



EPCOR Distribution & Transmission Inc.

Genesee 330P Substation Expansion Project

October 6, 2022

Alberta Utilities Commission

Decision 27499-D01-2022

EPCOR Distribution & Transmission Inc.

Genesee 330P Substation Expansion Project

Proceeding 27499

Applications 27499-A001 to 27499-A003

October 6, 2022

Published by the:

Alberta Utilities Commission

Eau Claire Tower

1400, 600 Third Avenue S.W.

Calgary, Alberta T2P 0G5

Telephone: 310-4AUC (310-4282) in Alberta

1-833-511-4AUC (1-833-511-4282) outside Alberta

Email: info@auc.ab.ca

Website: www.auc.ab.ca

The Commission may, no later than 60 days of the date of this decision and without notice, correct typographical, spelling and calculation errors and other similar types of errors and post the corrected decision on its website.

1 Decision summary

1. In this decision, the Alberta Utilities Commission approves applications from EPCOR Distribution & Transmission Inc. to expand and reconfigure the existing Genesee 330P Substation.

2 Introduction

2. EPCOR, pursuant to Licence 25730-D02-2020,¹ is the operator of Genesee 330P Substation. This substation currently connects Genesee Generating Station Units (Genesee Units) 1 and 2 to the Alberta Interconnected Electric System (AIES).

3. In Decision 26204-D01-2021,² the Commission approved Capital Power Generation Services Inc.'s application to repower Genesee Units 1 and 2 by constructing and operating new natural gas-fired combustion turbine generators, Genesee Units 6 and 7. To connect the new Genesee Units 6 and 7 to the AIES, Capital Power filed system access service requests to the Alberta Electric System Operator (AESO).

4. In response to the system access service requests, the AESO filed a needs identification document (NID) application with the Commission, requesting approval to modify the existing Genesee 330P Substation. The Commission granted NID Approval 27454-D01-2022.³

5. To meet the need identified by the AESO, EPCOR filed facility applications with the Commission requesting approval to expand and reconfigure the existing Genesee 330P Substation to allow for the connection of the Genesee Units 6 and 7 to the AIES.

¹ Substation Licence 25730-D02-2020, Proceeding 25730, Application 25730-A002, August 12, 2020.

² Decision 26204-D01-2021: Capital Power Generation Services Inc. - Genesee Generating Station Units 1 and 2 Repowering Project, Proceeding 26204, Application 26204-A001, March 16, 2021.

³ Needs Identification Document Approval 27454-D01-2022, Proceeding 27454, Application 27454-A001, June 21, 2022.

3 Applications

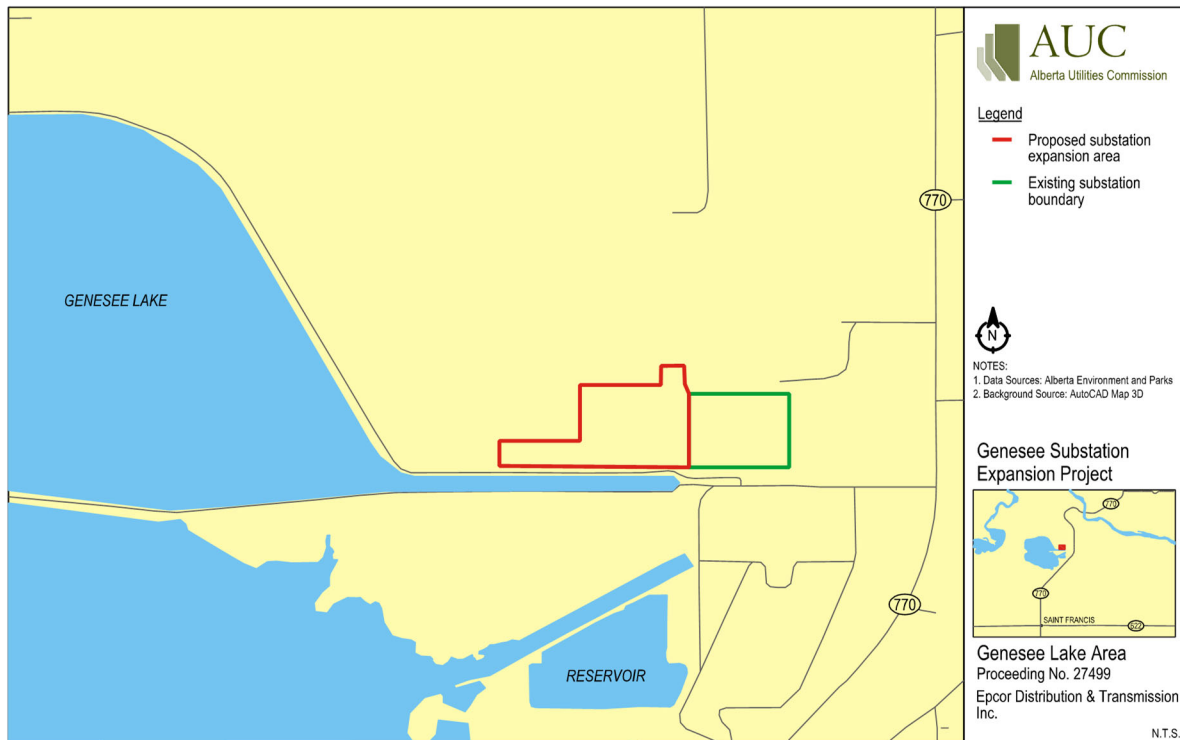
6. EPCOR proposed to relocate some of the 138-kilovolt (kV) infrastructure from the existing Genesee 330P substation to a substation expansion area to the west of the existing substation yard. The existing substation and expansion area would be connected through two 500-kV buses and four 138-kV transmission lines. EPCOR applied for approval to:⁴

- Remove one 500/240/138-kV, 100-megavolt ampere (MVA) transformer from the existing substation and add one 500/138-kV, 60/80/100-MVA transformer to the substation expansion area.
- Remove eight 138-kV circuit breakers from the existing substation and add new 138-kV switchgear with eight 138-kV circuit breakers to the substation expansion area.
- Re-terminate two 138-kV transmission lines, 430L and 8L10, from the existing substation to the 138-kV infrastructure in the substation expansion area.
- Add four 500-kV circuit breakers to the substation expansion area.
- Expand the 500-kV bus into the substation expansion area by constructing two 210-metre-long, 500-kV transmission lines.
- Connect the existing substation to the expansion area by constructing four, approximately 250-metre-long, 138-kV transmission lines.
- Build a stormwater retention pond in the southwest corner of the substation expansion site to ensure proper drainage.
- Install A-frame receiving structures for transmission lines at both the existing substation and the substation expansion area.
- Install underground fibre-optic cables between the existing substation and the substation expansion area and Capital Power's control room, for protection and control communications.

7. The project is located north of the Genesee Generating Station, approximately 20 kilometres north of Warburg. The proposed substation expansion site is located approximately 100 metres to the west of the existing substation. The proposed expansion area is approximately 246 metres by 236 metres, and is bordered by a temporary construction area of approximately 10 to 24 metres in width. The location of the project is shown in Figure 1.

⁴ Exhibit 27499-X0001, paragraph 12.

Figure 1. Project location



8. The substation expansion will be located on land owned by Capital Power. The transmission facilities will be wholly owned by EPCOR.

4 Discussion

9. The project has a footprint⁵ of approximately 13.06 hectares, which is comprised of a mixture of predominantly disturbed tame pasture, and wetland land cover types. In the early 1980s, Capital Power completed construction of the Genesee Generating Station facility and the inlet canal connection to Genesee Lake. The resulting excavated soil was spread over the current project footprint area creating disturbed and manmade landforms where the low areas have held water.

10. EPCOR stated that the project footprint is surrounded to the north, east and south by industrial development and the wetlands present within the project footprint have developed post-anthropogenic disturbance (i.e., after the Genesee facility was built). EPCOR explained that since the areas surrounding the project footprint are heavily disturbed by active industrial developments, the substation expansion will not cause encroachment into sensitive wildlife habitat. Also, EPCOR stated that the incidental wildlife observations and numerous wetlands present within the project study area suggest that wildlife populations are stable and have acclimatized to the surrounding industrial developments.

⁵ The project footprint consists of the area that is expected to be directly disturbed during the construction phases of the project. This includes the area outlined in red and part of the area outlined in green in Figure 1.

11. To determine any potential raptor nest habitat or indication of breeding activity within the project study area, raptor stick nest surveys were conducted in July 2021. Nothing was found. EPCOR stated that soil stripping and civil grading was expected to be conducted outside of the raptor breeding period. If activities extend into the breeding period, nest or wildlife sweeps will be completed and mitigation feedback from Alberta Environment and Parks (AEP) will apply. Also, EPCOR indicated that it will consult with AEP if a sensitive raptor nest is identified through the nest sweep process and existing mitigation is not deemed suitable by an experienced wildlife biologist.

12. To determine the presence of amphibian species of management concern (SOMC) within the local study area, two rounds of amphibian surveys were conducted in July 2021. EPCOR stated that though the Fisheries and Wildlife Internet Mapping Tool data contained records of boreal toads, an SOMC, within the project study area, no boreal toads were observed or heard during the surveys. Also, EPCOR explained that the timing of the amphibian surveys was justified because the recommended timing in the *Sensitive Species Inventory Guidelines* (GOA 2013) does not apply to the boreal toad.

13. One round of nocturnal marsh bird surveys was completed on July 7, 2021. EPCOR determined that one round was adequate because of the limited habitat present in the project footprint to support marsh birds and because survey conditions were ideal during the survey. No SOMC were found in the assessment area, but were observed incidentally and/or heard outside of the assessment area. Based on these findings, and given the ideal conditions during the surveys completed, EPCOR asserted that it is reasonable to assume that the survey coverage was adequate to identify SOMC that may have been present in the project footprint.

5 Findings

14. For the reasons outlined below, the Commission finds that approval of the proposed transmission development is in the public interest having regard to the social, economic, and other effects of the project, including its effect on the environment.

15. The Commission has determined that the information requirements specified in Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations, Hydro Developments and Gas Utility Pipelines* have been met. Also, the proposed development is consistent with the need approved in Approval 27454-D01-2022 and meets the requirements of the AESO's functional specification.

16. The Commission considers that EPCOR's participant involvement program (PIP) for the proposed project meets the requirements of Rule 007. EPCOR distributed copies of the project-specific information package to the landowners, occupants and interest holders located within 800 metres of the proposed project by email. EPCOR also consulted with Capital Power, who owns the lands where the substation expansion is proposed. EPCOR stated that it did not receive any concerns from these stakeholders. The Commission issued a notice of applications in accordance with Rule 001: *Rules of Practice* and did not receive any submissions in response.

17. EPCOR stated that no First Nation reserve or Metis Settlement was found to be located within 800 metres of the project. However, to be consistent with the Capital Power project PIP, EPCOR notified four Indigenous groups: Alexander First Nation, Alexis Nakota Sioux Nation, Enoch Cree Nation and Paul First Nation. The Commission sent notification of application letters

on July 19, 2022, to the consultation contacts of the Indigenous groups. No statements of intent to participate from any Indigenous groups were filed. Based on the foregoing, the Commission considers that EPCOR's PIP has met the objectives of effective consultation.

18. The Commission accepts EPCOR's statement that the project will be in compliance with Rule 012: *Noise Control*. EPCOR stated that the noise resulting from construction will be intermittent, and construction noise will be managed in accordance with Rule 012. The Commission considers that the proposed transformer replacement is a like-for-like replacement so no additional noise impacts are expected. Also, since the location of the new transformer is farther away from the nearest receptor, the project is likely to result in a reduced noise impact to the nearest receptor.

19. To ensure proper drainage, EPCOR proposed to add a stormwater retention pond at the west side of the expansion area. EPCOR stated that the stormwater retention pond will be registered with AEP. The Commission accepts that with the proposed stormwater management system, environmental impacts from stormwater drainage are expected to be negligible.

20. EPCOR received *Water Act* approval from AEP in June 2022 for the proposed substation expansion project. As per AEP's *Wetland Mitigation Directive*, EPCOR has paid wetland replacement fees. The Commission considers that by demonstrating that the project was sited to avoid wetlands to the extent practicable, and by adhering to AEP's directive through compensation payments, EPCOR has mitigated the impacts on wetlands.

21. The Commission finds that EPCOR's justification for the amphibian survey timing is acceptable. The Commission also finds that EPCOR's proposed mitigation is reasonable to protect amphibians and amphibian habitat. The Commission is satisfied that EPCOR's approach to nest sweeps will ensure that sensitive species are not affected by the proposed project. Given the proposed mitigation measures, the Commission accepts that the environmental effects of the proposed project can be minimized and that there will be no significant adverse environmental effects from the project.

22. Based on the foregoing, the Commission considers the project to be in the public interest in accordance with Section 17 of the *Alberta Utilities Commission Act*.

6 Decision

23. The Commission approves Application 27499-A001, under sections 14, 15, 19 and 21 of the *Hydro and Electric Energy Act* and grants EPCOR Distribution & Transmission Inc. the approval set out in Appendix 1 – Substation Permit and Licence 27499-D02-2022 to alter and operate Genesee 330P Substation.

24. The Commission approves Application 27499-A002, under sections 14, 15, 19 and 21 of the *Hydro and Electric Energy Act* and grants EPCOR Distribution & Transmission Inc. the approval set out in Appendix 2 – Transmission Line Permit and Licence 27499-D03-2022 to alter and operate Transmission Line 430L.

25. The Commission approves Application 27499-A003, under sections 14, 15, 19 and 21 of the *Hydro and Electric Energy Act* and grants EPCOR Distribution & Transmission Inc. the approval set out in Appendix 3 – Transmission Line Permit and Licence 27499-D04-2022 to alter and operate Transmission Line 8L10.

26. The appendixes will be distributed separately.

Dated on October 6, 2022.

Alberta Utilities Commission

(original signed by)

Vera Slawinski
Commission Member