

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA**

**IN THE MATTER OF THE APPLICATION
OF OTTER TAIL POWER COMPANY
FOR AN ENERGY CONVERSION
FACILITY PERMIT FOR THE
CONSTRUCTION OF A COMBUSTION
TURBINE GENERATOR AND
ASSOCIATED INFRASTRUCTURE
INCLUDING A NATURAL GAS PIPELINE
AND ELECTRIC TRANSMISSION LINE
NEAR ASTORIA, SOUTH DAKOTA**

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**OTTER TAIL POWER
COMPANY'S RESPONSES TO
STAFF'S FIRST SET OF DATA
REQUESTS TO OTTER TAIL
POWER COMPANY**

EL17-042

Otter Tail Power Company ("Otter Tail") for its non-confidential and public responses to Staff's First Set of Data Requests to Otter Tail Power Company dated November 17, 2017, states as follows:

Otter Tail is responding to data requests 1-1 through 1-15 as an entity, and the responses were collaboratively generated as a result of information being provided by multiple sources within Otter Tail and after Otter Tail's consultation with its outside consultant HDR, Inc. and its attorneys at Boyce Law Firm, LLP. HDR, Inc. provided the maps produced in response to data requests 1-8, 1-9, and 1-12. Additionally, although Otter Tail as a whole contributed to the drafting of the responses to the data requests, the following specific persons have been identified to be the individual on behalf of Otter Tail responsible for addressing each of the data requests:

- William Swanson, Manager of Supply Engineering, Otter Tail Power Company is responsible for data requests 1-2, 1-4, 1-5, 1-6, 1-7, 1-13, 1-14, and 1-15
- Mark Thoma, Manager of Environmental Services, Otter Tail Power Company is responsible for data requests 1-1, 1-3, 1-8, 1-9, 1-10, 1-11, and 1-12

- 1-1) Refer to Appendix C of the Application and SDCL 49-41B-7. Pursuant to SDCL 49-41B-7(3), provide information regarding the potential effect by the proposed facility on water supply and distribution.

Response: Information regarding the potential effect on water supply and distribution was combined with discussion on wastewater treatment and collection. This can be found within the Application in Appendix C Section 4 (pages 11 - 13). To the best of Otter Tail's knowledge at this time, there is no negative impact on water supply and distribution caused by the proposed facility.

- 1-2) Refer to Page ES-i of the Application. Has the Applicant acquired the rights-of-way from adjacent landowners for the 345 kV gen tie? If no, explain and identify any concerns in obtaining easements, if necessary.

Response: Response contained in non-public document because it contains confidential information protected from public disclosure pursuant to ARSD 20:10:01:39 through 20:10:01:44.

- 1-3) Refer to Page ES-ii of the Application. The Applicant states "The resource addition allows the Company the flexibility to convert the Project to combined cycle generation should that become advantageous in the future." Does the Applicant agree that converting the Project to combined cycle generation would require an energy conversion facility permit from the Commission prior to conversion? Explain.

Response: While there is perhaps some ambiguity whether the future conversion of the Project to combined cycle generation would require a new energy conversion facility permit, or the amendment of an existing permit (i.e., assuming the instant Application is granted), Otter Tail agrees the Commission retains jurisdiction to review and approve any such future conversion.

Because it is not today clear that future conversion to combined cycle generation will be prudent, Otter Tail's Application did not seek Commission approval to later convert the Project. If, indeed, there were clarity that future conversion would be prudent - - Otter Tail would have described its concrete plans for future modification or expansion, pursuant to SDCL 49-41B-11 and ARSD 20:10:22:25.

- 1-4) Refer to Page 1 of the Application. When does the Applicant expect the Generation Interconnection Agreement to be signed? Explain.

Response: Otter Tail estimates that the Generation Interconnection Agreement will be signed in the 3rd or 4th quarter of 2018. This timeline factors in some potential

delay associated with the Midcontinent Independent System Operator's overall interconnection schedule.

- 1-5) Refer to Page 1 of the Application. The Applicant states "changes in the final location of the interconnection could affect the length and route of the Project's 345 kV gen-tie line." When will the final location of the interconnection be known? Explain and describe the alternative routes and associated length of the 345 kV gen-tie line that the Company is currently aware of.

Response: Response contained in non-public document because it contains confidential information protected from public disclosure pursuant to ARSD 20:10:01:39 through 20:10:01:44.

- 1-6) Refer to Page 4 of the Application. Provide a more detailed breakdown cost estimate of the Project, specifically separate the combustion turbine, 345 kV gen-tie line, and natural gas pipeline.

Response: Response contained in non-public document because it contains confidential information protected from public disclosure pursuant to ARSD 20:10:01:39 through 20:10:01:44.

- 1-7) Refer to Page 9 of the Application, Section 7.2. What does the Applicant anticipate the cost savings associated with a more direct gen-tie line route? Explain.

Response: Response contained in non-public document because it contains confidential information protected from public disclosure pursuant to ARSD 20:10:01:39 through 20:10:01:44.

- 1-8) Pursuant to ARSD 20:10:22:11, provide a map of the general site showing prominent features such as lakes and rivers, transportation facilities, or other public facilities adjacent to or abutting the plant or transmission site.

Response: Please see map produced herewith at Bates stamp OTP 1.

- 1-9) Pursuant to ARSD 20:10:22:14(3), provide a topographic map showing the bedrock geology and surficial geology with sufficient cross-sections to depict the major subsurface variations in the siting area.

Response: A topographic map with surficial geology is produced herewith at Bates stamp OTP 2. The bedrock geology in the siting area is consistently Pierre Shale. Because this does not vary, only a bedrock elevation is provided.

- 1-10) Pursuant to ARSD 20:10:22:15(1), provide a map of the plant and transmission site showing surface water drainage patterns before and anticipated patterns after construction of the facility.

Response: Exhibit 10-1 of the Application (page 15) shows the existing surface water drainage patterns, and Section 10.1.1 of the Application (page 14) describes these existing patterns. After construction of the facility, no impacts to surface water drainage patterns are anticipated. However, drainage within the energy conversion facility site will be altered to ensure that storm water coming into contact with facility operations will be directed to an on-site storm water retention pond. See section 10.2.1 of the Application (page 16). Preliminary Project design features (including a retention pond) are shown on Exhibit 13-2 of the Application (page 24).

- 1-11) Pursuant to ARSD 20:10:22:15(4), provide a map of any known groundwater supplies within the siting area to be used as a water source and all offsite pipelines or channels required for water transmission.

Response: The groundwater source for the planned on-site well will be the Altamont aquifer. See documents produced herewith at Bates stamp OTP 3 to 40, which are informational pamphlets prepared by the United States Geological Survey regarding the major aquifers in Deuel/Hamlin and Brookings Counties. Figure 5 of each pamphlet shows the extent, depth, and thickness of the Altamont aquifer. No offsite pipelines or channels will be required for water transmission from the on-site well.

As provided in Section 10.2.2 of the Application (page 16), the Brookings-Deuel rural water supply is a potential alternative water source. Discussions with the Brookings-Deuel rural water supply are very preliminary, but if this alternative is pursued an offsite pipeline may be required to tie into that system.

- 1-12) Pursuant to ARSD 20:10:22:18(1), provide a map of the plant and transmission site identifying existing land use according to the following classification system: (b) Irrigated lands; (c) Undisturbed native grasslands; (d) Existing and potential extractive nonrenewable resources; (e) Other major industries; (f) Rural residences and farmsteads, family farms, and ranches; (g) Residential; (h) Public, commercial, and institutional uses; (i) Municipal water supply and water sources for organized rural water systems; and (j) Noise sensitive land uses.

Response: Except for farmsteads, these classifications do not occur on, or immediately adjacent to, the plant and transmission site. Consequently, Exhibit 13-1 of the Application (page 23) included only standard land use cover types. Because Exhibit 13-1 did not identify farmstead classifications, this classification has been added in the map produced herewith at Bates stamp OTP 31.

- 1-13) Pursuant to ARSD 20:10:22:24, provide the estimated annual employments expenditures of the applicants, the contractors, and the subcontractors during the construction phase of the proposed facility. Provide the description of the job classifications of the three to five permanent employees that will maintain and operate the facility.

Response: Response contained in non-public document because it contains confidential information protected from public disclosure pursuant to ARSD 20:10:01:39 through 20:10:01:44.

- 1-14) Refer to Page 45 of the Application. Provide the analysis and support for the statement that the local labor force will be adequate, when augmented by necessary outside personnel, to meet the construction needs of the Project. Estimate the percentage of labor that will remain within the county and the township in which the facility is located after construction is complete.

Response: As noted in the Application on page 45, the Astoria Station Project will require a construction workforce with a variety of skills, including general carpenters, iron workers, millwrights, and electricians. According to Table 10 of the Social and Economic Impact Study (Appendix C page 27) prepared for the Project, the five counties surrounding the project site (Deuel, Brookings, Codington, Grant, and Hamlin) include a workforce of roughly 4,185 construction and maintenance workers. While it can be assumed that the local area has construction workers who practice the trades needed for the project, the construction of a simple cycle combustion turbine energy conversion facility is a highly specialized task. Otter Tail will hire a firm that specializes in the construction of these types of facilities who will bring in their own specialists and supervisory personnel to manage the project and the labor force for individual aspects of construction.

The percentage of Project construction workforce that will remain within the county/township after construction is complete depends largely upon on how many construction laborers are from the immediate vicinity. In short, the temporary construction jobs will likely provide a one-time influx of income to the surrounding communities. Once construction has been completed, there will be 3-5 permanent full time operating and maintenance positions.

- 1-15) Pursuant to ARSD 20:10:22:26, provide the proposed on-line lives of the facilities.

Response: The proposed on-line lives of the facilities are 35 years.


STATE OF MINNESOTA)
 :SS.
COUNTY OF OTTER TAIL)

William Swanson, being duly sworn is the authorized agent of Otter Tail Power Company, for purposes of the response.

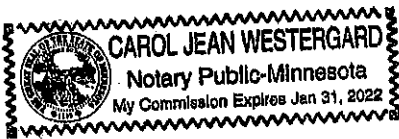
He states that he does not have personal knowledge of all the facts recited in the foregoing Responses Otter Tail Power Company to Staff's First Data Requests, but the information has been gathered by and from employees, contractors of the owner of the Astoria Station Project; and that the information is verified by him as being true and correct on behalf of the owner of the Astoria Station Project.

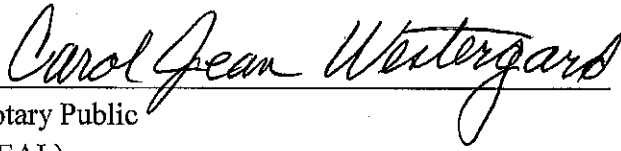
Dated this 4th day of December, 2017.

OTTER TAIL POWER COMPANY

By 
William Swanson, P.E.
Its Manager, Supply Engineering

Subscribed and sworn to before me this 4th day of December, 2017.




Notary Public
(SEAL)

My Commission Expires: 1/31/2022