GENERATOR INTERCONNECTION
MATERIAL MODIFICATION ASSESSMENT

for integration of the proposed

330 MW [redacted] PROJECT
(IDAHO POWER QUEUE #590)

to the

IDAHO POWER COMPANY ELECTRICAL SYSTEM

in

ELMORE COUNTY, IDAHO

for

[redacted]

Report v1.0

April 2, 2026

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1.0 INTRODUCTION

On March 4, 2026, [redacted] requested a material modification assessment from Idaho Power Company (Transmission Provider), which consisted of a proposal to convert the full injection capacity of their 330 MW [redacted] project (the Project) from a combination of wind and solar to 100% solar capacity. The Project will continue to incorporate a grid charging BESS that will supplement the solar generation but will not exceed the current POI limit of 330 MW of injection capacity.

The Project is Generation Interconnection queue number 590 (GI #590) located in Elmore County, ID at approximately [redacted]. The specific Point of Interconnection (POI) is on Idaho Power's [redacted] 230kV line.

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 DESCRIPTION OF PROPOSED TECHNOLOGICAL CHANGE

The proposed technological changes to [redacted] Project include:

- Convert the full injection capacity of the Project from a combination of wind and solar to 100% solar capacity.
- The Project will continue to incorporate a grid charging BESS that will supplement the solar generation but will not exceed the current POI limit of 330 MW of injection capacity.

3.0 ASSESSMENT RESULTS

3.1 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.

3.2 Reactive Power Requirements

The Project will be required to operate at 0.95 leading/lagging measured at the high side of the main power transformer to maintain voltage within limits at the POI over the range of real power output.

Power flow analysis indicates that with the proposed technological change, 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.

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3.3 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.

3.4 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 proposed technological change will have no impact on the voltage stability analysis found in previous studies.

3.5 Short Circuit Results

The proposed technological change does not necessitate any changes to the required protection system.

3.6 Sub-Synchronous Control Interaction (SSCI)

The Project's POI is on the [redacted] 230kV line which includes series compensation. Due to possible negative interaction between inverter control systems and series compensation, an SSCI study was performed using original inverter specifications, and a report titled Sub-Synchronous Control Interaction Study prepared by Power Engineers was issued on January 18, 2023.

Since this request proposes changing the Project's inverter models and specifications, an SSCI restudy will be required. The SSCI study requirement will be incorporated in the Project's LGIA milestones as an amendment. Additional upgrades as a result of the SSCI study may be required.

3.7 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.

4.0 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 steady-state reliability or transient stability concerns. The proposed changes may be incorporated into the Project's LGIA via an amendment.

A Sub-Synchronous Control Interaction (SSCI) risk assessment restudy will be required and will be incorporated in the Project's LGIA milestones as an amendment.

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