



Oregon

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To: Energy Facility Siting Council

From: Kellen Tardaewether, Senior Siting Analyst

Date: July 8, 2022

Subject: Agenda Item G (Information Item): Boardman to Hemingway Transmission Line (B2H) – Council Review of Proposed Order; Facility Description, Procedural History, and Council Standards not Part of Contested Case Proceeding, for the July 22, 2022 EFSC Meeting.

Attachments: Attachment A: B2HAPDoc2-1 Proposed Order on ASC w Hyperlink Attachments 2019-07-02 [hyperlink]
Attachment B: Hearing Officer Proposed Contested Case Order with Bookmarks 2022-05-31

SUMMARY

This staff report accompanies the Oregon Department of Energy's (Department) Proposed Order for the proposed Boardman to Hemingway Transmission Line Application for Site Certificate (ASC) and the Energy Facility Siting Council (EFSC or Council) appointed Hearing Officer's Proposed Contested Case Order (PCCO); and is intended to facilitate the Council's review of the Proposed Order, PCCO, exceptions to the PCCO, and to prepare for its final decision on the ASC.

Agenda Item G for the July 22, 2022 EFSC meeting will provide an overview of the proposed facility and of the procedural history of the Department and EFSC review of the ASC. The Department will provide Council a presentation of the Council Standards that are not at issue in the contested case proceeding on the Proposed Order. These standards are:

- General Standard of Review¹
- Organizational Expertise
- Waste Minimization
- Siting Standards for Transmission Lines
- Removal Fill Law

¹ The Department will provide an overview of the Council's General Standard of Review (OAR 345-022-0000) as presented in the Proposed Order at the July EFSC Meeting as well as at a later date during EFSC's final decision to determine, after reviewing the PCCO and exceptions, if the preponderance of evidence on the record supports the conclusion that the facility complies with the requirements of the EFSC statutes, ORS 469.300 to 469.570 and 469.590 to 469.619, and the standards adopted by the Council pursuant to 469.501.

- Water Rights

These standards and select recommended conditions under the standards are summarized in this staff report. Council will review these standards from the Proposed Order which were not part of the contested case and conduct straw polls to preliminarily determine whether any changes should be made with respect to these standards in the Final Order. The Council will continue its review of the Proposed Order and standards implicated in the contested case proceeding, as well as the PCCO, and exceptions to the PCCO at later regularly scheduled and/or special EFSC Meetings that will be provided to EFSC, parties, and limited parties when the Department is able to schedule the meeting dates.

PROPOSED FACILITY

The proposed facility includes a transmission line corridor (site boundary) extending approximately 273 miles across five Oregon counties, including Morrow, Umatilla, Union, Baker, Malheur, and one county in Idaho. Within the corridor, Idaho Power Company (applicant) seeks approval by the Council to construct and operate up to 270.8-miles of a single-circuit 500 kilovolt (kV) electric transmission line, decommission 12 miles of existing 69 kV transmission line, rebuild 0.9 miles of 230 kV transmission line, and rebuild 1.1 miles of existing 128 kV transmission line. These components are referred to as the proposed route. In addition, within the proposed transmission line corridor (site boundary), the applicant seeks approval for four alternative route segments, extending 33.3 total miles.

In addition to construction and operation of transmission lines, the applicant seeks Council approval to construct and operate a 20-acre Switching Station located near the Port of Morrow, 12 communication station sites (this includes two alternative site locations), permanent and temporary access roads, temporary multi-use and pulling and tensioning sites.

COUNCIL B2H APPLICATION REVIEW AND PROCEDURAL OVERVIEW

- July 19, 2017 - Idaho Power company (IPC or applicant) submitted an amended preliminary application for site certificate (ApASC) for the proposed Boardman to Hemingway Transmission Line (proposed facility).
- September 21, 2018 - The Department deemed the Application for Site Certificate (ASC) complete.
- September 28, 2018 - IPC filed the ASC with the Department.
- May 22, 2019 - The Department issued the Draft Proposed Order (DPO) on the ASC. With the DPO, the Department issued a public notice of a 62-day public comment period on the DPO and of public hearings in Ontario, Baker City, La Grande, Pendleton and Boardman, Oregon.
- June 26, 2019 – At the public hearing in Pendleton, the Energy Facility Siting Council (Council) extended the public comment period by 30-days, and the opportunity for the applicant to respond.
- September 26-27, 2019 – During the Council meeting, Council approved a request by the applicant to extend the record by 45-days, to allow the applicant additional

time to review and respond to the substance and volume of comments received by the August 22, 2019 draft proposed order public comment deadline. During the 93-day public comment period on the DPO, the Department received over 470 comments from members of the public, reviewing agencies and appointed Special Advisory Groups.

- July 2, 2020 - The Department issued a Proposed Order, which took into consideration Council comments on the DPO, comments received on the record of the public hearing, and agency consultation. Concurrent with the issuance of the proposed order, the Department issued a Notice of Proposed Order and Contested Case. The Notice of Proposed Order and Contested Case was issued via U.S. mail, email or both, dependent upon individual's contact information on file, pursuant to OAR 345-015-0230(3), and sent to all persons on the Council's general mailing list, the special mailing list established for the project, all persons who commented in person or in writing on the record of the DPO public hearings, and the property owners listed in Exhibit F of the ASC.

CONTESTED CASE PROCESS, NEXT STEPS, AND COUNCIL FINAL DECISION

Only those persons who commented in person or in writing on the record of the DPO public hearing may request to participate as a party or limited party in the contested case proceeding. To raise an issue in a contested case proceeding, the issue must be within the jurisdiction of the Council, and the person must have raised the issue in person or in writing on the record of the public hearing, unless the Department did not follow the DPO noticing and public hearing procedural requirements pursuant to ORS 469.370(2) or (3), respectively, or unless "[t]he action recommended in the proposed order, including any recommended conditions of approval, differs materially from that described in the draft proposed order, in which case only new issues related to such differences may be raised".

The contested case proceeding included process steps as designated by the EFSC-appointed hearing officer in four case management orders issued throughout the proceeding: discovery; EFSC review of appeals of hearing officer Order on Party Status; motions for summary determination; EFSC review of interlocutory appeals; direct testimony; rebuttal testimony; request for cross examination; live cross examination; closing briefs; and response to closing briefs. On May 31, 2022, at the conclusion of a contested case proceeding, the hearing officer issued a proposed contested case order (PCCO) stating the hearing officer's findings of fact, conclusions of law and recommended site certificate conditions on the issues raised in the contested case. Pursuant to OAR 345-015-0085(5), within the PCCO, the hearing officer provided notification to contested case parties of an opportunity to file exceptions to the PCCO with a deadline of June 30, 2022. Thirty-seven exceptions were timely filed. Parties have until July 15, 2022 to file responses to exceptions.

Following Council's review of exceptions, responses to exceptions and written and oral testimony provided during the public hearing, the Council may adopt, modify or reject the hearing officer's proposed contested case order. The findings of the hearing

officer's proposed contested case order, and any modifications requested by Council following the exception process, are then incorporated into the Council's final order on the ASC. Following the contested case proceeding, the Council will issue a final order either approving or denying the ASC based upon the standards adopted under ORS 469.501, and any additional state statutes, rules, or local government regulations or ordinances determined to be applicable to the facility in the project order.

The Department compiled documents from the contested case proceeding and referenced in the Hearing Officer's Proposed Contested Case Order (PCCO) into files and folders to assist Council in its upcoming review of the PCCO, exceptions to the PCCO, and in making its final decision. The contested case files available do not constitute the complete record of the contested case, however, they do include most of the rulings, documents, and evidence referenced in the PCCO. These files are accessible and downloadable from the [Department's project webpage](#), at the bottom of the *Timeline* under the links/headings [Decision-Making and Administrative Project Record](#) and [Select Contested Case Files](#).

B2H Project Webpage:

<https://www.oregon.gov/energy/facilities-safety/facilities/Pages/B2H.aspx>

Select Contested Case Files:

https://oregonenergy-my.sharepoint.com/personal/askenergy_odoe_state_or_us/_layouts/15/onedrive.aspx?id=%2Fpersonal%2Faskenergy%5Fodoe%5Fstate%5For%5Fus%2FDocuments%2FB2H%2FSelect%20Contested%20Case%20Files&ga=1

STANDARDS NOT PART OF CONTESTED CASE

General Standard of Review: OAR 345-022-0000 (PO page 52 [see footnote 1 on page 1 of this staff report])

Recommended General Standard of Review Condition 1 is a recommended amended mandatory condition that would allot four years for the applicant to begin construction to allow adequate time for the applicant to comply with site certificate conditions for a phase or segment of the facility. The condition also allows four years to complete construction across the five counties in Oregon.

Recommended General Standard of Review Condition 2 requires that at least 180 days prior to beginning construction, the applicant must submit to the Department a construction plan outlining construction phasing or segments, activities and schedules for completing construction of the facility consistent with the site certificate. Upon Department verification of compliance with applicable pre-construction requirements in the site certificate for any phase or segment of the facility, the Department will notify the applicant in writing that pre-construction requirements have been met and they may commence construction for that phase or segment.

Recommended General Standard of Review Condition 11 imposes a site certificate condition under OAR 345-025-0010(5) which would allow the applicant to construct the facility anywhere within the site boundary (approved corridor(s)), and as described in ASC Exhibit B and represented in ASC Exhibit C Attachment C-2 and C-3 mapsets. The approved corridors include:

- a. The transmission line route extending approximately 272-miles through Morrow, Umatilla, Union, Baker, and Malheur counties;
- b. West of Bombing Range Road alternative 1 and the west of Bombing Range Road alternative 2 in Morrow County;
- c. Morgan Lake alternative in Union County; and
- d. Double Mountain alternative in Malheur County.

Organizational Expertise: OAR 345-022-0010 (PO Page 60)

Experience and Expertise Constructing, Operating, and Maintaining Transmission Lines

Proposed Order Table OE-1, *Idaho Power’s Recent 230 kV Transmission Line Projects* below provides examples of recent (since 2000) 230 kV transmission line projects that the applicant constructed, maintained and operated.

Table OE-1: Idaho Power’s Recent 230 kV Transmission Line Projects

Line No.	Line Name	Circuit	Mileage	Constructing Entity	Year
707	Brownlee-to-Ontario	Single	72.7	Mustang Construction	2000
710	Locust-to-Caldwell	Single	18.6	Wilson Construction	2003
711	Nampa Tap	Double	3.2	Wasatch Electric	2006
714	Brownlee-to-Oxbow	Single	11.0	Great Southwestern	2004
715	Langley Gulch	Double	2.8	IPC (lines); TBH & Assoc. (foundations)	2011
716	Bennett Mountain-to-Rattlesnake	Single	4.4	Wasatch Electric	2008

Source: B2HAPPDoc3-10 ASC 04_Exhibit D_Organization_ASC 2018-09-28, Table D-1.

Recommended Organizational Expertise Condition 1 requires the applicant to provide documentation of transmission line and substation inspections, including date inspection(s) occurred, issues identified, and any corrective actions taken, within the annual report submitted to the Department pursuant to OAR 345-026-0080 (1)(b).

Proposed Order discusses the applicant’s experience and expertise in compliance including:

- Compliance with Federal Reliability Standards FERC, NERC and WECC
- Compliance with Oregon Reliability Standards Oregon Public Utility Commission (OPUC)
- Compliance with mitigation projects

Waste Minimization: OAR 345-022-0120 (PO page 585)

Table WM-1 provided below is modified from the Proposed Order and presents summaries of the total construction-related waste generated and the totals of estimated recycled materials.

Modified Table WM-1: Construction-Related Waste and Recycled Materials in cubic yards (tons)

Totals	Vegetation	Native Material	Solid Waste
Total Generated per Route	3,516,256 (1,054,877)	197,218 (256,383)	6,235 (1,870)
Proposed Route TOTAL Amount Recycled	2,813,005 (843,902)	19,722 (25,638)	4,988 (1,496)
Proposed Route TOTAL Amount to Landfill	703,251 (210,975)	177,496 (230,744)	1,247 (374)
Alternative Routes TOTAL Amount Recycled	1,037,372 (311,212)	2,693 (3,501)	642 (192)
Alternative Routes TOTAL Amount to Landfill	259,343 (77,803)	24,241 (31,513)	160 (48)

Recommended Waste Minimization Condition 1 requires the applicant to adhere to Construction Waste Management Plan(s). The Plan(s) would address the number and types of waste containers, names and locations of appropriate recycling and waste disposal facilities, collection requirements, and hauling requirements to be used during construction; as well as recycling procedures and compliance with Morrow County-specific waste ordinances.

Siting Standards for Transmission Lines: OAR 345-024-0090 (PO page 605)

The applicant used a model developed by the Electric Power Research Institute (which utilizes a methodology developed by the Bonneville Power Administration) to calculate the electric fields, measured in units of kilovolts per meter (kV/m), which would be produced by the proposed new 500 kV transmission line, rebuilt 230-kV transmission line, and rebuilt 138-kV transmission line. The Council’s standard requires the applicant to design, construct and operate the proposed transmission line so that alternating current electric fields do not exceed 9 kV per meter at one meter above the ground surface in areas accessible to the public.

Table SSTL-1: Electric Field Strength for Each Considered Structural Configuration

Structure Type	ROW Width (feet)	South/West ROW Edge (kV/m)	Maximum within ROW (kV/m)	North/East ROW Edge (kV/m)
500-kV lattice	250	0.8	8.9	0.8
500-kV tubular steel H-frame and Y-frame monopole	250	0.9	8.8	0.9
230-kV wood H-frame	125	0.8	5.0	0.8
138-kV wood H-frame	100	0.5	2.3	0.5
Electric field strength calculated at standard height of one meter above ground surface. kV/m = kilovolt per meter; ROW = right-of-way				

To ensure that the proposed transmission lines, especially the 500 kV lines, the Department recommends **Siting Standards for Transmission Lines Condition 1**, which requires the applicant to operate the transmission lines under worse case conditions in a manner to not exceed the 9 kV/m threshold. To reduce or manage human exposure to electromagnetic fields, the certificate holder shall design and construct:

- a. All aboveground 500-kV transmission lines with a minimum clearance of 34.5 feet from the ground under all operating conditions;
- b. All aboveground 230-kV transmission lines with a minimum clearance of 20 feet from the ground under all operating conditions; and
- c. All aboveground 138-kV transmission lines with a minimum clearance of 20 feet from the ground under all operating conditions.
- d. In areas where an aboveground transmission line will cross an existing transmission line, the certificate holder shall construct the transmission line at a height and separation that would ensure that alternating current electric fields do not exceed 9-kV per meter at one meter above the ground surface.
- e. The Department may authorize a lower conductor clearance in areas determined to not be accessible to the public or otherwise demonstrated by the applicant to be compliant with the standard.

Removal Fill Law: OAR 141-085-0500 through -0785 (PO page 658)

The applicant conducted desktop studies and field investigations to delineate potential locations of wetlands and waters of the state (WOS) located within the site boundary. To ensure that additional wetland delineation reports are submitted to the Department and to the Oregon Department of State Lands (DSL) prior to any construction activities on any unsurveyed parcels within the site boundary the Department recommends **Recommended Removal-Fill Condition 1**, which requires the applicant to conduct wetland delineation studies once access is gained and submit the data to the Department and DSL for concurrence.

In the areas where the applicant had access to the site boundary, Tetra Tech field delineated 45 wetlands, 54 waterways, and five ponds within the analysis area. On September 13, 2018, DSL issued a letter concurring with the wetland and waterway boundaries mapped by the applicant. Tetra Tech delineated 11 wetlands and 26 non-wetland WOS in the field that may be subject to some temporary or permanent impact of removal or fill activities that would exceed 50 cubic yards, therefore a Oregon Removal-Fill Law (ORS 196.795 through 196.990) and DSL regulations (OAR 141-085-0500 through 141-085-0785) apply as a removal/fill permit is necessary for the proposed facility. Under **Recommended Removal-Fill Condition 5**, the applicant would be required, prior to construction of a phase of segment of the facility and during operation, to maintain compliance with the General and Special Conditions set forth in the removal-fill permit (Attachment J-3 to the Final Order on the ASC). And under **Recommended Removal-Fill Condition 6**: would be required to update the removal-fill permit based on updated wetland delineations, DSL concurrence, and actual impacts to wetlands and WOS from construction and operation of the proposed facility. This condition would also require that the Department will provide updates to Council on the certificate holder's implementation of the removal-fill permit and of any permit revisions at Council meetings, following submittal of the certificate holder's

six-month construction progress report per General Standard of Review Condition 3 or annual report per General Standard of Review Condition 4.

Water Rights: OAR 690-310-0000; OAR 690-380-0000 (PO page 676)

The applicant estimates that proposed facility construction would require approximately 54.8 million gallons under worst-case conditions which would be during summer months when the weather is hot and conditions are dry. Approximately 39,420,000 gallons would be used for dust suppression; 5,847,188 gallons for foundation construction; 6,637,500 gallons for restoration and; 2,552,400 gallons for road construction. The applicant does not request a groundwater permit, a surface water permit, or a water right transfer; the applicant would procure water for use during construction and operations from contracts with municipal sources including the City of Boardman, the City of Pendleton, the City of La Grande, Baker City, and the City of Ontario.

During facility operations, the water use would be limited to the restroom facility at the Longhorn Station, which would be connected to the Port of Morrow's water and sewer system.

ATTACHMENTS

Attachment A: B2HAPPDoc2-1 Proposed Order on ASC w Hyperlink Attachments 2019-07-02
[hyperlink]

<https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/2020-07-02-B2H-PO-ASC.pdf>

Attachment B: Hearing Officer Proposed Contested Case Order with Bookmarks 2022-05-31