# GENERATOR INTERCONNECTION MATERIAL MODIFICATION ASSESSMENT

for integration of the proposed

400 MW

(GI PROJECT #665)

to the

## IDAHO POWER COMPANY ELECTRICAL SYSTEM

in

**ADA COUNTY, IDAHO** 

for

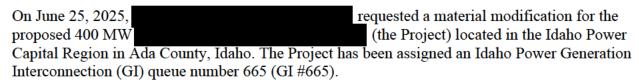
Report v1.0

July 25, 2025

# **Table of Contents**

1.0	Introd	luction	3		
2.0	0 Summary				
3.0	Assessment Results				
	3.1	Power Flow Results (Thermal and Voltage Analysis)	3		
	3.2	Reactive Power Requirements	3		
	3.3	Transient Stability Results	3		
	3.4	Post-Transient Voltage Stability (Reactive Margin) Results	3		
	3.5	Short Circuit Results	3		
	3.6	Other Operating Requirements	4		
4.0 Conclusions					
Rev	ision ]	History	5		

#### 1.0 Introduction



The material modification requested consisted of a proposed change to the PV inverter model, a resizing of the high voltage transformers, and a new commercial operation date (COD) of

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 Tariff and executed Large Generator Interconnection Agreement (LGIA) for the Project.

# 2.0 Summary

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

#### 3.0 Assessment Results

## 3.1 Power Flow Results (Thermal and Voltage Analysis)

Power flow analysis indicates that there are no junior queued projects impacted by any of the proposed changes.

#### 3.2 Reactive Power Requirements

Power flow analysis indicates that the Project has sufficient reactive power capability to provide a 0.95 leading/lagging power factor at the Point of Interconnection (POI) at a maximum output of 400 MW based on the provided data.

#### 3.3 Transient Stability Results

Transient stability data provided by the customer was reviewed and deemed usable. A transient stability analysis was performed, and the results were deemed 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 reactive power requirements are not changes at the POI, the proposed changes will have no impact on the voltage stability analysis results performed in the SIS.

#### 3.5 Short Circuit Results

The proposed changes do not necessitate any changes to the required protection systems identified in the SIS.

## 3.6 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 install a plant controller for managing the real power output at the Project's POI.

The Project is required to comply with the applicable Voltage and Current Distortion Limits found in IEEE Standard 519-2014 *IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems*.

The Project will be required to reduce output to levels directed by IPC Load Serving Operations during transmission system contingencies and other reliability events. This will be accomplished with a Generator Output Limit Control (GOLC) setpoint sent from IPC to the Project.

#### 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 reliability concerns, nor do they require new facilities. The proposed changes may be incorporated in the Project's LGIA as an amendment.

# **Revision History**

Date	Revision	Initials	Summary of Changes
2025-07-25	1.0	СНН	Initial report