**Generating Facility Name:**

Maximum Net Export Capability requested at POI:     MW (Gross Generation – Station Service)

Gross Generation Capability:      MW

Station Service Load (Including Losses):       MW and       Mvar

Generating Facility Owner:

Generating Facility Substation GPS coordinates: Latitude       and Longitude       (decimal degrees)

Complete this data form and provide final design data sheets from vendor which show the following information (the vendor data sheets must be provided) and Single Line Diagrams of facility:

1. **Generator Machine Data:**
2. Generator base MVA (impedance base for data below):       MVA
3. Rated power factor of generator:
4. Generator rated voltage:       kV
5. Generator Dynamic Model:
6. Inertia (wK2), including prime mover:       lbs-ft2 or       kW sec/kVA

All applicable reactance values (unsaturated):

1. 1) Xd       2) Xq       3) X'd       4) X'q       5) X''d

6) Xlm

Saturated reactance values:

1. 1) X'd       2) X"d       3) X2       4) Xo

All applicable time constants (seconds):

1. 1) T'do       2) T"do       3) T'qo       4) T"qo
2. Provide all Saturation diagrams for the generator.

Armature winding sequence resistance data:

1. 1) R0       2) R1       3) R2
2. Neutral Grounding Resistor (if applicable):       (Ohms)

Final design specifications which are a function of either 1) the generator design or 2) the generator design and the supporting plant auxiliary system

1. Maximum gross power output of turbine at 95 degree ambient temperature:       MW
2. Minimum gross power output of turbine at 95 degree ambient temperature:       MW
3. Maximum gross power output of turbine in the range of 50-70° ambient temperature:       MW
4. Minimum gross power output of turbine in the range of 50-70° ambient temperature:       MW
5. Maximum reactive production at maximum MW output at 95° ambient and rated voltage:       MVAR
6. Maximum reactive absorption at maximum MW output at 95° ambient and rated voltage:       MVAR
7. Attach a copy of the unit capability curve at rated voltage and indicate which curve is appropriate for a 95° ambient day. If necessary to accurately represent expected operating capability on a 95° ambient day, indicate a sufficient number of unit operating points on the manufacturer supplied unit capability curve.
8. Generator Cooling (Open air, TEWAC, Hydrogen, etc.):
9. Generator High/Low voltage limits =      /      kV (or pu)
10. **Generator Step-up Transformer Data:**
11. Attach transformer test reports showing ratings, impedances, available taps, etc.
12. GSU tap is set to      .
13. **Voltage Ride-Through Capability.**

Provide voltage ride-through time duration settings (per-unit voltage set point and corresponding ride-through time), reflecting the settings for the plant level controller. An example of a voltage ride-through time duration curve for applicable units is provided below for reference.



1. **Frequency Ride-Through Capability.**

Provide frequency ride-through capability settings (frequency set point and corresponding ride-through time), reflecting the settings for the plant level controller. An example of a frequency ride-through time duration curve for applicable units is provided below for reference.

