

**GENERATOR INTERCONNECTION
MATERIAL MODIFICATION ASSESSMENT**

for interconnection of the proposed

**117.9 MW [REDACTED]
(IDAHO POWER QUEUE #795)**

to the

IDAHO POWER COMPANY ELECTRICAL SYSTEM

in

POWER COUNTY, ID

for

[REDACTED]

Report v1.0

August 14, 2025

OFFICIAL USE ONLY

This report contains Idaho Power Company Critical Energy Infrastructure Information (CEII). Distribution of this report must be limited to parties that have entered into a non-disclosure agreement with Idaho Power Company and have a need to know.

Table of Contents

1.0	Introduction.....	2
2.0	Summary	2
3.0	Description of Proposed Technological Change.....	2
4.0	Assessment Results	2
4.1	Power Flow Results (Thermal and Voltage Analysis)	2
4.2	Reactive Power Requirements	2
4.3	Transient Stability Results	3
4.4	Post-Transient Voltage Stability (Reactive Margin) Results	3
4.5	Short Circuit Results	3
4.6	Other Operating Requirements.....	3
5.0	Conclusions.....	3

OFFICIAL USE ONLY

This report contains Idaho Power Company Critical Energy Infrastructure Information (CEII). Distribution of this report must be limited to parties that have entered into a non-disclosure agreement with Idaho Power Company and have a need to know.

1.0 INTRODUCTION

On July 30, 2025, [REDACTED] requested a material modification assessment from Idaho Power Company (Transmission Provider), which consisted of a proposal to update their [REDACTED] (the Project) hydro system turbine, governor controls, and generator components.

The Project is Generation Interconnection queue number 795 (GI #795) located in Power County, ID at [REDACTED]. The specific Point of Interconnection (POI) is at the 138kV [REDACTED] Station.

This report describes the results of an assessment that was conducted to evaluate the potential impacts of the proposed modification in accordance with the Idaho Power Open Access Transmission Tariff (OATT) and Large Generator Interconnection Agreement (LGIA) for the Project.

2.0 SUMMARY

An assessment was conducted which determined that the modification request is not considered a material modification. The proposed changes do not result in any new reliability concerns, nor do they require new facilities. The proposed changes may be incorporated in the Project's LGIA.

3.0 DESCRIPTION OF PROPOSED TECHNOLOGICAL CHANGE

The proposed technological changes to [REDACTED] include:

- Replacing the turbine with an updated turbine of the same type ([REDACTED]) manufactured by a new OEM (the power output from the turbine will remain the same).
- Updating the governor controls [REDACTED].
- Refurbishing the generator by replacing components nearing end-of-life (the capabilities and electrical characteristics of the generator will remain the same).

4.0 ASSESSMENT RESULTS

4.1 Power Flow Results (Thermal and Voltage Analysis)

Because there are no changes to the Project's maximum real power output at the POI, the modifications will have no impact on the power flow results found in previous studies.

4.2 Reactive Power Requirements

The Project will be required to operate at 0.95 leading/lagging at continuous rated power output measured at the POI.

Power flow analysis indicates that with the modification of the hydro system, the Project has sufficient reactive power capability to provide a 0.95 leading/lagging power factor at the POI over the range of real power output based on the data provided by Interconnection Customer.

OFFICIAL USE ONLY

This report contains Idaho Power Company Critical Energy Infrastructure Information (CEII). Distribution of this report must be limited to parties that have entered into a non-disclosure agreement with Idaho Power Company and have a need to know.

4.3 Transient Stability Results

Transient stability data provided by the customer for the changes to the Project was reviewed and deemed usable. A transient stability analysis was performed with the new provided data, and the results were acceptable.

4.4 Post-Transient Voltage Stability (Reactive Margin) Results

Because there are no changes to the Project's maximum real power output at the POI, and the reactive power requirements are not changed at the POI, the modification of the hydro system will have no impact on the voltage stability analysis found in previous studies.

4.5 Short Circuit Results

The proposed changes do not necessitate any changes to the required protection system.

4.6 Other Operating Requirements

The Project will be required to control voltage in accordance with a voltage schedule as provided by Idaho Power Load Serving Operations.

The Project will be required to reduce output to levels directed by IPC Load Serving Operations during transmission system contingencies and other reliability events.

5.0 CONCLUSIONS

An assessment was conducted which determined that the modification request is not considered a material modification. The proposed changes do not result in any new reliability concerns, nor do they require new facilities. The proposed changes may be incorporated into the Project's LGIA.

OFFICIAL USE ONLY

This report contains Idaho Power Company Critical Energy Infrastructure Information (CEII). Distribution of this report must be limited to parties that have entered into a non-disclosure agreement with Idaho Power Company and have a need to know.