



Capital Power Generation Services Inc.

Genesee Generating Station Units 1 and 2 Ownership Correction and Amendments

July 18, 2022

Alberta Utilities Commission

Decision 27420-D01-2022

Capital Power Generation Services Inc.

Genessee Generating Station Units 1 and 2 Ownership Correction and Amendments

Proceeding 27420

Application 27420-A001

July 18, 2022

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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 an application from Capital Power Generation Services Inc., to complete minor amendments and to correct the ownership of Genesee Generating Station units 1 and 2 in the Genesee area.

2 Application

2. Capital Power Generation Services Inc. (CPGSI) filed an application with the Commission for approval to correct the ownership of Genesee units 1 and 2, and to complete minor amendments to the units. The approved repowering project of Genesee units 1 and 2 includes the construction of two 732-megawatt (MW) combined-cycle generating units, which are estimated to be completed by March 31, 2025. Currently, the units are operating at 400 MW each, since the steam turbine portion of the combined-cycle process is still in construction.

3. CPGSI proposed to install two skid-mounted fuel gas compressors, two air cooled heat exchangers and associated infrastructure to meet fuel gas pressure requirements for the repowered units 1 and 2 combustion turbines. This work is scheduled to be completed by December 31, 2023.

4. CPGSI stated that on July 21, 2021, Genesee Unit 2 experienced a ground fault trip resulting in significant damage to the existing Unit 2 stator. Unit 2 was forced into an unplanned outage that had the unit offline until November 22, 2021. A replacement stator was installed and retro-fitted from TransAlta's decommissioned Sundance Unit 3. CPGSI stated that the combination of the new rotor and replacement stator provides Unit 2 with the potential to generate an additional 20 MW with no additional energy input beyond the originally approved design, giving Genesee Unit 2 a total output of 420 MW. CPGSI confirmed that the fuel inputs do not exceed what was previously approved due to rotor efficiency upgrades.

5. CPGSI stated that the proposed amendments will not result in an increase in air emissions since there are no air emissions associated with electric compressors. CPGSI stated that Genesee units 1 and 2 will remain compliant with all requirements of the *Environmental Enhancement and Protection Act* approval.

6. CPGSI stated that this additional 20-MW output is temporary, and will be limited to the time frame between now and late 2023/early 2024, when the entire unit would be operational at its intended capacity as a combined-cycle unit with both the gas turbine and the steam turbine in full operation.

7. In response to a Commission information request, CPGSI stated that Alberta Environment and Parks (AEP) responded on May 18, 2022, indicating that no amendment is required to the *Environmental Enhancement and Protection Act* approval, and also verbally confirmed with AEP that the new fuel gas compressors will not result in an increase in emissions of any substance.

8. CPGSI stated that the minor predicted noise emissions from the compressors and heat exchangers would be less than 85 dBA (A-weighted decibels) and represent an immaterial noise source for the area. CPGSI stated that noise emissions for the modifications will remain compliant with Rule 012: *Noise Control*, and that a revised noise impact assessment is not required.

9. CPGSI sent out a letter via email to local municipalities and industry stakeholders with interests and operations in the Genesee area regarding the proposed amendments. CPGSI did not receive any comments, questions or concerns about the proposed installation of the two compressors. CPGSI stated that due to the minor nature of the amendments, it is not anticipated to have any impact to local stakeholders and therefore CPGSI has not provided notice regarding the capacity increase for Genesee Unit 2 or the administrative amendment requests.

10. CPGSI stated that it is in Stage 1 of the Alberta Electric System Operator (AESO) approval process which includes scope study for the additional 20 MW for Unit 2. CPGSI expects that all necessary studies and AESO approvals will be completed by August 2022. In response to a Commission information request, CPGSI stated that it is in the final stages of the AESO transient studies with regard to the repowering project. Final approval from the AESO is expected by September 1, 2022.

11. CPGSI requested to correct the ownership of Genesee units 1 and 2 from Capital Power GP Holdings Inc. to CPGSI. CPGSI also requested to amend the power plant approval to reflect the correct number of transformers for the power plant. The current power plant lists two transformers but there are four transformers for the power plant. CPGSI stated that the four transformers were applied-for in previous applications and acknowledged that two of the transformers were inadvertently not included in the single-line diagram provided in a previous application for the repowering project. CPGSI provided an updated single-line diagram that shows the four transformers, including the ratings of the transformers.

3 Findings

12. For the reasons outlined below, the Commission finds that the amendments are of a minor nature, no person is directly and adversely affected by the proposal, and no significant adverse environmental impact will be caused by the proposed amendments.

13. The Commission accepts that the temporary additional output of 20 MW from Genesee Unit 2, due to the combination of the new rotor and replacement stator will continue to comply with Rule 012.

14. The Commission accepts CPGSI's statement that the amendments will not result in an increase in air emissions and that the power plant will remain compliant with all requirements of the *Environmental Enhancement and Protection Act* approval.

15. Given that the amendments are minor in nature and not anticipated to result in impacts to local stakeholders, the Commission accepts CPGSI's conclusion that a public consultation process was not required.
16. In accordance with the requirements of Section 23 of the *Hydro and Electric Energy Act*, CPGSI is incorporated under the *Business Corporations Act*. Based upon the information provided, CPGSI has demonstrated that it is eligible to hold the power plant approval in its name.
17. Based upon the information provided, CPGSI has demonstrated that the proposal is of a minor nature.

4 Decision

18. Pursuant to sections 11 and 19 of the *Hydro and Electric Energy Act*, the Commission approves Application 27420-A001 and grants Capital Power Generation Services Inc. the approval set out in Appendix 1 – Power Plant Approval 27420-D02-2022 to alter and operate Genesee Generating Station units 1 and 2.
19. Condition 2 of Approval 26806-D02-2021 has been revised to include “two 542.5 303-20kV, 270/360/450 MVA generator step-up transformers” as a component of the power plant.
20. The appendix will be distributed separately.

Dated on July 18, 2022.

Alberta Utilities Commission

(original signed by)

Vincent Kostas
Acting Commission Member