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April 3, 2017

Ms. Patricia Van Gerpen, Executive Director  
South Dakota Public Utilities Commission  
Capitol Building, 1st floor  
500 East Capitol Avenue  
Pierre, SD 57501-5070



RE: Notification of Intent to Apply for Construction of an Energy Conversion Facility  
Proposed Astoria Station Project

Dear Ms. Van Gerpen:

Pursuant to SDCL 49-41B-5 and ARSD 20:10:22:02, Otter Tail Power Company (Otter Tail) is filing this Notification of Intent (NOI) to submit a permit application for an Energy Conversion Facility.

**Facility Description** [ARSD 20:10:22:02(1)]

Otter Tail is proposing to construct, own, and operate a simple-cycle combustion gas turbine consisting of one combustion turbine generator, one stack, standard equipment enclosures, balance-of-plant equipment, and associated facilities.

Depending on final design, we expect the turbine to generate approximately 250 megawatts of power during periods of high energy use. Astoria Station's associated facilities include natural gas piping to connect to the Northern Border Pipeline (anticipated to be less than 1000 feet of new piping) and a 345-kilovolt generation-tie (preliminarily estimated to be less than one mile) to connect to the Big Stone South-to-Brookings (BSSB) 345-kilovolt transmission line.<sup>1</sup>

During periods of warm ambient temperatures, we estimate water use to be 40 gallons per minute (gpm) to augment the power output. We also anticipate that less than 1 gpm of potable water will be consumed under normal operations. An on-site well or the local rural water supply will provide all process and potable water.

By recycling the small amount of process waste water produced, Astoria Station will be designed to operate in a zero liquid discharge mode. If there is waste water that cannot be recycled, it will be sent off-site for proper disposal.

**Site Description** [ARSD 20:10:22:02(3)]

The proposed energy conversion facility site is in the N ½ of Section 22, Township 113N, Range 48 West, Scandinavia Township, Deuel County, approximately 1.5 miles northwest of Astoria, South Dakota. This location consists of a combination of tilled, fallow, and pasture land with isolated patches of trees and a small creek. Exhibit 1 shows the anticipated affected siting area within ten miles of the proposed energy conversion facility, pursuant to SDCL 49-41B-2.

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<sup>1</sup> The BSSB Transmission Owners (Northern States Power Company – Minnesota and Otter Tail) are responsible for construction and permitting for any new or modified interconnection facilities, such as a new switchyard.

**Estimated Project Costs, Social and Economic Impact** [ARSD 20:10:22:02(2), (4)]

Otter Tail estimates the total construction cost of the proposed project at \$165 million, including transmission interconnection and escalation costs.

We expect the construction effort will provide considerable economic benefits to the local community and the State of South Dakota due to contractor expenditures in the area, local project purchases of materials and services, and long-term employment and operation in the area.

During construction we expect the project to employ an average of 48 workers, with 70 workers at its peak. Project construction will require a broad workforce, including general carpenters, iron workers, millwrights, and electricians. We anticipate that a portion of the construction work force will be hired locally from the Brookings and Deuel County areas.

Following construction, we estimate that three to five full-time Otter Tail employees will operate Astoria Station. Following the four-year period during which Deuel County affords a reduced, discretionary formula for property taxes, the projected annual property taxes will be approximately \$1.0 million. This amount will decrease over time due to depreciation of the facility.

As part of the application process, the project will be extensively studied to determine whether mitigation measures are needed for impacts including, but not limited to, environment, noise, or transportation.

**Anticipated Permit Authorization Date, Construction Schedule, and Commercial Operation Schedule** [ARSD 20:10:22:02(5)]

The schedule anticipates permit authorization from the Commission by the end of third quarter 2018. This will allow the project to commence detailed engineering and equipment procurement throughout 2019. We anticipate starting construction in spring 2020, lasting approximately 13 months. We expect commercial operation in spring 2021.

**List of Names and Addresses of County Commissioners, School District Presidents, Tribal Governments, and Municipalities in the Anticipated Affected Area**

[ARSD 20:10:22:02(6)]

A list is set forth in Table 1.

**Table 1  
Chairs of County Commissions, Presidents of School Boards, and Mayors of Municipalities  
in the Anticipated Affected Area**

County Commissioners	
Deuel County PO Box 616 408 4th Street West Clear Lake, SD 57226	Chairman - Gary Jaeger (605) 874-2312
Brookings County 520 Third Street Suite 210 Brookings, SD 57006	Chairperson - Larry Jensen (605) 696-8205

<b>School District and District Superintendent /President</b>	
Deubrook School District 05-6 100 School Ave P.O. Box 346 White, SD 57276	David Iverson - President (605) 629-1100
Deuel School District 19-4 410 5 <sup>th</sup> St West Clear Lake, SD 57226	Debbe Koenecke - Chairperson (605) 874-2161
<b>Municipalities</b>	
<b>DEUEL COUNTY</b>	
Blom Township 19464 473 <sup>rd</sup> Ave Toronto, SD 57268	Chairman - Bruce Haringa (605) 794-2551
Brandt Township 47424 185 <sup>th</sup> St Clear Lake, SD 57226	Chairman - Leonard Prins (605) 874-2990
Norden Township 48074 189 <sup>th</sup> St Brandt, SD 57218	Chairman - Larry Kjenstad (605) 876-2331
Scandinavia Township 19149 485 <sup>th</sup> Ave Astoria, SD 57213	Chairman - Dennis Lee Kanengieter (605) 832-3581
Town of Astoria P.O Box 83 Astoria, SD 57213	Mayor - Geoff Andrews (605) 832-3881
Town of Brandt PO Box 164 Brandt, SD 57218	Mayor - Greg Anderson (605) 876-3661
Town of Toronto PO Box 333 Toronto, SD 57268	Mayor - Brad Knutson (605) 794-2461
<b>BROOKINGS COUNTY</b>	
Town of White, SD PO Box 682 228 W Main St White, SD 57276	Mayor - Terry Wright (605) 629-3661
Afton Township 20613 473 <sup>rd</sup> Ave Aurora, SD 57002	Chairman - Allen Jones (605) 629-5674
Argo Township 47725 200 <sup>th</sup> St White, SD 57276	Chairman - John Kleinjan (605) 690-3804
Lake Hendricks 20018 486 <sup>th</sup> Ave Hendricks, MN 56136	Chairman - Mark Sandro (605) 479-3875

Oaklake Township 19762 478 <sup>th</sup> Ave Toronto, SD 57268	Chairman - DeWayne Jurren (605) 794-2021
Sherman Township 48308 SD Hwy 30 White, SD 57276	Chairman - Troy Murphy (605) 629-8331

**State, Local, and Federal Permits Known to be Required** [ARSD 20:10:22:02(8)]

Depending on final design and studies conducted as a part of the Energy Conversion Facility permit application process, the permits or approvals that may be required for construction and operation of the proposed project are set forth in Table 2.

**Table 2**  
**State, Local, and Federal Permits**

<b>Government Level</b>	<b>Agency</b>	<b>Permits/Approvals/Consultations</b>	<b>Timing</b>
Federal	U.S. Army Corps of Engineers	Clean Water Act Section 404	Prior to Construction
Federal	U.S Fish and Wildlife Service	Federal Threatened and Endangered Species Review, Section 10	Prior to Construction
Federal	Federal Aviation Administration	Form 7460-1 Notice of Proposed Construction or Alteration	Prior to Construction
Federal	U.S Environmental Protection Agency	Spill Prevention, Control and Countermeasure Plan	Prior to Operation
Federal	U.S Environmental Protection Agency	Title IV Acid Rain Permit	Prior to Operation
State	South Dakota Public Utilities Commission	Permit for Energy Conversion Facility and Associated Transmission Facilities	Prior to Construction
State	South Dakota Department of Environment and Natural Resources (SDDENR)	Temporary Surface Water Discharge Permit	Prior to Construction
State	SDDENR	Temporary Water Use Permit for Construction Activities, Drilling, or Testing Purposes	Prior to Construction
State	SDDENR	Permit to Construct for a Non-PSD Minor Source of Air Emissions	Prior to Construction
State	SDDENR	Water Right Permit for Nonirrigation Use	Prior to Construction
State	SDDENR	National Pollution Discharge Elimination System Construction Stormwater Discharge Permit	Prior to Construction

Government Level	Agency	Permits/Approvals/Consultations	Timing
State	SDDENR	National Pollution Discharge Elimination System Industrial Stormwater Discharge Permit	Prior to Operation
State	SDDENR	No Exposure Certification (for exclusion from stormwater discharges associated with industrial activities)	Prior to Construction
State	SDDENR	Clean Water Act Section 401 Certification	Prior to Construction
State	SDDENR	Septic Tank Installation Plan Review	Prior to Construction
State	South Dakota Game, Fish, and Parks	State-listed Endangered Species Review	Prior to Construction
State	State Historic Preservation Office	Cultural and Historic Resources Review	Prior to Construction
Local	Deuel County	Zoning Change or Special Exemption/Variance	Prior to Construction
Local	Deuel County	Building Permit	Prior to Construction

**Facility Questions or Requests** [ARSD 20:10:22:02(7)]

Otter Tail requests a prefiling conference during third quarter 2017 pursuant to SDCL 49-41B-5.

**Summary**

The addition of this natural gas generation will provide a reliable, economic, and environmentally responsible source of energy to South Dakota and the Upper Midwest.

If you have any questions on this NOI or the Astoria Station project, please feel free to contact me at (218) 739-8205 or via email at [wswanson@otpc.com](mailto:wswanson@otpc.com). You also may visit us online at [www.otpc.com/AstoriaStation](http://www.otpc.com/AstoriaStation).

Sincerely,



William Swanson, P.E.  
 Manager, Supply Engineering  
 Astoria Station Project Manager

Enclosure