Appendix E7: Unit Design Data – Miscellaneous (Voluntary Reporting)

Note: The NERC Board of Trustees approved the *GADS Task Force Report* (dated July 20, 2011)[1], 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 sending in this form to gads@nerc.net. GADS staff encourages using the software for design entry and updating.

Instructions

Use these forms when no other forms in this appendix are appropriate. Specifically, use them for multi-boiler/multi-turbine units, combined-cycle units, and geothermal units.

Submit the data in this section once during the life of each pumped storage or hydro 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, enter a (9) to indicate an alternative other than those specified. Whenever you enter a (9), write the column number and the answer on the reverse side of the form.

When submitting an original copy of the form, make sure that it is legible.

Unit Name _____

Location of Unit (State) _____

Energy Information Administration (EIA) Number _____

Regional Entity _____

Subregion _____

Date Reporter _____

Telephone Number _____

Date _____

General Data

	Col No.	Column Information
	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

[1] http://www.nerc.com/pa/RAPA/gads/MandatoryGADS/Revised_Final_Draft_GADSTF_Recommendation_Report.pdf

	17	Month unit first paralleled for load
	19	Day unit first paralleled for load
	21	Energy source – (1) Fossil (Multi-Boiler – Multi-Turbine); (3) Geothermal; (4) More than one; (9) Other
	22	Energy medium – (1) Water and/or steam; (2) Heavy water and/or steam; (3) Liquid metal; (4) Gas; (5) More than one; (6) Direct conversion; (9) Other
	23	Enter (1) if header unit
	24	Enter (1) if noncondensing steam turbine
	25	Columns 25 through 80 are blank

Pollution Control Equipment Data

	Col No.	Column Information
	01	Utility Identification Number
	04	Unit Identification Number
	07	Card code
	09	Columns 09 through 17 are blank
	18	Nameplate MW Rating of the unit

Selective Non-Catalytic Reduction System (SNCR)

	Col No.	Column Information
	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)

	Col No.	Column Information
	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
	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 Code)

Catalytic Air Heaters (CAH)

	Col No.	Column Information
	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)

General Data

	Col No.	Column Information
	01	Utility Identification Number
	04	Unit Identification Number
	07	Card code
	09	Columns 09 through 14 are blank
	15	Total nameplate rating in MW
	19	Type electrical output – (1) Three-phase, 60 cycle; (9) other
	20	Columns 20 through 55 are blank
	56	Name of Unit