Reporting Event Details

Data Reporting Instructions – Section III

April 2025

Module 08 - GADS Data Reporting Workshops

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- GADS events are submitted to OATI thru a text file.
- A number of entries are required on your software's event entry screen.
- Other data are automatically known by the software because of the unit chosen for data entry.
- Event data from the data entry screen and other unique unit data is placed in the text file that is submitted to NERC
- A map of the text file is shown at the end of this presentation for help in troubleshooting errors in the OATI submittal.

- Required fields:

  - ■ Record Code
    - ○ The 07 record code uniquely identifies the data as an event data file record
    - ○ This is provided by your software
  - ■ Utility (Company) Code
    - ○ Three character alpha-numeric code identifying the reporting organization
    - ○ Assigned by OATI for NERC
    - ○ This is provided by your software when a plant and unit are selected for data entry
    - ○ A plant reporter may never know this number

- Required fields:
  - Unit Code
    - Three-digit code identifying the unit reported
    - Code distinguishes one unit from another in a utility
    - Code range is restricted by the unit type
    - This is provided by your software when a plant and unit are selected for data entry
    - A plant reporter may never know this number

- The combination of utility and unit codes uniquely identifies a unit in the GADS database
  - Example: 840331   Utility=840, Unit=331

- Required fields:
  - Year
    - The year the event occurred
    - May be a default in the software or part of data entry
  - Event Number
    - Unique for each event on a unit in a given year
    - Need not be sequential
    - Recommend they be chronological
    - Provided by software

- Events start when they start and end when they end - <u>events that continue through multiple months should be tracked as one long event and not ended/re-started each month.</u>

- Event must stop and start at year end.

- The combination of Utility Code, Unit Code, Year, and Event Number uniquely identifies an event in the GADS database
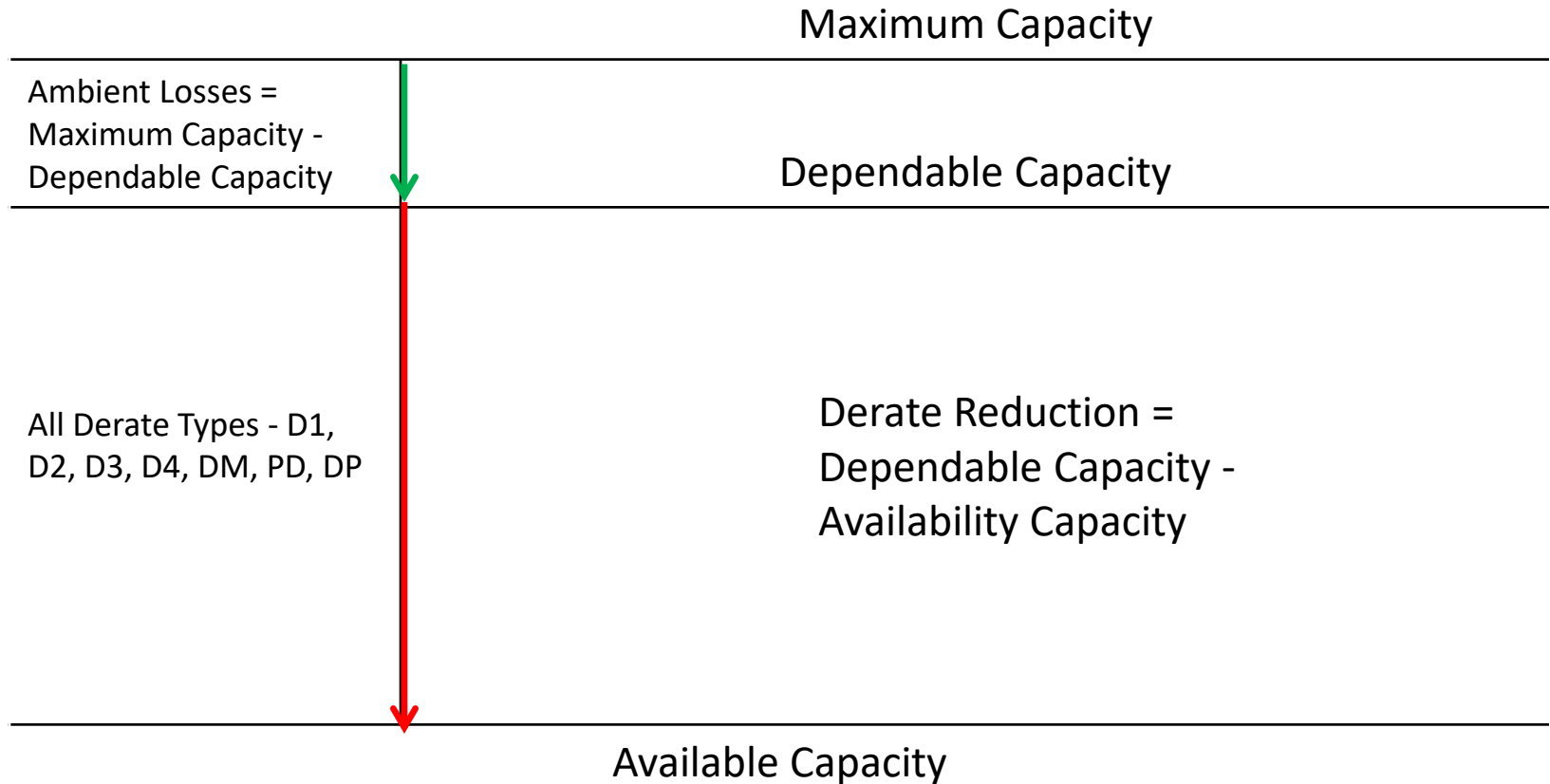 - Example: 8403311995137   Utility=840, Unit=331, Year=1995, Event=137

- Report Revision Code (voluntary)
  - Shows changes to the event record
    - Original Reports (0)
    - Additions or corrections (1, 2,…9)
    - Even if just one record is revised resubmit all of the records for the revised time period
    - Software will probably provide a revision code
- Event Type Code (required)
  - Identifies the state experienced by the unit
    - Inactive State - divided into three (3) event types (IR, MO, RU)
    - Active State - divided into seventeen (17) event types (Outage, Derate, RS, NC)

- Start of Event (required)
  - Start month, day, hour, minute

- Outages start when the unit
  - Is desynchronized
  - Enters a new outage state

- Reserve Shutdowns start when the unit
  - Is desynchronized
  - Enters the reserve shutdown state from another state

- Derates start when
  - A major component or piece of equipment is taken out of service
  - The unit experiences a problem preventing it from making full load
    - Small boiler tube leak

- Use a 24-hour clock when reporting the start of event to GADS

- End of Event (required by year's end)
  - End month, day, hour, minute
  - Can be left "open" until year end
- Outages end when the unit
  - Is synchronized
  - Enters another appropriate unit state
- Reserve Shutdowns end when the unit
  - Is synchronized
  - Enters another appropriate unit state
- Derates end when
  - A major component or piece of equipment is available for service
  - A problem that had prevented the unit from running at full load is fixed
    - Fuel oil gun finally goes in service
- Use a 24-hour clock when reporting the end of event to GADS

- If the event starts at midnight, use:
  - 0000 as the start hour and start time

- If the event ends at midnight, use:
  - 2400 as the end hour or 0000 of the next day (these are same time)

- This is a data file formatting rule
  - Your in-house GADS system may not use a 24 hour clock. In that case your system must reformat the end time of the event when recorded in the 07 event data file using a 24 hour clock format as shown above
  - This will not end your event at the end of a year; GADS will connect both pieces of an event spanning the end of a year back together
  - The reason each event must end at the end of the year in the data file you submit to GADS is because you only enter the month, day, hour, and minute for the start/end times on the events in Section B. The year is in Section A, as a single value, which is used for both the start and end of the event, so the event can't cross years in data file itself.

Unit Capacity Levels

Maximum Capacity

Ambient Losses =
Maximum Capacity -
Dependable Capacity

Dependable Capacity

All Derate Types - D1,
D2, D3, D4, DM, PD, DP

Derate Reduction =
Dependable Capacity -
Availability Capacity

Available Capacity

Available capacities are to be expressed on either a gross or net basis

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- Gross Available Capacity (voluntary)
  - This is the level of gross generation the unit can achieve while being derated
  - Voluntary but recommended
  - Reporting gross available capacity eliminates capacity estimation
- Net Available Capacity (required)
  - This is the level of net generation the unit can achieve while being derated
- Dominant Derate Code (voluntary)
  - Enter a D to indicate that a derate is dominant

- If only GAC or NAC is reported during a derate the missing value will be estimated using a capacity estimation factor (CEF) for the unit type
  - Example: GAC = NAC * (1 + CEF)

Table IV-4 Unit Capacity/Generation Estimation Factors and MW Multipliers			
Unit Type Name	Capacity/ Generation Estimation Factor	MW Multiplier	Unit Type Code Ranges
CC GT units	2.00	0.20	300-399, 700-799
CC steam units	5.00	0.20	100-199, 600-649
CoG GT units	2.00	0.20	300-399, 700-799
CoG steam units	5.00	0.20	100-199, 600-649
Co-generator Block	4.00	0.10	800-899
Combined Cycle Block	4.00	0.15	800-899
Fluidized Bed	5.00	0.10	650-699

Table IV-4 Unit Capacity/Generation Estimation Factors and MW Multipliers			
Unit Type Name	Capacity/ Generation Estimation Factor	MW Multiplier	Unit Type Code Ranges
Fossil-Steam	5.00	0.30	100-199, 600-649
Gas Turbine/Jet Engine (Simple Cycle Operation)	2.00	0.30	300-399, 700-799
Geothermal	4.00	0.10	800-899
Internal Combustion/Reciprocating Engines	0.00	0.10	400-499
Miscellaneous	4.00	0.10	800-899
Multi-boiler/Multi-turbine	4.00	0.10	800-899
Nuclear	5.00	0.10	200-299
Pumped Storage/Hydro	0.00	0.50	500-599, 900-999

- The hydro CEF has been revised in recent years as there is almost no auxiliary power used by a hydro unit.

- The estimation factors for other types of units may be different from your actual values and cause validation issues.

- It is a best practice to provide both GAC and NAC to eliminate any issues caused by the estimated values.

- Question: For which event types should you report GAC/NAC?
  - A. All events
  - B. Only forced outage events
  - C. Derate events
  - D. Reserve Shutdowns
- Answer: C. Derate events
- Explanation: GAC/NAC are reported for derate events only; they are needed to determine the reduction on unit output

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- Yes - indicates an allowed transition from one event type to another

- No - indicates an illegal transition from one event type to another

- There are seven (7) general types of transitions
  - All outages can transition to U1 but not U2 or U3
  - All outages can transition to SF
  - PO and PE can now transition to MO (Use with care)
  - All outages except ME can transition to PO
  - All outage extensions must follow outages of the same type
  - All outages can transition to RS
  - Derates may transition to their extensions only

Allowable Event Type Changes

Section III: Event Reporting

TO FROM	U1	U2	U3	SF	MO	PO	ME	PE	RS	DM	DP
U1 – Immediate	Yes	No	No	Yes	Yes	Yes	No	No	Yes		
U2 – Delayed	Yes	No	No	Yes	Yes	Yes	No	No	Yes		
U3 – Postponed	Yes	No	No	Yes	Yes	Yes	No	No	Yes		
SF - Startup Failure	Yes	No	No	Yes	Yes	Yes	No	No	Yes		
MO – Maintenance	Yes	No	No	Yes	Yes	Yes	Yes	No	Yes		
PO – Planned	Yes	No	No	Yes	Yes	Yes	No	Yes	Yes		
ME – Maintenance Extension	Yes	No	No	Yes	Yes	Yes	No	No	Yes		
PE – Planned Extension	Yes	No	No	Yes	Yes	Yes	No	No	Yes		
RS – Reserve Shutdown	Yes	No	No	Yes	Yes	Yes	No	No	Yes		
D1 – Immediate										No	No
D2 – Delayed										No	No
D3 – Postponed										No	No
D4 – Maintenance										Yes	No
PD – Planned										No	Yes
DM – Maintenance Derating Extension										No	No
DP – Planned Derating Extension										No	No

IEEE Standard 762 does not recognize transition to/of deratings from/to other event types except as shown.

Figure III-3: Allowable Event Type Changes

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- Problem: You are trying to enter your GADS data for the month and you keep getting a strange error. You have checked and verified that all of the data was typed in correctly. You dig deeper and find that the error is due to an invalid event transition which you fix by correcting an event type.

- Question: Which event type transition is invalid?
  - A. PO to PE
  - B. D4 to DM
  - C. RS to U2
  - D. U3 to U1

- Answer: C. RS to U2

- Explanation: RS is an offline state while a U2 can only occur from an online state

- Details the primary cause of event
  - What caused the event?
  - It may not always be the root cause

- Cause Code (required)
  - 4-digit number
  - 1,700+ cause codes currently in GADS
  - Points to the equipment with a problem and/or cause of the event
  - Sets of cause codes are available for each type of unit
    - See DRI Appendices B01-15
    - Each appendices is indexed alphanumerically by system, component, and sub-component; some tables do not (yet) have sub-component data
    - The main index has a link to each table for easy access
    - Each table is indexed numerically by cause code
    - All System, Component, and Sub-Component names are standardized
    - Except for a few exceptions all cause code descriptions are standardized as well
    - Any applicable notes are located at the bottom of each table for easy reference
    - The entire document is searchable

- Sample cause code table
  - Unit Type   Fossil Steam
  - Appendices   B08
  - Table   16
  - System   Balance of Plant
  - Component   Condensate System
  - Sub-Component: Pumps, Piping, and Valves

UNIT TYPE	SYSTEM	COMPONENT	SUB-COMPONENT	CAUSE CODE	DESCRIPTION
Fossil-Steam	Balance of Plant	Condensate System	Pumps, Piping, and Valves	3300	Condensate water pre-treatment
Fossil-Steam	Balance of Plant	Condensate System	Pumps, Piping, and Valves	3310	Condensate/hotwell pumps
Fossil-Steam	Balance of Plant	Condensate System	Pumps, Piping, and Valves	3311	Condensate/hotwell pump motor
Fossil-Steam	Balance of Plant	Condensate System	Pumps, Piping, and Valves	3312	Condensate booster pump
Fossil-Steam	Balance of Plant	Condensate System	Pumps, Piping, and Valves	3313	Condensate booster pump motor
Fossil-Steam	Balance of Plant	Condensate System	Pumps, Piping, and Valves	3314	Condensate booster pump motor - variable speed
Fossil-Steam	Balance of Plant	Condensate System	Pumps, Piping, and Valves	3315	Condensate booster pump drive (other than 3313 and 3314)
Fossil-Steam	Balance of Plant	Condensate System	Pumps, Piping, and Valves	3320	Condensate piping
Fossil-Steam	Balance of Plant	Condensate System	Pumps, Piping, and Valves	3330	Condensate valves

TABLE B08-15 Balance of Plant: Condensate System - Pumps, Piping, and Valves

Notes: 1) For use with Unit Codes 100-199 and 600-649.

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Unit Type Name	Unit Type Code Ranges	Appendix
Combined Cycle GT units	300–399, 700–799	B01
Combined Cycle ST units	100–199, 600–649	B02
CoGeneration GT units	300–399, 700–799	B03
CoGeneration ST units	100–199, 600–649	B04
CoGeneration Block	800–899	B05
Combined Cycle Block	800–899	B06
Fluidized Bed	650–699	B07
Fossil-Steam	100–199, 600–649	B08
Gas Turbine/Jet Engine (Simple Cycle Operation)	300–399, 700–799	B09
Geothermal	800–899	B10
Internal Combustion/Reciprocating Engines	400–499	B11
Miscellaneous	800–899	B12
Multi-boiler/Multi-turbine	800–899	B13
Nuclear	200–299	B14
Pumped Storage/Hydro	500–599, 900–999	B15

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- Verbal Description (voluntary but **<u>strongly encouraged</u>**)
  - The verbal description can be the most helpful piece of information you provide if it is completed correctly
  - Comparing the verbal description to the cause code description is the only way to verify that the cause code is correct
  - While the cause code will point to the equipment with the problem or its cause, the verbal description can actually describe the event in detail
  - Your in-house system may allow you to write a book for a verbal description but only the first 86 characters get sent to NERC
    - Include the common unit name/number of the equipment and a concise description of the problem in the first 86 characters
      - Example: 1A BFPBP outboard journal bearing failure – housing cracked

Method 1	Method 2
• Cause Code 1000 • U1 Outage • The unit was brought off line due to a leak	• Cause Code 1000 • U1 Outage • Water wall tube leak, level 6, front panel, tubes 21-23 eroded from stuck soot blower. Replaced tubes, soot blower lance

- Problem: A combined cycle gas turbine must be brought off-line to repair a leak on the 1A HRSG HP drum door.

- Question: What cause code would you use to characterize the primary cause of the event?

- Answer: 0801 HP drum

- Explanation: The leaking drum door is part of the HP drum.

- Description: Replaced gasket on leaking 1A HRSG HP drum door

- Problem: A combined cycle gas turbine trips as the result of a HRSG HP drum level trip.

- Question: What cause code would you use to characterize the Primary cause of the event?

- Answer: Something other than 0801 HP drum

- Explanation: The drum is a metal cylinder with no moving parts. The change in water level in the drum is never caused by the drum. It is usually an operator issue, a BFP problem, a controls problem, or a valve issue.

- Description: Operator entered incorrect drum level set point in control system

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- Problem: A feral cat gets into the auxiliary bus room on Unit 2. While chasing a mouse it steps across two conductors creating a conductive path. While the electricians are tasked with cleaning up what's left of the cat and repairing the damage done to the auxiliary bus you are tasked with reporting the event to GADS.

- Question: Which cause code should you use?

  A. 3662   4000-7000 volt conductors and buses
  B. 3669   Other 4000-7000 volt problems
  C. 9040   Other catastrophe
  D. 9320   Other miscellaneous external problems
  E. 9720   Other safety problems

- Answer: E. 9720

- Explanation: The cause of the event was not due to voltage or external problems, nor to a catastrophe; it was due to poor housekeeping which is considered a safety problem

- Two alpha numeric character code used to describe the failure mode or reason for failure (Appendix J)
- Used by Compliance Enforcement Authority (CEA) and International Atomic Energy Agency (IAEA) as modifiers to codes for many years
- Increases the resources of cause codes without adding new codes
- Many Amplification Codes are the same as the Failure Mechanism codes (Appendix H)
- Only required for U1 events that occur from an online state

Amplification/Failure Code Examples

Amplification Code		Failure Code	
03	Arced/flashover – electrical	F030	Arced/flashover – electrical
06	Broken	F060	Broken
12	Clogged	F120	Clogged
28	Cracked	F280	Cracked
42	Error, operator	F420	Error, operator
53	Inspection	F530	Inspection
55	Loose	F550	Loose
72	Sticking	F720	Sticking
81	Torn	F810	Torn
42	Error, operator	FP00	Personnel error
R0	Fire	FR00	Fire
V0	Vibration (other)	FV00	Vibration

- Problem: A feral cat gets into the auxiliary bus room on Unit 2. While chasing a mouse it steps across two conductors creating a conductive path. While the electricians are tasked with cleaning up what's left of the cat and repairing the damage done to the auxiliary bus you are tasked with reporting the event to GADS.

- Question: Which amplification code should you use?
  - A.   08   Burned/fire damage - not initiated by component
  - B.   10   Carbon, covered
  - C.   30   Damaged, foreign object
  - D.   45   Explosion damage - not initiated by the component
  - E.   49   Grounded electrical component

- Answer: E. 49   Grounded electrical component

- Explanation: While the cat did catch fire, which covered the bus with carbon, and parts of the cat did do damage where they landed after the explosion, the problem was due to grounding

- Time: Work Started/Time: Work Ended (voluntary)
  - Use 24 hour clock
  - GADS uses the event start/end dates/times if not provided
- Event Contribution Code (voluntary)
  - Primary cause of event - 1
    - Forced outages have only one primary cause
    - PO and MO events can have multiple primary causes for PO and MO events
  - Contributed to primary cause of event - 2
    - Contributed but not primary
  - Work done during the event - 3
    - Worked on during event but did not initiate an event
  - After startup, delayed unit from reaching load point – 5
    - Used to track missed RFL

- Contributing Operating Condition (mandatory) – 2024

  - Provides context for conditions that led to the event.

  - If the event would have happened even if the extreme conditions did not exist, then report no operating condition.

  - Most events will occur during normal operating conditions, and no operating condition will be reported.

There are 15 contributing operating conditions:

- 0 No contributing condition
- 2 Drought or low water
- 4 Lightning
- 6 Earthquake
- 8 Hurricane
- A Hot weather
- C Turbulent wind
- E Wildlife

- 1 Flood or high water
- 3 Fire including wildfire
- 5 Geomagnetic disturbance
- 7 Tornado
- 9 Cold weather
- B Ice/Hail/Snow
- D Avalanche/landslide
- Z State of Emergency

Note: Hot and cold weather are relative to your location. Hot and cold in Minnesota are not the same as in Florida.

Problem:

- Question: A motor on a boiler feedwater pump located in an enclosed powerhouse fails during a polar vortex event when the ambient temperature is 15 degrees. What contributing operating condition would you use?

- Answer: No contributing condition. The failure was in an enclosed powerhouse and was not weather related. It would have happened anyway.

Problem:

- Question: Hurricane Leeth destroys half of your 2X1 combined cycle plant's cooling tower, and it is forced to run in a 1X1 condition while repairs are made. What contributing operating condition would you use?

- Answer: Hurricane. The failure is clearly related to the named storm.

Problem:

- Question: A tornado takes down transmission lines 5 miles from the plant, and the plant trips off-line. There is no damage to the plant. How should you code the event, and what contributing operating condition would you use?

- Answer:
  - The outage should be coded as a U1 with T1 amp code.
  - Choose cause code of 9300 for transmission.
  - The contributing operating condition should be tornado. The tornado did not damage the plant but did eliminate transmission.

Problem:

- Question: There has been little rain in your area, and the river that supplies cooling water to your plant is warmer than normal. Because of the river temperature, your plant cannot run at rated load without violating your permitted discharge temperature limit. What should you report? What contributing operating condition would you use?

- Answer:
  - A forced derate. The choice of D1, D2, or D3 would depend on your permit requirements.
  - Choose code 9660 for thermal discharge limits.
  - Choose drought as the contributing operating condition.

Problem:

- Question: A simple cycle gas turbine with interruptible gas is called to run on a 15F day. No gas is available, and the unit is not dual fuel. The unit cannot be started from RS. What should you report? What contributing operating condition would you use?

- Answer:
  - Report a U1 without an amp code.
  - Use cause code 9131 for interruptible gas.
  - Choose cold weather as the contributing operating condition.

Problem:

- Question: Your unit is on RS when Hurricane Steve comes ashore in south Texas, stalls, and dumps 30 inches of rain which floods your unit. What should you report? What contributing operating condition would you use?

- Answer:
  - Report a U1 without an amp code.
  - Use cause code 9035 for hurricane.
  - Choose hurricane as the contributing operating condition.
  - Choosing 9000 flood would be reasonable except there is a named storm and NERC may be trying to capture the resulting outages from Hurricane Steve.

Problem:

- Question: A power plant is derated for oil temperature on a FD fan bearing during a string of 95-100 degree days because the water entering the lube oil cooler is much higher than normal. What should you report? What contributing operating condition would you use?

- Answer:
  - Report a forced derating (probably D1).
  - Use cause code 1407 for FD fan lubrication system.
  - If you are in Minnesota, you may be outside your unit's design specification and choose to report hot weather as the contributing operating condition.
  - If you are in the southeast, Texas, or the desert southwest, this should be a normal operating condition and no condition would be selected.

- Problem: Your company has many gas turbines and it decides to start submitting its GADS data to an outside company for more in depth analysis. The analysis involves breaking the NERC cause codes down into about 5X as many. After the initial files are sent you start getting a lot of emails and phone calls requesting more information about a lot of the events.

- Question: What is wrong with your data?
  - A. The company can't handle records for additional work during an event
  - B. You don't do expanded data reporting on your gas turbines
  - C. The verbal description is missing or very poor

- Answer: C. The verbal description is missing or very poor

- Explanation: To break the cause codes out requires a good verbal description; NERC does not require it but others do

- Man Hours Worked (voluntary)
  - Enter the number of man-hours spent correcting the cause of the event or making repairs
  - Include hours expended for on-site repairs as well as any off-site work

- The 07 event data file has four (4) sections

  A - Event identification   C - Primary Cause of Event

  B - Event magnitude   D - Additional Work During Event (up to 48)

07 Event Data File Format

Record Code →   One (1) Event on One (1) Unit = 3 records + 2 Per Additional Work During Event = 99 Records Max   ← Record Number

07	Section A - Event Identification, col 1 - 19	Section B - Event Magnitude, col 20 - 82	01
07	Section A - Event Identification, col 1 - 19	Section C - Primary Cause of Event, col 20 - 82	02
07	Section A - Event Identification, col 1 - 19	Section C - Primary Cause of Event, col 20 - 82	03
07	Section A - Event Identification, col 1 - 19	Section D - Additional Work During Event, col 20 - 82	04
07	Section A - Event Identification, col 1 - 19	Section D - Additional Work During Event, col 20 - 82	05

- Section A - 7 data fields

- Section B - 6 data fields

- Section C - 9 data fields (Even), 3 data fields (Odd)

- Section D - 9 data fields (Even), 3 data fields (Odd)

- Even/Odd = Record Numbers for Sections C/D which have two records each, one even, one odd, up to 99 max

- Only the 07 event data file format is accepted by webE-GADS
  - To see if your program is using the correct format
    - Open the event file with Notepad
    - If the first two digits of the file are 07 you have the right file format
    - If the first two digits of the file are 97 then update your software

```
073873812017    370MB01010000          12312400      0           01
073873812017    370MB9991        1      0             Mothballed  02
073873822017    240MB01010000          12312400      0           01
073873822017    240MB9991        1      0             Mothballed  02
073873832017    200MB01010000          12312400      0           01
073873832017    200MB9991        1      0             Mothballed  02
```

- All event data files must be text files and have the file extension "txt" or it will not upload to webE-GADS

- Data is due 45 days after the end of each quarter year

- Monthly or year-to-date data is accepted by webE-GADS
  - Strongly recommend year-to-date submittals as it is the best way to capture changes

- The DRI contains rules about the data you are required to collect

  ■ These rules must be followed when collecting the GADS data

  ■ Example:

    ○ Outages can never overlap

      – An outage that starts during another outage will cause an error

- The DRI also contains rules about the format the data must be in to be submitted to GADS

  ■ These rules must be followed when creating the files you submit to GADS

  ■ Example:

    ○ The format in Section B of the 05 performance data file assumes two decimals in each of the six unit generation performance values reported in it

      – Data: 1234567.8   ends in .8, one decimal
      – File: 123456780   no decimal point, zero added for 2 decimals

- The two sets of rules are mutually exclusive

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- Problem: Unit A completes a planned outage. The critical path involved replacing the generator but there were 40 other items worked on during the outage and your boss wants you to include them for the record

- Question: How many 07 event data file records will be required for the planned outage event plus the additional 40 items?
  A. 41
  B. 43
  C. 83
  D. 81

- Answer: C. 83

- Explanation: # records = 3 + 2 per additional work during event = 3 + 2*40 = 83; the maximum is 99 records

07 Event Data File: Section A - Event Identification, Record 01

Data Field	Columns	07						
Record Code	01-02							
Utility (Company) Code	03-05							
Unit Code	06-08							
Year	09-12							
Event Number	13-16							
Report Revision Code	17							
Event Type	18-19							

Required	(yellow)
Voluntary	(green)
Blank	(black)

- Section A is used to identify the event
  - Which utility-unit did the event occur on?
  - What type of event was it?
- There are seven (7) data fields per record as shown above

07 Event Data File: Section B - Event Magnitude, Record 01

Data Field	Columns
Start of Event	20-27
Blank Columns	28-47
End of Event	48-55
Gross Available Capacity	56-61
Net Available Capacity	62-67
Blank Columns	68
Dominant Derating Code	69
Blank Columns	70-80
Record Number	81-82

Required	
Voluntary	
Blank	

- Section B is used to describe the impact of the event
  - How long did the event last?
  - How large an impact did the event have on unit capacity?
- There are six (6) data fields per record as shown above

07 Event Data File: Section C - Primary Cause of Event, Record 02

Data Field	Columns										02
Cause Code	20–23										
Amplification Code	24–25										
Time Work Started	26–33										
Time Work Ended	34–41										
Blank Columns	42–43										
Event Contribution Code	44										
Problem Alert	45										
Man-hours Worked	46–49										
Verbal Description	50–80										
Record Number	81–82										

Required
Voluntary
Blank

07 Event Data File: Section C - Primary Cause of Event, Record 03

Data Field	Columns				03
Cause Code	20–23				
Blank Columns	24–25				
Verbal Description	26–80				
Record Number	81–82				

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Section D - Additional Work During Event, col 20 - 82	04
Section D - Additional Work During Event, col 20 - 82	05

- Reporting additional work during the event is voluntary

- Same record layout as Section C, the primary cause of event

- Typically used to report
  - Factors contributing to the cause of the event
  - Additional work
  - Factors affecting startup/ramp down

- Also used to document other major equipment items worked on during outages

- Up to 48 additional work during event records allowed
  - Record Numbers would be from 04 to 99 max

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07 Event Data File: Section C - Primary Cause of Event w/Expanded Reporting for GT/JE (*), Record 02

Data Field	Columns
Cause Code	20-23
Amplification Code	24-25
Time Work Started	26-33
Time Work Ended	34-41
Blank Columns	42-43
Event Contribution Code	44
Problem Alert	45
Man-hours Worked	46-49
Failure Mechanism Code *	50-53
Trip Mechanism *	54
Cumulative Fired Hours *	55-60
Cumulative Engine Starts *	61-65
Verbal Description	66-80
Record Number	81-82

Legend:
- Required
- Voluntary
- Blank

- Expanded data reporting is available for owners/operators of gas turbine/jet engines. Four additional data fields as shown above by an asterisk (*) can be reported in Section C.

- Expanded data reporting is voluntary
- It is for gas turbines and jet engines only
  - Optional but strongly encouraged
- Failure mechanism code
- Trip mechanism (manual or auto)
- Cumulative fired hours at time of event
- Cumulative engine starts at time of event
- Note: the expanded reporting data fields take up extra space in Section C of the 07 event data file reducing the length of the verbal description for the primary cause of the event from 86 to 70 characters; the length of the verbal description for additional work during event records remains at 86 characters

Questions and Answers

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