# GI-2020-5 Interconnection Facilities Study Phase 4 Report 5/2/2022



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# 1.0 Summary

This report only includes the Interconnection Customer's Interconnection Facilities and should be read in conjunction with the *DISIS-2020-001 Cluster Interconnection Facilities Study Phase 4 Report* located at: <a href="mailto:Transmission Studies">Transmission Studies</a> (rmao.com).

GI-2020-5 is a 24 MW (18 MW in Summer) expansion of the Existing Fort Saint Vrain #4 generator, requesting Energy Resource Interconnection Service (ERIS).

The total estimated cost of the transmission system improvements for GI-2020-5: \$50,000.

Energy Resource Interconnection Service of GI-2020-5 is: 24 MW; no transmission system improvements are required.

The Generation Interconnection Service identified in this report in and of itself does not convey transmission service.

### 2.0 Introduction

GI-2020-5 is an 18 MW (Summer)/24 MW (Winter) incremental capacity in the output of the existing Fort Saint Vrain #4 Combustion Turbine generator located in Weld County, Colorado. The incremental output is driven by turbine prime mover changes being performed as part of maintenance and modernizing the equipment and no changes to the electrical generator set are anticipated. The net generating capacity of Fort Saint Vrain #4 after confirmation testing of incremental increase in generation output due to a plant equipment upgrade will be 167 MW (Summer)/173 MW (Winter).

The POI of the incremental capacity is the existing Fort Saint Vrain Substation where Fort Saint Vrain #4 currently interconnects.

The proposed Commercial Operation Date (COD) of the incremental capacity is November 1, 2020. Since the POI is existing and operational, a backfeed date is not applicable to GI-2020-5.



## 3.0 Study Scope

The scope of the Interconnection Facilities Study which is Phase 4 of the Definitive Interconnection Study process includes non-binding cost estimates and construction schedule of the Interconnection Facilities and Network Upgrades identified for GI-2020-5 in the <a href="DISIS-2020-001 Phase 2 Report">DISIS-2020-001 Phase 2 Report</a> dated 8/19/2021 and <a href="DISIS-2020-001 Phase 2 Study Report">DISIS-2020-001 Phase 2 Study Report</a> Addendum dated 9/15/2021.

### 4.0 Cost Estimates

The cost responsibilities associated with these facilities shall be handled as per current FERC guidelines.

The total cost of the required transmission improvement required for GI-2020-5 to interconnect at the existing Fort Saint Vrain Substation where Fort Saint Vrain#4 currently interconnects is \$50,000.

- The cost of Transmission Provider's Interconnection Facilities is \$50,000 (Table 1).
- The cost of Station Network Upgrades is \$0.
- The cost of other System Network Upgrades is \$0.

Table 1 – GI-2020-5 Transmission Provider's Interconnection Facilities

| Element                         | Description  | Cost Est.<br>(million) |
|---------------------------------|--|------------------------|
| PSCo's Ft. St. Vrain<br>Unit #4 | Confirmation testing of incremental increase in generation output due to a plant equipment upgrade | <b>¢</b> 0.050         |
| Total Cost Estimate for         | \$0.050  |                        |
| Interconnection Facilities      |  |                        |
| Time Frame                      | Site, design, procure and construct  | 6 Months               |