

2.5.6 Power Transmission (Main Generator) System

Design Description

1.0 System Description

The power transmission system transmits main generator output to the transmission system via the main step-up transformers (MSU) and provides power to the station auxiliary loads via the MSU and switchyard.

2.0 Arrangement

2.1 Deleted.

3.0 Mechanical Design Features

3.1 Each MSU has an oil containment system.

3.2 Each MSU has a deluge fire protection system.

4.0 Electrical Power Design Features

4.1 The MSUs and associated isophase bus are sized to support the main generator rated output at generator rated power factor.

5.0 Interface Requirements

5.1 The main generator switchyard circuit breakers shall be sized to supply the load requirements.

Inspections, Tests, Analyses, and Acceptance Criteria

Table 2.5.6-1 lists the power transmission (main generator) system ITAAC.

Table 2.5.6-1—Power Transmission (Main Generator) System ITAAC

Commitment Wording		Inspections, Tests, Analyses	Acceptance Criteria
2.1	Deleted.	Deleted.	Deleted.
3.1	Each MSU has an oil containment system.	An inspection will be performed to verify that each as-built MSU has an oil containment system.	Each MSU has an oil containment system.
3.2	Each MSU has a deluge fire protection system.	An inspection will be performed to verify that each as-built MSU has a deluge fire protection system.	Each MSU has a deluge fire protection system.
4.1	The MSUs and associated isophase bus are sized to support the main generator rated output at generator rated power factor.	An inspection and analysis will be performed to verify as-built MSU inverters are sized to power the design MSU loads on the respective supplied MCC.	An equipment sizing analysis concludes each MSU inverter rating is greater than the analyzed load requirements.