

NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

Design Data Reporting

Data Reporting Instructions – Section V

Module 04 - GADS Data Reporting Workshops
June. 2019

RELIABILITY | ACCOUNTABILITY



- To identify the unit - name, location, type, et cetera
- It is needed to analyze event and performance data
- It provides the opportunity to critique past and present
- It allows you to perform many types of generating plant analyses

- There are nine (9) required design data fields for two specific reasons:
 - They allow GADS data to be matched with information collected in other databases such as the Transmission Availability Data System (TADS)
 - Example: Certain design data fields are needed to allow generating units to be located in areas where transmission lines are located
 - They ensure the continued quality of information collected by GADS by editing event and performance data

1. GADS utility code: assigned by NERC
2. GADS unit code: assigned by the reporting company following the guidelines in Appendix C of the DRI
3. NERC Regional Entity (RE) where the unit is located
4. Name of the unit
5. Commercial operating date
6. Type of generating unit: fossil, combined cycle, et cetera
7. MW size: generator nameplate
8. State or province location of the unit
9. Energy Information Administration (EIA) Plant Number
 - a) US units only

- Voluntary design data can be used to further analyze the GADS data
 - By manufacturer, equipment design, redundancy, et cetera
- The voluntary design data forms are located in Appendices E1-8
 - The voluntary design data is equipment specific
 - The forms are self explanatory, fill in the blank type forms
 - If you don't know what is being asked for seek out an expert who does
- If you decide to submit the data complete the forms when
 - Utility begins participating in GADS
 - Unit starts commercial operation
 - Unit's design parameters change
 - The forms should be reviewed annually

Unit Type	Unit Code Range	Appendix
Combined Cycle GT units	300-399, 700-799	E8
Combined Cycle ST units	100-199, 600-649	E8
CoGeneration GT units	300-399, 700-799	E8
CoGeneration ST units	100-199, 600-649	E8
CoGeneration Block	800-899	E8
Combined Cycle Block	800-899	E8
Fluidized Bed	650-699	E2
Fossil-Steam	100-199, 600-649	E1
Gas Turbine/Jet Engine (Simple Cycle Operation)	300-399, 700-799	E6
Geothermal	800-899	E7
Internal Combustion/Reciprocating Engines	400-499	E4
Miscellaneous	800-899	E7
Multi-boiler/Multi-turbine	800-899	E7
Nuclear	200-299	E3
Pumped Storage/Hydro	500-599, 900-999	E5

- Problem: Your company has decided to start reporting data to GADS and you are tasked with finding the required nine (9) design data fields for each of your generating units
- Question: Which of the following is not a required design data field?
 - A. Utility Code
 - B. Unit Code
 - C. Regional Entity
 - D. Generator MVAR
 - E. Commercial Operating Date
- Answer: D. Generator MVAR (Mega Volt-Amps Reactive)
- Explanation: Required design data is unit specific while Generator MVAR is equipment specific and therefore voluntary



Questions and Answers