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VIA ELECTRONIC MAIL

February 14, 2025

Philip Augustin, Chair
WECC Studies Subcommittee (StS)

Doug Tucker, Staff Engineer
WECC Studies Subcommittee (StS)

Subject: Cascade Renewable Transmission Project (CRTP) HVDC Transmission Line Project: 2025 Annual Supplemental Progress Report

Dear Mr. Augustin and Mr. Tucker:

This letter is the 2025 Annual Supplemental Progress Report for the Cascade Renewable Transmission Project (CRTP). Cascade Renewable Transmission, LLC has a Phase 3 WECC Path Rating for the CRTP Project.

Cascade Renewable Transmission Project Description

The Cascade Renewable Transmission Project's 1,100 MW Path Rating is based upon the following Plan of Service:

1. CRTP Eastern HVDC Converter Station
   a. VSC – IGBT based converter rated for 1,100 MW plus line losses for withdrawal at the BPA Big Eddy 500 kV AC substation and conversion to +/- 320 kV[1] DC for transmission.

2. HVDC Transmission Line
   a. Approximately 98 miles of ±320 kV[1] power cable, symmetrical monopole, in a series combination of submarine and underground cables that connect both the east and west voltage source converter stations.

3. CRTP Western HVDC Converter Station
   a. VSC – IGBT based converter, +/- 320 kV[1] DC to 230 kV AC, rated for 1,100 MW delivered to the Point of Interconnection, injection to the PGE Harborton Substation at 230 kV AC

[1] Recent developments in DC cable manufacturing have led to a +/- 400 KV design which may be a viable solution for the CRTP Project. At this stage CRTP is maintaining flexibility to consider both voltage options. The utilization of the +/- 400 KV DC cable would not in any way impact the WECC modeling results for CRTP, however, it may reduce costs. Maintaining flexibility to utilize either voltage may increase cable supplier options, helping to alleviate global supplier constraints.

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Cascade Renewable Transmission Project Status

Permitting:

During 2024, CRT moved forward with its permitting efforts in Oregon and Washington as well as with the US Army Corps of Engineers (USACE) and has completed numerous environmental studies to support these efforts. In June, CRT filed an application for permit under Section 404 of the Clean Water Act with the USACE, which issued a Public Notice and received comments through the end of September. The USACE will be the lead agency for NEPA review and has initiated formal Section 106 consultation with Native American Tribes. CRT will be completing extensive cultural resource surveys in the project area this spring. CRT is also completing its siting applications in Oregon (EFSC) and Washington (EFSEC) and intends to file these by mid-year. CRT has resumed its all-agency coordination meetings intended to coordinate the delivery of project information and encourage inter-agency cooperation in reviewing the project.

Interconnection – BPA Big Eddy 500 kV substation and PGE Harborton 230 kV substation:

PGE completed their System Impact Study in 2023 and their Facilities Study in 2024. From there PGE has started drafting the Interconnection Agreement for LLIR 22-003. The results from the PGE SIS study caused BPA to review and revise their initial SIS study, which they completed in 2024. BPA then started their Facilities Study which will be completed in mid 2025. CRTP will need to see the results from both the PGE and BPA facilities studies to better understand how the CRTP Plan of Service completion date of 2030-2031 fits into the bigger scheme of things. At this stage it remains unclear how these estimated dates for completing required system upgrades may impact CRTP's Plan of Service date.

Converter Station Sites: CRTP has participated in discussions with BPA to locate its converter station on land owned by the US Federal Government in close proximity to BPA's Big Eddy Substation. In addition, CRTP has executed an Option Agreement with the Port of Portland for a long-term lease of a parcel of land suitable for the converter station site in close proximity to PGE's Harborton substation.

WECC Path Rating:
CRTP, being in Phase 3, continues to move forward with development activities, with a strong focus on permitting and interconnection studies with multiple Agencies as evidenced in this Third Supplemental Progress Report.

Plan of Service:
The Project was initially planned to have the first elements of the CRTP Project placed in service at the end of 2027. Based on the feedback from both BPA System Impact Study and PGE Facilities Study Reports regarding the timing of completing required system upgrades, as well as, anticipated

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global supply constraints, the current development timeline is pointing towards a planned in service date in 2030 or 2031.

Contact Information:

Any questions about this report or the Cascade Renewable Transmission Project can be directed to:

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Sincerely,

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Cc: Enoch Davies, WECC
Doug Tucker, WECC