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

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
81	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

¹ http://www.nerc.com/pa/RAPA/gads/MandatoryGADS/Revised Final Draft GADSTF Recommendation Report.pdf

Appendix E7: Unit Design Data – Miscellaneous (Voluntary Reporting)				
	21	Energy source – (1) Fossil (Multi-Boiler – Multi-Turbine); (3) Geothermal; (4) More than one; (9) Other 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	t Data			
	Col No.	Column Information		
	01	Utility Identification Number		
	04	Unit Identification Number		
82	07	Card code		
	09	Columns 09 through 17 are blank		
	18	Nameplate MW Rating of the unit		
Selective Non-Catalytic Red	uctio	n 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 SNCR injection equipment location – (1) Furnace; (2) Super-heater;		
	24	(3) Economizer; (9) Other		
	25	Number of SNCR injectors (1) Steems (2) Airs (0) Others		
	28	SNCR carrier gas type – (1) Steam; (2) Air; (9) Other 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 Reductio	n Sys	stem (SCR)		
	Col No.	Column Information		
	43	SCR reactor – (1) Separate; (2) In Duct		
	44	SCR reagent – (1) Ammonia; (2) Urea; (9) Other		

Selective Catalytic Reduction Sy	ystem (SCR)
Col No.	Column Information
45 46 47 48 49	SCR ammonia injection grid location – (1) Furnace; (2) Super-heater; (3) Economizer; (4) Zoned SCR duct configuration – (1) Flow straighteners; (2) Turning vanes; (3) Dampers SCR Catalyst Element Type (1) Plate; (2) Honeycomb; (9) Other SCR catalyst support material – (1) Stainless steel; (2) Carbon steel; (9) Other SCR catalytic material configuration – (1) Vertical; (2) Horizontal; (9) Other SCR catalyst surface face area (thousands of square feet)
=======================================	SCR catalyst volume (thousands of cubic feet)
53	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)
Catalytic Air Heaters (CAH)	
Col	Column Information
	Column Information CAH element type — (1) Laminar surface; (2) Turbulent surface; (9) Other CAH catalyst material — (1) Titanium oxide; (2) Vanadium pentoxide; (3) Iron (II) oxide; (4) Molybdenum oxide; (9) Other CAH catalyst support material — (1) Stainless steel; (2) Carbon steel; (9) Other CAH catalyst material configuration — (1) Horizontal air shaft; (2) Vertical air shaft
Col No. 68 69 70	CAH element type – (1) Laminar surface; (2) Turbulent surface; (9) Other CAH catalyst material – (1) Titanium oxide; (2) Vanadium pentoxide; (3) Iron (II) oxide; (4) Molybdenum oxide; (9) Other CAH catalyst support material – (1) Stainless steel; (2) Carbon steel; (9) Other CAH catalyst material configuration – (1) Horizontal air shaft; (2)
Col No. 68 69 70 71	CAH element type – (1) Laminar surface; (2) Turbulent surface; (9) Other CAH catalyst material – (1) Titanium oxide; (2) Vanadium pentoxide; (3) Iron (II) oxide; (4) Molybdenum oxide; (9) Other CAH catalyst support material – (1) Stainless steel; (2) Carbon steel; (9) Other CAH catalyst material configuration – (1) Horizontal air shaft; (2) Vertical air shaft CAH catalyst material total face area (thousands of square feet) CAH catalyst material open face area (thousands of square feet)
Col No. 68 69 70 71 72	CAH element type – (1) Laminar surface; (2) Turbulent surface; (9) Other CAH catalyst material – (1) Titanium oxide; (2) Vanadium pentoxide; (3) Iron (II) oxide; (4) Molybdenum oxide; (9) Other CAH catalyst support material – (1) Stainless steel; (2) Carbon steel; (9) Other CAH catalyst material configuration – (1) Horizontal air shaft; (2) Vertical air shaft CAH catalyst material total face area (thousands of square feet)
Col No. 68 69 70 71 72 75	CAH element type – (1) Laminar surface; (2) Turbulent surface; (9) Other CAH catalyst material – (1) Titanium oxide; (2) Vanadium pentoxide; (3) Iron (II) oxide; (4) Molybdenum oxide; (9) Other CAH catalyst support material – (1) Stainless steel; (2) Carbon steel; (9) Other CAH catalyst material configuration – (1) Horizontal air shaft; (2) Vertical air shaft CAH catalyst material total face area (thousands of square feet) CAH catalyst material open face area (thousands of square feet)
Col No. 68 69 70 71 72 75 78	CAH element type – (1) Laminar surface; (2) Turbulent surface; (9) Other CAH catalyst material – (1) Titanium oxide; (2) Vanadium pentoxide; (3) Iron (II) oxide; (4) Molybdenum oxide; (9) Other CAH catalyst support material – (1) Stainless steel; (2) Carbon steel; (9) Other CAH catalyst material configuration – (1) Horizontal air shaft; (2) Vertical air shaft CAH catalyst material total face area (thousands of square feet) CAH catalyst material open face area (thousands of square feet)
Col No. 68 69 70 71 72 75 78 General Data Col	CAH element type – (1) Laminar surface; (2) Turbulent surface; (9) Other CAH catalyst material – (1) Titanium oxide; (2) Vanadium pentoxide; (3) Iron (II) oxide; (4) Molybdenum oxide; (9) Other CAH catalyst support material – (1) Stainless steel; (2) Carbon steel; (9) Other CAH catalyst material configuration – (1) Horizontal air shaft; (2) Vertical air shaft CAH catalyst material total face area (thousands of square feet) CAH catalyst material open face area (thousands of square feet) CAH catalyst material layer thickness (1/1000 inches)

General Data		
	Col No.	Column Information
83	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 (Columns 56-80)