

Unit Design Data

GAS TURBINE OR JET ENGINE (VOLUNTARY REPORTING)

(Note: The NERC Board of Trustees approved the GADS Task Force report (dated July 20, 2011 - <http://www.nerc.com/filez/gadstf.html>) which states that design data collection outside the required nine fields is solely voluntary. However, the GADS staff encourages that reporters report and update GADS design data frequently. This action can be completed by 1) sending in this form or 2) using the design data entry software located at <http://www.nerc.com/page.php?cid=4|43|46>. GADS staff encourages using the software for design entry and updating.)

Instructions

Submit the data in this section once during the life of each gas turbine or jet engine unit. If a major change is made to a unit which significantly changes its characteristics, then resubmit this section with updated information.

For coded entries, a (9) is entered to indicate an alternative other than those specified. Whenever a (9) is entered, write the column number and the answer on the reverse side of the form.

If a copy of the original form is being submitted, make sure that it is legible.

Unit name:

Location of unit (State):

Energy Information Administration (EIA) Number:

Regional Entity:

Subregion:

Data reporter:

Telephone number:

Date:

GENERAL DATA**Col. No.**

01 Utility identification number

04 Unit identification number

07 Card code

09 Columns 09 through 12 are blank

13 Year unit first paralleled for load

17 Month unit first paralleled for load

19 Day unit first paralleled for load

GAS TURBINE OR JET ENGINE DATA

21 Engine manufacturer - (1) Pratt & Whitney; (2) General Electric; (3) Westinghouse; (4) ABB Gas Turbine Power Division; (5) Rolls Royce; (6) Cooper Bessemer; (7) Worthington; (8) Allison; (9) Other

21 Engine type - (1) Gas turbine single shaft; (2) Gas turbine split shaft; (3) Jet engine; (9) Other

22 Engines, number per unit

25 Expander turbines, number per unit if applicable

26 Type expander, if applicable - (1) Single flow; (2) Double flow

27 Cycle type - (1) Reheat; (2) Simple; (3) Regenerative; (4) Recuperative; (5) Intercooled; (6) Precooled; (7) Complex; (8) Compound; (9) Other

28 Startup system - (1) Air; (2) Auxiliary motor; (3) Electric motor; (4) Natural gas; (5) Flow turbine; (6) Supercharging fan; (7) Hydraulic; (9) Other

29 Startup type - (1) Automatic, on site; (2) Automatic, remote; (9) Other

SELECTIVE NON-CATALYTIC REDUCTION SYSTEM (SNCR)

- 22 SNCR reagent - (1) Ammonia; (2) Urea; (9) Other
- 23 SNCR injector type - (1) Wall nozzle; (2) Lance; (9) Other
- 24 SNCR injection equipment location - (1) Furnace;
(2) Super-heater; (3) Economizer; (9) Other
- 25 Number of SNCR injectors
- 28 SNCR carrier gas type - (1) Steam; (2) Air; (9) Other
- \ 29 SNCR carrier gas total flow rate (thousands of lbs./hr.) i.e.
6,000,000 lbs./hr. enter 6000
- 34 SNCR carrier gas pressure at nozzle (psi)
- \ 38 SNCR carrier gas nozzle exit velocity (thousands of ft./sec.)

SELECTIVE CATALYTIC REDUCTION SYSTEM (SCR)

- 43 SCR reactor - (1) Separate; (2) In Duct
- 44 SCR reagent - (1) Ammonia; (2) Urea; (9) Other
- 45 SCR ammonia injection grid location - (1) Furnace;
(2) Super-heater; (3) Economizer; (4) Zoned
- 46 SCR duct configuration - (1) Flow straighteners;
(2) Turning vanes; (3) Dampers
- 47 SCR Catalyst Element Type (1) Plate; (2) Honeycomb;
(9) Other
- 48 SCR catalyst support material - (1) Stainless steel;
(2) Carbon steel; (9) Other
- 49 SCR catalytic material configuration - (1) Vertical;
(2) Horizontal; (9) Other
- \ 50 SCR catalyst surface face area (thousands of square feet)
- \ 55 SCR catalyst volume (thousands of cubic feet)
- 60 Number of SCR catalytic layers

SELECTIVE CATALYTIC REDUCTION SYSTEM (SCR) (Continued)

- 62 SCR catalytic layer thickness (1/1000 inches)
- 65 SCR sootblower type - (1) Air; (2) Steam; (3) Both
- 66 SCR sootblower manufacturer - (see table of Manufacturers - page E-125)

CATALYTIC AIR HEATERS (CAH)

- 68 CAH element type - (1) Laminar surface; (2) Turbulent surface; (9) Other
- 69 CAH catalyst material - (1) Titanium oxide; (2) Vanadium pentoxide; (3) Iron (II) oxide; (4) Molybdenum oxide; (9) Other
- 70 CAH catalyst support material - (1) Stainless steel; (2) Carbon steel; (9) Other
- 71 CAH catalyst material configuration - (1) Horizontal air shaft; (2) Vertical air shaft
- \ 72 CAH catalyst material total face area (thousands of square feet)
- \ 75 CAH catalyst material open face area (thousands of square feet)
- 78 CAH catalyst material layer thickness (1/1000 inches)

GENERATOR DATA

- 01 Utility identification number
- 04 Unit identification number
- 07 Card code
- 09 Columns 09 through 13 are blank
- 14 Manufacturer (see table of Manufacturers, page E-123)
- 16 Type - (1) Three-phase, 60-cycle; (9) Other
- \ 13 Nameplate voltage to nearest one-tenth KV

