~~ Project. Construction and maintenance activities shall be limited to daytime working hours to the extent practicable to ensure nighttime noise level standards will not be exceeded.

⁴http://mn.gov/commerce/energyfacilities/documents/Easements%20Fact%20Sheet_08.05.14.pdf

5.3.6 Aesthetics

The Permittee shall consider input pertaining to visual impacts from landowners and land management agencies prior to final location of structures, rights-of-way, and other areas with the potential for visual disturbance. ~~Care~~ The Permittee shall be used use care to preserve the natural landscape, minimize tree removal and prevent any unnecessary destruction of the natural surroundings in the vicinity of the ~~p~~Project during construction and maintenance. The Permittee shall work with landowners to locate the high-voltage transmission line to minimize the loss of agricultural land, forest, and wetlands, and to avoid homes and farmsteads. Structures shall be placed at a distance, consistent with sound engineering principles and system reliability criteria, from intersecting roads, highways, or trail crossings.

5.3.7 Soil Erosion and Sediment Control

The Permittee shall implement those erosion prevention and sediment control practices recommended by the Minnesota Pollution Control Agency (MPCA) Construction Stormwater Program. If construction of the ~~facility~~Project disturbs more than one acre of land, or is sited in an area designated by the MPCA as having potential for impacts to water resources, the Permittee shall obtain a National Pollutant Discharge Elimination System/State Disposal System (~~NPDES/SDS~~) Construction Stormwater Permit from the MPCA that provides for the development of a Stormwater Pollution Prevention Plan (~~SWPPP~~) that describes methods to control erosion and runoff.

The Permittee shall implement reasonable measures to minimize erosion and sedimentation during construction and shall employ perimeter sediment controls, protect exposed soil by promptly planting, seeding, using erosion control blankets and turf reinforcement mats, stabilizing slopes, protecting storm drain inlets, protecting soil stockpiles, and controlling vehicle tracking. Contours shall be graded as required so that all surfaces provide for proper drainage, blend with the natural terrain, and are left in a condition that will facilitate re-vegetation and prevent erosion. All areas disturbed during construction of the facilities shall be returned to pre-construction conditions.

5.3.8 Wetlands and Water Resources

~~Wetland~~ The Permittee shall implement wetland impact avoidance measures ~~that shall be implemented~~ during design and construction of the transmission line that will include spacing and placing the power poles at variable distances to span and avoid wetlands, watercourses, and floodplains. Unavoidable wetland impacts as a result of the placement of poles shall be limited to the immediate area around the poles. To minimize impacts, construction in wetland areas shall occur during frozen ground conditions where practicable and shall be according to permit requirements by the applicable permitting authority. When construction during winter is not possible, wooden or composite mats shall be used to protect wetland vegetation. Soil excavated from the wetlands and riparian areas shall be contained and not placed back into the wetland or riparian area. Wetlands and riparian areas shall be accessed using the shortest route possible in order to minimize travel through wetland areas and prevent unnecessary impacts. No staging or stringing set up areas shall be placed within or adjacent to wetlands or water resources, as practicable. Power pole structures shall be assembled on upland areas before they are brought to

⁴http://mn.gov/commerce/energy/facilities/documents/Easements%20Fact%20Sheet_08.05.14.pdf

the site for installation.

~~Wetland~~ The Permittee shall restore wetland and water resource areas disturbed by construction activities ~~shall be restored~~ to pre-construction conditions in accordance with the requirements of applicable state and federal permits or laws and landowner agreements. ~~All~~ The Permittee shall meet all requirements of the U.S. Army Corps of Engineers (USACE), Minnesota Department of Natural Resources (DNR), and local units of government ~~shall be met~~.

5.3.9 Vegetation Management

The Permittee shall minimize the number of trees to be removed in selecting the right-of-way specifically preserving to the maximum extent practicable windbreaks, shelterbelts, living snow fences, and vegetation in areas such as trail and stream crossings where vegetative screening may minimize aesthetic impacts, to the extent that such actions do not violate sound engineering principles or system reliability criteria.

Tall growing species located within the transmission line right-of-way that endanger the safe and reliable operation of the ~~transmission facility~~ Project will be removed by the Permittee. The Permittee shall leave undisturbed, to the extent possible, existing low growing species in the right-of-way or replant such species in the right-of-way to blend the difference between the right-of-way and adjacent areas, to the extent that the low growing vegetation that will not pose a threat to the ~~transmission facility~~ Project or impede construction.

5.3.10 Application of Pesticides

The Permittee shall restrict pesticide use to those pesticides and methods of application approved by the Minnesota Department of Agriculture, DNR, and the U.S. Environmental Protection Agency. Selective foliage or basal application shall be used when practicable. All pesticides shall be applied in a safe and cautious manner so as not to damage adjacent properties including crops, orchards, tree farms, apiaries, or gardens. The Permittee shall contact the landowner ~~or designee~~ to obtain approval for the use of pesticide at least 14 days prior to ~~any pesticide~~ application on their property. The Permittee may not apply any pesticide if the landowner may request that there be no application of pesticides on any part of the site within the landowner's property. The Permittee shall provide notice of pesticide application to ~~affected~~ landowners and ~~known~~ beekeepers operating apiaries within three miles of the ~~p~~Project site at least 14 days prior to such application. The Permittee shall keep pesticide communication and application records and provide them upon the request of Department of Commerce or Commission staff.

5.3.11 Invasive Species

The Permittee shall employ best management practices to avoid the potential introduction and spread of invasive species on lands disturbed by ~~p~~Project construction activities. The Permittee shall develop an Invasive Species Prevention Plan to prevent the introduction and spread of invasive species on lands disturbed by ~~p~~Project construction activities and file with the Commission ~~30~~ at least 14 days prior to the pre-construction meeting plan and profile required under Section 9.1 of this Permit.

⁴http://mn.gov/commerce/energyfacilities/documents/Agreements%20Fact%20Sheet_08.05.14.pdf

5.3.12 Noxious Weeds

The Permittee shall take all reasonable precautions against the spread of noxious weeds during all phases of construction. When utilizing seed to establish temporary and permanent vegetative cover on exposed soil the Permittee shall select site appropriate seed certified to be free of noxious weeds. To the extent possible, the Permittee shall use native seed mixes. The Permittee shall ~~consult~~ keep records of compliance with landowners on this section and provide them upon the selection and use of seed for replanting request of Department of Commerce or Commission staff.

5.3.13 Roads

The Permittee shall ~~advise~~ notify the appropriate governing bodies having jurisdiction over all state, county, city or township roads that will be used during the construction phase of the ~~p~~Project. Where practical, the Permittee shall use existing roadways shall be used for all activities associated with construction of the ~~facility~~Project. The Permittee shall not haul ~~oversize or overweight loads associated with the facility shall not be hauled across public roads~~Project without required permits and approvals.

The Permittee shall construct the ~~least~~ fewest number of site access roads ~~it can~~ required. Access roads shall not be constructed across streams and drainage ways without the required permits and approvals. Access roads shall be constructed in accordance with all necessary township, county or state road requirements and permits.

The Permittee shall promptly repair private roads or lanes damaged when moving equipment or when accessing construction workspace, unless otherwise negotiated with the affected landowner. The Permittee shall keep records of compliance with this section and provide them upon the request of Department of Commerce or Commission staff.

5.3.14 Archaeological and Historic Resources

The Permittee shall make every effort to avoid impacts to ~~identified~~ archaeological and historic resources when constructing the ~~transmission facility~~Project. In the event that a resource is encountered, the Permittee shall consult with the State Historic Preservation Office and the State Archaeologist. Where feasible, avoidance of the resource is required. Where not feasible, mitigation must include an effort to minimize ~~p~~Project impacts on the resource consistent with State Historic Preservation Office and State Archaeologist requirements.

Prior to construction, the Permittee shall train workers ~~shall be trained~~ about the need to avoid cultural properties, how to identify cultural properties, and procedures to follow if undocumented cultural properties, including gravesites, are found during construction. If human remains are encountered during construction, the Permittee shall immediately halt construction and promptly notify local law enforcement and the State Archaeologist. ~~Construction~~ The Permittee shall not resume construction at such location ~~shall not proceed~~ until authorized by local law enforcement or the State Archaeologist. The Permittee shall keep records of compliance with this section and provide them upon the request of Department of Commerce or Commission staff.

⁴http://mn.gov/commerce/energyfacilities/documents/Enforcements%20Fact%20Sheet_08.05.14.pdf

5.3.15 Avian Protection

The Permittee in cooperation with the DNR shall identify areas of the ~~p~~Project where bird flight diverters will be incorporated into the transmission line design to prevent large avian collisions attributed to visibility issues. Standard transmission design shall incorporate adequate spacing of conductors and grounding devices in accordance with Avian Power Line Interaction Committee standards to eliminate the risk of electrocution to raptors with larger wingspans that may simultaneously come in contact with a conductor and grounding devices.

5.3.16 Restoration

The Permittee shall restore the right-of-way, temporary ~~workspaces~~ ~~workspaces~~, access roads, abandoned right-of-way, and other public or private lands affected by construction of the transmission line. Restoration within the right-of-way must be compatible with the safe operation, maintenance, and inspection of the transmission line. Within 60 days after completion of all restoration activities, the Permittee shall notify the Commission in writing of the completion of such activities.

5.3.17 Cleanup

~~All~~ The Permittee shall remove and properly dispose of all waste and scrap that is the product of construction shall be removed from the right-of-way and all premises on which construction activities were conducted and properly disposed of upon completion of each task. ~~Personal~~ The Permittee shall remove and properly dispose of all personal litter, including bottles, cans, and paper from construction activities on a daily basis.

5.3.18 Pollution and Hazardous Wastes

All appropriate precautions to protect against pollution of the environment must be taken by the Permittee. The Permittee shall be responsible for compliance with all laws applicable to the generation, storage, transportation, clean up and disposal of all wastes generated during construction and restoration of the right-of-way.

5.3.19 Damages

The Permittee shall fairly restore or compensate landowners for damage to crops, fences, private roads and lanes, landscaping, drain tile, or other damages sustained during construction. The Permittee shall keep records of compliance with this section and provide them upon the request of Department of Commerce or Commission staff.

5.4 Electrical Performance Standards

5.4.1 Grounding

The Permittee shall design, construct, and operate the transmission line in a manner so that the maximum induced steady-state short-circuit current shall be limited to five milliamperes root mean square (rms) alternating current between the ground and any non-stationary object within the right-of-way, including but not limited to large motor vehicles and agricultural equipment. All fixed metallic objects on or off the right-of-way, except electric fences that parallel or cross the

⁴http://mn.gov/commerce/energyfacilities/documents/Engagements%20Fact%20Sheet_08.05.14.pdf

right-of-way, shall be grounded to the extent necessary to limit the induced short-circuit current between ground and the object so as not to exceed one milliamperere rms under steady state conditions of the transmission line and to comply with the ground fault conditions specified in the National Electric Safety Code (NESC). The Permittee shall address and rectify any induced current problems that arise during transmission line operation.

5.4.2 *Electric Field*

The Permittee shall design, construct, and operate the transmission line ~~shall be designed, constructed, and operated~~ in such a manner that the electric field measured one meter above ground level immediately below the transmission line shall not exceed 8.0 kV/m.

5.4.3 *Interference with Communication Devices*

If interference with radio or television, satellite, wireless internet, GPS-based agriculture navigation systems or other communication devices is caused by the presence or operation of the transmission line, the Permittee shall take whatever action is necessary to restore or provide reception equivalent to reception levels in the immediate area just prior to the construction of the line. The Permittee shall keep records of compliance with this section and provide them upon the request of Department of Commerce or Commission staff.

5.5 Other Requirements

5.5.1 *Safety Codes and Design Requirements*

The Permittee shall design the transmission line and associated facilities ~~shall be designed~~ to meet or exceed all relevant local and state codes, the NESC, and North American Electric Reliability Corporation (NERC) requirements. This includes standards relating to clearances to ground, clearance to crossing utilities, clearance to buildings, strength of materials, clearances over roadways, right-of-way widths, and permit requirements. The transmission line shall be equipped with protective devices to safeguard the public if an accident occurs.

5.5.2 *Other Permits and Regulations*

The Permittee shall comply with all applicable state rules and statutes. The Permittee shall obtain all required permits for the ~~project~~ and comply with the conditions of those permits unless those permits conflict with or are preempted by federal or state permits and regulations. ~~A list of the permits known to be required is included in the permit application.~~ The Permittee shall submit a copy of such permits ~~to the~~ upon the request of Department of Commerce or Commission ~~upon request staff.~~

6 SPECIAL CONDITIONS

Special conditions shall take precedence over other conditions of this permit should there be a conflict.

6.1 Vegetation Management Plan

The Permittee shall develop a vegetation management plan (VMP), in coordination with the Department of Commerce, DNR, BWSR, MPCA, and Agriculture, using best management practices

¹http://mn.gov/commerce/energyfacilities/documents/Epgements%20Fact%20Sheet_08.05.14.pdf

established by the DNR and BWSR. The Permittee shall file the VMP and documentation of the coordination efforts between the Permittee and the coordinating agencies with the Commission at least 14 days prior to the plan and profile required under Section 9.1 of this permit. The Permittee shall provide all landowners along the route with copies of the VMP. The Permittee shall file an affidavit of its distribution of the VMP to landowners with the Commission at least 14 days prior to the plan and profile.

The VMP must recognize landowner preferences and include the following:

- (a) short term and long term management objectives;
- (b) a description of planned restoration and vegetation activities, including how the route will be prepared, timing of activities, and how seeding will occur (broadcast, drilling, etc.), and the types of seed mixes to be used;
- (c) a description of how the route will be monitored and evaluated to meet management objectives;
- (d) a description of management tools used to maintain vegetation (e.g., mowing, spot spraying, hand removal, etc.), including timing/frequency of maintenance activity;
- (e) identification, monitoring and management plan for noxious weeds and invasive species (native and non-native) on route; and
- (f) a plan showing how the route will be revegetated and corresponding seed mixes. Seed mixes, seeding rates, and cover crops should follow best management practices.

6.2 Independent Third-Party Monitor

Prior to any construction, the Permittee shall propose a scope of work and identify one independent third party monitor on behalf of the Department of Commerce. The scope of work shall be developed in consultation with and approved by the Department of Commerce. This third-party monitor will report directly to and will be under the control of the Department of Commerce with costs borne by the Permittee. The Permittee shall file the scope of work, and the name, address, email, phone number, and emergency phone number of the third-party monitor with the Commission at least 14 days prior to the plan and profile required under Section 9.1 of this permit, and upon changes to the scope of work or third-party monitor contact information.

6.3 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 with the Commission at least 14 days prior to the plan and profile required under Section 9.1 of this permit.

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 defined as areas underlain by carbonate bedrock with less than 50 feet of sediment cover.

⁴http://mn.gov/commerce/energyfacilities/documents/Engements%20Fact%20Sheet_08.05.14.pdf

6.4 Wildlife-Friendly Erosion Control

The Permittee shall use only “bio-netting” or “natural netting” types and mulch products without synthetic (plastic) fiber additives.

6.5 Northern Long-Eared Bat (NLEB)

For Project construction, Permittees shall comply with the U.S. Fish and Wildlife Service guidance and requirements in effect regarding NLEB, including tree clearing restrictions if applicable.

6.6 Loggerhead Shrike

The Permittee shall avoid tree and shrub removal within suitable Loggerhead Shrike habitat during the April through July breeding season. If tree or shrub removal will occur within during the breeding season, the Permittee shall coordinate with DNR to identify potentially suitable habitat and ensure that a qualified surveyor inspects the trees/shrubs for active nests prior to removal.

7 DELAY IN CONSTRUCTION

If the Permittee has not commenced construction or improvement of the route within four years after the date of issuance of this permit the Permittee shall file a report on the failure to construct and the Commission shall consider suspension of the permit in accordance with Minn. R. 7850.4700.

8 COMPLAINT PROCEDURES

Prior to the start of construction, the Permittee shall submit to the Commission the procedures that will be used to receive and respond to complaints. The procedures shall be in accordance with the requirements of Minn. R. 7829.1500 or Minn. R. 7829.1700, and as set forth in the complaint procedures attached to this permit.

Upon request, the Permittee shall assist the Department of Commerce or Commission staff with the disposition of unresolved or longstanding complaints. This assistance shall include, but is not limited to, the submittal of complaint correspondence and complaint resolution efforts.

9 COMPLIANCE REQUIREMENTS

Failure to timely and properly make compliance filings required by this permit is a failure to comply with the conditions of this permit. Compliance filings must be electronically filed with the Commission.

9.1 Plan and Profile

At least 30 days before right-of-way preparation for construction begins on any segment or portion of the project, the Permittee shall provide the Commission with a plan and profile of the right-of-way and the specifications and drawings for right-of-way preparation, construction, structure specifications and locations, cleanup, and restoration for the transmission line. The documentation shall include maps depicting the plan and profile including the right-of-way, alignment, and structures in relation to the route and alignment approved per this permit.

⁴http://mn.gov/commerce/energyfacilities/documents/Engagements%20Fact%20Sheet_08.05.14.pdf

The Permittee may not commence construction until the 30 days has expired or until the Commission has advised the Permittee in writing that it has completed its review of the documents and determined that the planned construction is consistent with this permit. If the Permittee intends to make any significant changes in its plan and profile or the specifications and drawings after submission to the Commission, the Permittee shall notify the Commission 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 permit.

9.2 Status Reports

The Permittee shall ~~report to file with~~ the Commission monthly status reports on progress ~~during~~ regarding finalization of the route, design of structures, and construction of the transmission line. ~~The Permittee need not report more frequently than monthly.~~ Reports shall begin with the submittal of the plan and profile for the ~~p~~Project and continue until completion of restoration. Reports shall describe construction activities and progress and activities undertaken in compliance with this permit. Reports shall include text and photographs.

9.3 In-Service Date

At least three days before the ~~facility~~ Project is to be placed into service, the Permittee shall notify the Commission of the date on which the ~~facility~~ Project will be placed into service and the date on which construction was completed.

9.4 As-Builts

Within 90 days after completion of construction, the Permittee shall submit copies of all final as-built plans and specifications developed during the ~~p~~Project.

9.5 GPS Data

Within 90 days after completion of construction, the Permittee shall submit to the Commission, in the format requested by the Commission, geo-spatial information (e.g., ArcGIS compatible map files, GPS coordinates, associated database of characteristics) for all structures associated with the transmission line and each substation connected.

9.6 Right of Entry

The Permittee shall allow Commission designated representatives to perform the following, upon reasonable notice, upon presentation of credentials and at all times in compliance with the Permittee's site safety standards:

- (a) To enter upon the facilities easement of the property for the purpose of obtaining information, examining records, and conducting surveys or investigations.
- (b) To bring such equipment upon the facilities easement of the property as is necessary to conduct such surveys and investigations.
- (c) To sample and monitor upon the facilities easement of the property.
- (d) To examine and copy any documents pertaining to compliance with the conditions of this permit.

10 PERMIT AMENDMENT

This permit may be amended at any time by the Commission. Any person may request an amendment of the conditions of this permit by submitting a request to the Commission in writing describing the amendment sought and the reasons for the amendment. The Commission will mail notice of receipt of the request to the Permittee. The Commission may amend the conditions after affording the Permittee and interested persons such process as is required.

11 TRANSFER OF PERMIT

~~The Permittee may request at any time that the Commission transfer this permit to another person or entity. The Permittee shall provide the name and description of the person or entity to whom the permit is requested to be transferred, the reasons for the transfer, a description of the facilities affected, and the proposed effective date of the transfer. The person to whom the permit is to be transferred shall provide the Commission with such information as the Commission shall require to determine whether the new Permittee can comply with the conditions of the permit. The Commission may authorize transfer of the permit after affording the Permittee, the new Permittee, and interested persons such process as is required.~~

The Permittee may request at any time that the Commission transfer this permit to another person or entity (transferee). In its request, the Permittee must provide the Commission with:

- (a) the name and description of the transferee;
- (b) the reasons for the transfer;
- (c) a description of the facilities affected; and
- (d) the proposed effective date of the transfer.

The transferee must provide the Commission with a certification that it has read, understands and is able to comply with the plans and procedures it filed, and all conditions of the permit.

12 REVOCATION OR SUSPENSION OF THE PERMIT

The Commission may initiate action to revoke or suspend this permit at any time. The Commission shall act in accordance with the requirements of Minn. R. 7850.5100, to revoke or suspend the permit.

ATTACHMENT 1

Complaint Handling Procedures for Permitted Energy Facilities

**MINNESOTA PUBLIC UTILITIES COMMISSION
COMPLAINT HANDLING PROCEDURES FOR
PERMITTED ENERGY FACILITIES**

A. Purpose

To establish a uniform and timely method of reporting and resolving complaints received by the permittee concerning permit conditions for site or route preparation, construction, cleanup, restoration, operation, and maintenance.

B. Scope

This document describes complaint reporting procedures and frequency.

C. Applicability

The procedures shall be used for all complaints received by the permittee and all complaints received by the Minnesota Public Utilities Commission (Commission) under Minn. R. 7829.1500 or Minn. R. 7829.1700 relevant to this permit.

D. Definitions

Complaint: A verbal or written statement presented to the permittee by a person expressing dissatisfaction or concern regarding site or route preparation, cleanup or restoration, or other permit conditions. Complaints do not include requests, inquiries, questions or general comments.

Substantial Complaint: A written complaint alleging a violation of a specific permit condition that, if substantiated, could result in permit modification or suspension pursuant to the applicable regulations.

Unresolved Complaint: A complaint which, despite the good faith efforts of the permittee and a person, remains unresolved or unsatisfactorily resolved to one or both of the parties.

Person: An individual, partnership, joint venture, private or public corporation, association, firm, public service company, cooperative, political subdivision, municipal corporation, government agency, public utility district, or any other entity, public or private; however organized.

E. Complaint Documentation and Processing

1. The permittee shall designate a representative responsible for filing complaints to the Commission's eDocket system. This person's name, phone number and email address shall accompany all complaint submittals. The name and contact information for the representative shall be kept current in eDockets.
2. A person presenting the complaint should, to the extent possible, include the following information in their communications:
 - a. name, address, phone number, and email address;
 - b. initial date of the complaint;
 - c. tract, parcel number, or address of the complaint;
 - d. a summary of the complaint; and
 - e. whether the complaint relates to a permit violation, a construction practice issue, or other type of complaint.
3. The permittee shall document all complaints by maintaining a record of all applicable information concerning the complaint, including the following:
 - a. docket number and project name;
 - b. name of complainant, address, phone number and email address;
 - c. precise description of property or parcel number;
 - d. name of permittee representative receiving complaint and date of receipt;
 - e. nature of complaint and the applicable permit condition(s);
 - f. summary of activities undertaken to resolve the complaint; and
 - g. a statement on the final disposition of the complaint.

F. Reporting Requirements

The permittee shall commence complaint reporting at the beginning of project construction and continue through the term of the permit, unless otherwise required below. The permittee shall report all complaints to the Commission according to the following schedule:

Immediate Reports: All substantial complaints shall be reported to the Commission the same day received, or on the following working day for complaints received after working hours. Such reports are to be directed to the Commission's Public Advisor at 1-800-657-3782 (voice messages are acceptable) or publicadvisor.puc@state.mn.us. For e-mail reporting, the email

subject line should read “PUC EFP Complaint” and include the appropriate project docket number.

Monthly Reports: During project construction, restoration, and operation, a summary of all complaints, including substantial complaints received or resolved during the preceding month, shall be filed by the 15th of each month to Will Seuffert, Executive Secretary, Public Utilities Commission, using the eDockets system. The eDockets system is located at: <https://www.edockets.state.mn.us/EFiling/home.jsp>. If no complaints were received during the preceding month, the permittee shall file a summary indicating that no complaints were received.

If a project has submitted twelve consecutive months of complaint reports with no complaints, monthly reports can terminate by a letter to eDockets notifying the Commission of such action. If a substantial complaint is received (by the company or the Commission) following termination of the monthly complaint report, as noted above, the monthly reporting should commence for a period of one year following the most recent complaint or upon resolution of all pending complaints.

If a permittee is found to be in violation of this section, the Commission may reinstate monthly complaint reporting for the remaining permit term or enact some other commensurate requirement via notification by the Executive Secretary or some other action as decided by the Commission.

G. Complaints Received by the Commission

Complaints received directly by the Commission from aggrieved persons regarding the permit or issues related to site or route preparation, construction, cleanup, restoration, or operation and maintenance will be promptly sent to the permittee.

The permittee shall notify the Commission when the issue has been resolved. The permittee will add the complaint to the monthly reports of all complaints. If the permittee is unable to find resolution, the Commission will use the process outlined in the Unresolved Complaints Section to process the issue.

H. Commission Process for Unresolved Complaints

Complaints raising substantial and unresolved permit issues will be investigated by the Commission. Staff will notify the permittee and appropriate persons if it determines that the

complaint is a substantial complaint. With respect to such complaints, the permittee and complainant shall be required to submit a written summary of the complaint and its current position on the issues to the Commission. Staff will set a deadline for comments. As necessary, the complaint will be presented to the Commission for consideration.

I. Permittee Contacts for Complaints and Complaint Reporting

Complaints may be filed by mail or email to the permittee's designated complaint representative, or to the Commission's Public Advisor at 1-800-657-3782 or publicadvisor.puc@state.mn.us. The name and contact information for the permittee's designated complaint representative shall be kept current in the Commission's eDocket system.

SAMPLE PERMIT

ATTACHMENT 2

Compliance Filing Procedures for Permitted Energy Facilities

**MINNESOTA PUBLIC UTILITIES COMMISSION
COMPLIANCE FILING PROCEDURE FOR
PERMITTED ENERGY FACILITIES**

A. Purpose

To establish a uniform and timely method of submitting information required by Commission energy facility permits.

B. Scope and Applicability

This procedure encompasses all known compliance filings required by permit.

C. Definitions

Compliance Filing: A filing of information to the Commission, where the information is required by a Commission site or route permit.

D. Responsibilities

1. The permittee shall file all compliance filings with Will Seuffert, Executive Secretary, Public Utilities Commission, through the eDockets system. The eDockets system is located at:
<https://www.edockets.state.mn.us/EFiling/home.jsp>

General instructions are provided on the eDockets website. Permittees must register on the website to file documents.

2. All filings must have a cover sheet that includes:
 - a. Date
 - b. Name of submitter/permittee
 - c. Type of permit (site or route)
 - d. Project location
 - e. Project docket number
 - f. Permit section under which the filing is made
 - g. Short description of the filing

3. Filings that are graphic intensive (e.g., maps, engineered drawings) must, in addition to being electronically filed, be submitted as paper copies and on CD. Paper copies and CDs should be sent to: 1) Will Seuffert, Executive Secretary, Minnesota Public Utilities Commission, 121 7th Place East, Suite 350, St. Paul, MN 55101-2147, and 2) Department of Commerce, Energy Environmental Review and Analysis, 85 7th Place East, Suite 500, St. Paul, MN 55101-2198.

The Commission may request a paper copy of any electronically filed document.

SAMPLE PERMIT

Permit Compliance Filings¹

Permittee: Byron Solar, LLC

Permit Type: High-Voltage Transmission Line and Associated Facilities

Project Location: Dodge and Olmsted Counties

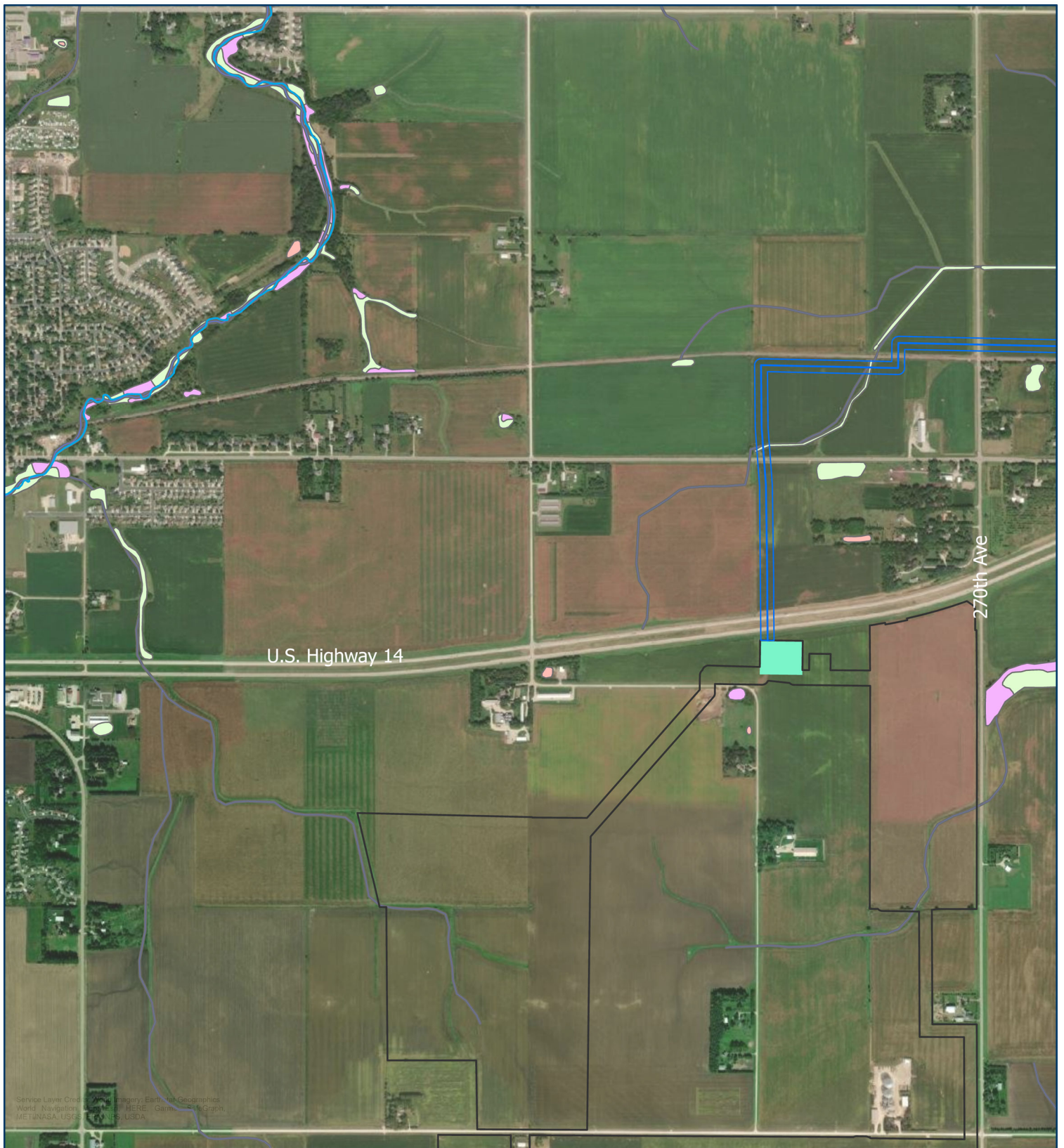
PUC Docket Number: IP7041/TL-20-765

Due Date		Compliance Filing Description (Permit Section)	
Pre-Construction	w/in 30 days of permit issuance	①	distribution of permit, complaint procedures, and factsheet (5.1, 8)
	as needed	⚠	delay in construction report (7) - if no construction w/in 4 years of permit issuance
	14 days prior to plan and profile submittal	①	identify field representative and affidavit of distribution (5.3.1) ⚠ submit changes
		①	invasive species prevention plan (5.3.11)
		①	VMP and affidavit of distribution (6.1)
		①	3 rd party monitor scope of work and contact Info (6.2) ⚠ submit changes
		①	geotechnical investigation report (6.3)
	monthly after plan and profile submittal	🔄	status report (9.2)
30 days prior to right-of-way preparation	①	plan and profile (9.1) ⚠ submit changes at least 5 days before implementation	
Construction & Restoration	as needed	⚠	immediate complaint report (Attach 1) – report same day or next if substantial complaint received after business hrs
	monthly through restoration	🔄	status report (9.2)
		🔄	complaint report (Attach 1)
	w/in 90 days of construction end	①	as-builts (9.4)
		①	GPS data (9.5)
	w/in 60 days of restoration completion	①	completion of restoration activities notification (5.3.16)
at least 3 days before operation	①	notice of in-service date and construction completion (9.3)	

¹ This compilation of permit compliance filings is provided for the convenience of the Permittee and the Commission. It is not a substitute for the permit; the language of the permit controls.

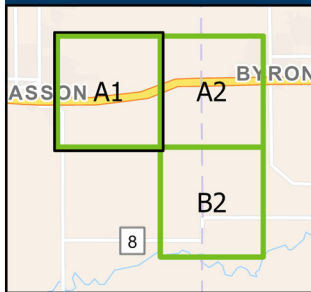
ATTACHMENT 3

Route Maps



Service Layer Credits: Aerial Imagery, Earthstar Geographics, World Navigation, OpenStreetMap, HERE, Garmin, DeLorme, Mapbox, METANASA, USGS, FWS, USDA

Byron Solar Transmission Route Permit Sheet 1



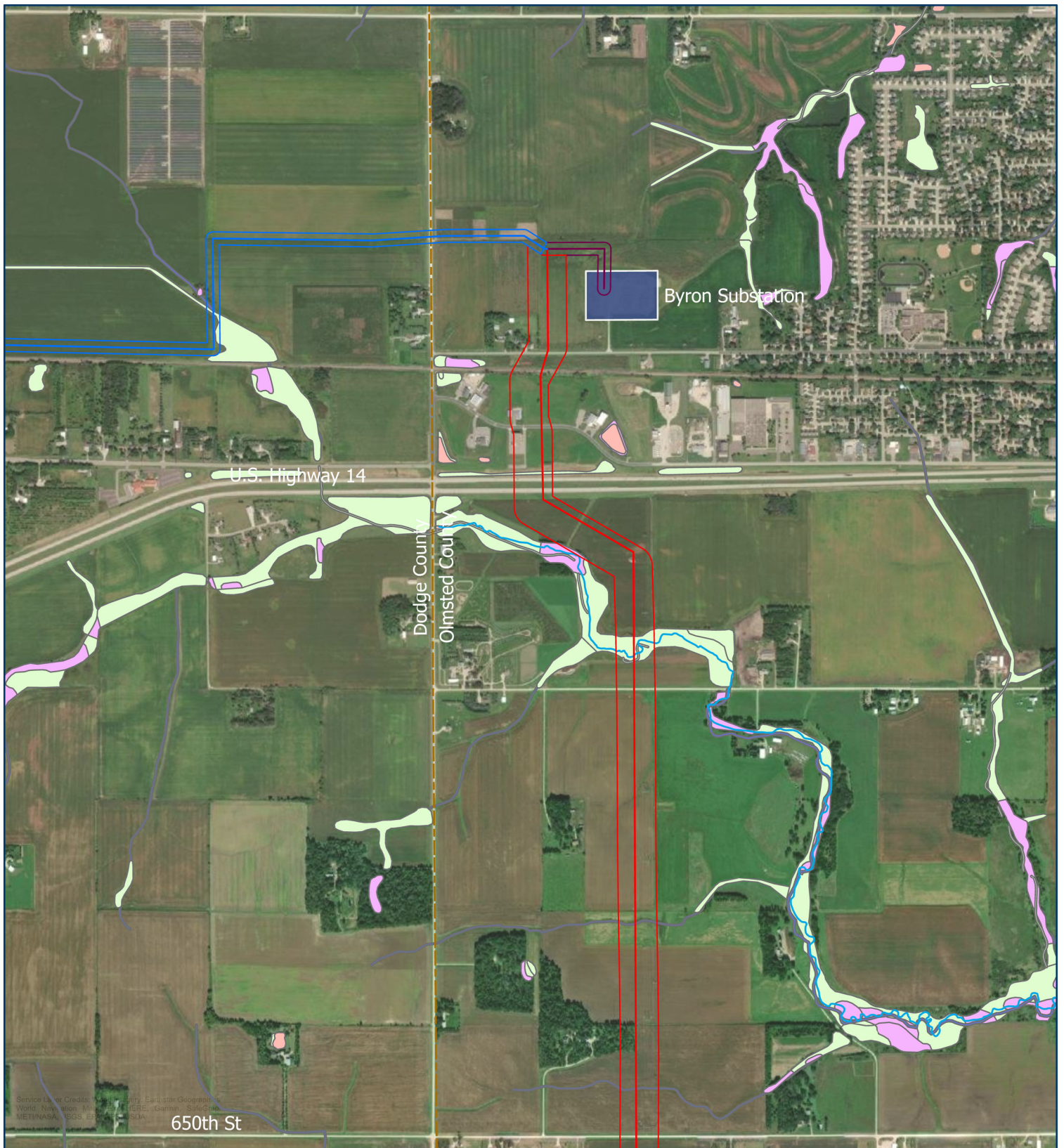
- Blue Route Width
- ~ Blue Centerline
- Solar Facility Boundary
- Proposed Project Substation
- Counties
- Watercourses
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond (wetland)
- Riverine (wetland)

MILES

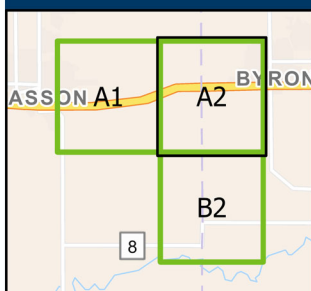
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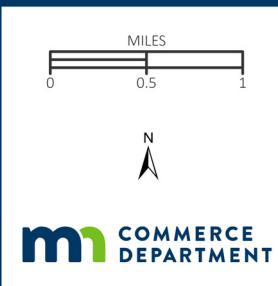
mi COMMERCE DEPARTMENT

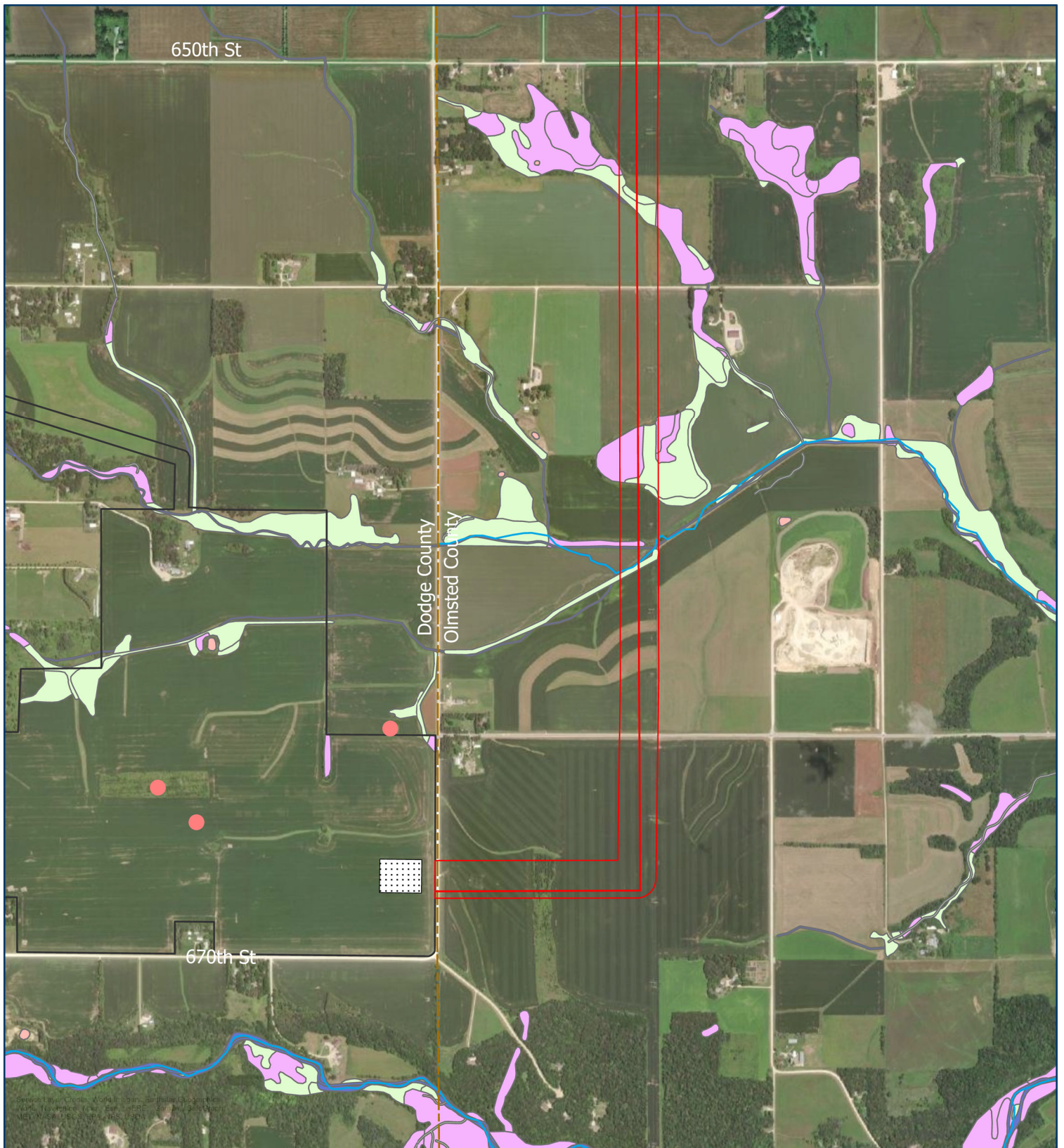


Byron Solar Transmission Route Permit Sheet 2



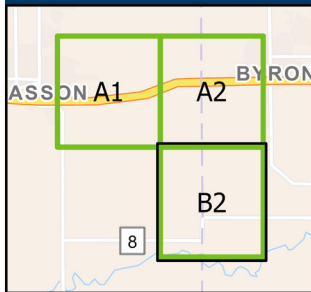
- | | | |
|--------------------|-----------------------------|-----------------------------------|
| Blue Route Width | Byron Substation | Freshwater Forested/Shrub Wetland |
| Blue Centerline | Counties | Freshwater Pond (wetland) |
| Red Route Width | Watercourses | Riverine (wetland) |
| Red Centerline | Freshwater Emergent Wetland | |
| Shared Route Width | | |
| Shared Centerline | | |





Service Layer Credits: World Imagery, Bing Maps, GeoAnalytics
 WPA, Topographic Data, Earth Engine, Environmental Data, Satellite
 MET, NASA, NOAA, USGS, NCEP, NOAA

Byron Solar Transmission Route Permit Sheet 3



- Sinkholes
- Red Route Width
- ~ Red Centerline
- Alternative Project Substation
- Solar Facility Boundary
- Counties
- Watercourses
- Freshwater Emergent Wetland
- Freshwater Forested/ Shrub Wetland
- Freshwater Pond (wetland)
- Riverine (wetland)

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mi COMMERCE DEPARTMENT