GENERATOR INTERCONNECTION
MATERIAL MODIFICATION ASSESSMENT

for integration of the proposed

53 MW XXXX XXXXPROJECT
(IDAHO POWER QUEUE #630)

to the

IDAHO POWER COMPANY ELECTRICAL SYSTEM

in

ELKO COUNTY, NEVADA

for

XXXX XXXX

REPORT v.1

March 15th, 2024

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1.0 INTRODUCTION

XXXX XXXX has requested a material modification evaluation to Idaho Power Company (Transmission Provider) which consisted of adding 53 MW of battery energy storage system (BESS) to the XXXX XXXX Project (the Project).

The Project location (XXXX) is in Idaho Power Company's (IPC) Southern Region in Elko County, Nevada. The Project is Generation Interconnect (GI) queue number 630 (GI #630). The specific point of interconnection (POI) is the 138 kV Border Tap to Wells Substation, approximately south of the Nevada–Idaho border.

This report describes the results of an assessment that was conducted to evaluate the potential impacts of the proposed modification in accordance with the executed Large Generator Interconnection Agreement (LGIA) for GI #630.

2.0 ASSESSMENT RESULTS

The material modification evaluation request consists of the addition of 53 MW BESS to the Project. The addition of the BESS includes the required collector system and transformers required to incorporate the BESS to the Project. This modification request does not increase the total deliverable capacity of the Project to the POI of 53 MW total injection capacity.

Charging the BESS from the IPC Transmission System results in significant overloads and voltage collapse on the 100-mile 138 kV radial line from the XXXX to the GI #630 POI. Charging the BESS at a lower capacity factor also results in significant upgrades due to voltage violations at the 138 kV XXXX Substation, which would require further modifications to IPC's Transmission System that were not contemplated in prior studies. The required Network Upgrades to support charging the BESS from the Transmission System include, but are not limited to, the removal and rebuild of the 100-mile 138 kV radial line from the XXXX Substation to the GI #630 POI, which is estimated to cost ~$90,000,000. To fully assess and determine the necessary Network Upgrades required for the BESS to charge from IPC's Transmission System, a System Impact Restudy would be required. The restudy may identify further Network Upgrades.

If the Project's BESS is not to be charged from IPC's Transmission System, a System Impact Study for transient stability analysis and a subsequent Facility Study will be required to determine the scope and cost of relaying and communication devices required to ensure the BESS does not charge from the Transmission System.

The necessary Network Upgrades to support the requested modification do not constitute a Material Modification since the Network Upgrades identified do not impact the timing or cost of a junior-queued generation interconnection request. However, GI #630 will require a System Impact Restudy, Facilities Restudy, and an LGIA amendment at the cost of XXXX XXXX.

3.0 CONCLUSIONS

An assessment was conducted, which determined that the Project's request to add BESS does not constitute a Material Modification. However, the proposed changes result in significant modifications to the facilities described in the April 24th, 2023, LGIA for GI #630. Network Upgrades required to support the Project's BESS charging from the Transmission System are estimated to cost at least ~$90,000,000. If XXXX wishes to proceed with the Project modification, a System Impact Restudy and Facilities Restudy will be required. The studies will be at the cost of XXXX and an amended LGIA will be issued to reflect the Project modifications, POI Facilities, and Network Upgrades.