



# GADS Section 1600 Data Request: Comments and Responses

the reliability of the bulluly 2011 Wer system

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# **Table of Contents**

Executive Summary	. 1
Introduction	. 4
Comments and Responses	. 7

## **Executive Summary**

NERC engaged industry through the Planning Committee, NERC's roster of industry contacts, the North American Generator Forum (NATF) and the Electric Power Supply Association (EPSA). Furthermore, NERC held a webinar detailing the data request encouraging industry comment in support of the public posting per NERC's Rules of Procedure, Section 1600 Request for Data and Information. This outreach resulted in broad industry responses with 39 entities providing helpful comments and suggestions. Each comment was evaluated and discussed by the GADS Task Force (GADSTF) leadership.

One common concern by respondents involved the sizeable amount of design data requested. In the initial Report, 18 pages summarized more than a 1,000 design fields for the 10 different types of conventional generating units currently collected on a voluntary basis. After reviewing these comments considering the goals of mandatory information and data collection to be focused on bulk power system reliability considerations, the GADSTF leadership recommended design data requirements be reduced to nine elements per unit, regardless of type. The nine design data fields were chosen for two specific reasons:

- Allowing GADS data to be matched with information collected in the Transmission Availability Data System (TADS). One goal of NERC is to allow the GADS and TADS databases to interact with each other. Certain data fields are necessary to allow generating units to be located in areas where transmission lines are found. Specific fields allow that interaction.
- 2. Editing event and performance data to ensure quality of information is collected.

The nine design data fields are:

- GADS utility code (assigned by GADS Services)
- GADS unit code (assigned by the reporting company following the guidelines in Appendix C of the GADS Data Reporting Instructions)
- NERC Regional entity where the unit is located
- Name of the unit
- Commercial operating date
- Type of generating unit (fossil, combined cycle, etc.)
- MW size (nameplate)
- State or province location of the unit
- Energy Information Administration (EIA) Plant number (US units only)

Another common concern addressed the mega-volt-ampere (MVA) size of the units being considered. There are a number of small hydro, gas turbine and other unit types that currently do not voluntarily report availability information to GADS. Some units are old and in remote locations. The requisite expense and time to report these units to GADS have not been budgeted for 2011. Therefore, the GADSTF leadership decided to require generating units report in two "phase-in" steps. New units in commercial operation from 2000-2010 are:

**TABLE 1: New Units in Commercial Operation from 2000 - 2010** 

MW Size Range	Percent of New Reported Units	Number of units
< 20 MW	0.3	4
20 to < 50 MW	17.42	229
50 to < 75 MW	8.14	107
75 to < 100 MW	12.16	160

**TABLE 2: Increased Amount of Data by Region** 

NERC Regions	20 MW+	50 MW+	75 MW+	100 MW+
FRCC	98.55%	93.25%	86.03%	83.06%
MRO	93.80%	85.20%	77.30%	71.07%
NPCC	97.24%	92.40%	89.68%	87.06%
RFC	98.59%	93.95%	90.70%	86.42%
SERC	98.03%	93.47%	89.43%	83.66%
SPP	96.75%	89.03%	80.24%	74.28%
TRE	99.46%	97.34%	94.21%	92.05%
WECC	98.26%	90.57%	84.89%	77.36%
Percent of total	97.93%	92.49%	87.95%	82.98%

Based on additional analyses, the GADSTF recommended generator operators on the NERC Compliance Registry report generating units according to the following schedule:

- Starting January 1, 2012, all generating units <u>50 MW and larger nameplate</u> are required to report to NERC. The revised design data will be completed by December 31, 2011. Event and performance data for the first quarter of 2012 will be to NERC by April 30, 2012.
- Starting January 1, 2013, all generating units <u>20 MW and larger nameplate</u> are required to report to NERC. The revised design data will be completed by December 31, 2012. Event and performance data for the first quarter of 2013 will need to be reported to NERC by April 30, 2013.

 All generating units under 20 MW nameplates will be invited to become part of NERC GADS on a voluntary basis. All smaller than 20 MW units which currently report to GADS on a voluntary basis are encouraged to continue reporting to GADS.

"MW Nameplate" will be calculated by the MVA recorded on the unit's generator times the power factor. For example, a 100 MVA unit with a 0.90 power factor would be 90 MW.

No comments were received regarding the event and performance data collection fields recommended by the GADSTF. In addition, no comments were received on any other of the GADSTF recommendations.

In summary, the GADSTF proposes that the aforementioned recommendation be changed to limit the design data to the nine aforementioned fields. Further, to accommodate comments regards unit size and timing, the generating units be phased in with 50 MW and larger starting January 1, 2012 and 20 MW and larger starting January 1, 2013.

### Introduction

On March 21, 2011, NERC posted a request for public response regarding mandatory Generating Availability Data System (GADS) reporting for all conventional generating units 20 MVA or larger in North America<sup>1</sup>. The completion data for public response was May 5, 2011. At the close of the 45-day public comment period, NERC received 39 comments:

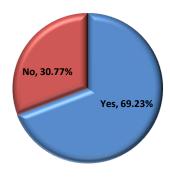
- 21 responses from Investor-Owned Utilities
- 7 responses from Independent Power Producers
- 3 responses from municipal companies
- 2 responses from Public Utility Districts
- 2 responses from consultants
- 2 responses from Independent System Operators
- 1 response from a public utility commission
- 1 response from a cooperative utility

The following is a summary set of public comments:

1. If you are a Generator Owner on the NERC Compliance Registry, do you currently collect Generating Availability Data System (GADS) event-, performance- and design-type information, whether you do or do not report such data to NERC? If "no", please explain.

FIGURE 1: DATA COLLECTION

Q1: Collect GADS Data?

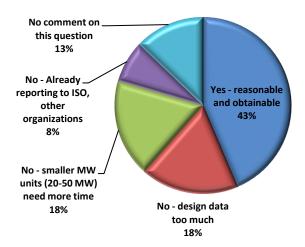


 $<sup>^1 \, \</sup>text{To view the GADSTF report and the Section 1600 request for comments, please go to} \, \, \underline{\text{http://www.nerc.com/filez/gadstf.html}} \, .$ 

2. Is the data being requested in Section A of this data request reasonable and obtainable? If "no", please explain.

**FIGURE 2: DATA REQUEST** 

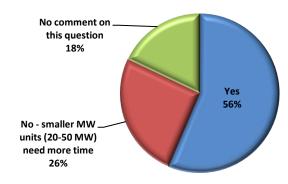
**Q2: Section A - Data Request** 



3. Is the data request schedule in Section A of this data request reasonable? If "no" please explain.

**FIGURE 3: DATA REQUEST SCHEDULE** 

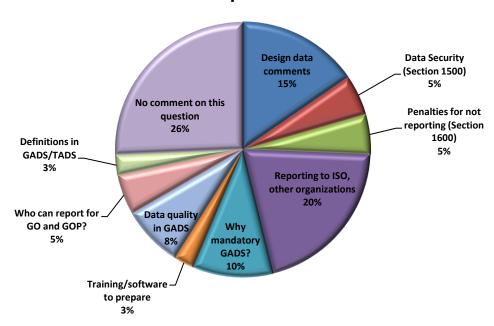
Q3: Section A Data Request Schedule



4. Please provide any other comments you may have about this data request.

FIGURE 4: ADDITIONAL COMMENTS

# Q4: Additional Comments on the Data Request %



# Comments and Responses

The Section 1600 requests include the four specific questions in the Section A of the Data Request. All comments have been considered and responses are provided below.

1. If you are a Generator Owner on the NERC Compliance Registry, do you currently collect Generating Availability Data System (GADS) event-, performance- and design-type information, whether you do or do not report such data to NERC? If "no", please explain.

**TABLE 3: DATA COLLECTION COMMENTS** 

Organization/Comment	GADSTF Response
<u>Calpine Corporation</u> : Yes, we currently collect GADS data (on the unit level, not the block level). We do not necessarily collect the design data. We do already voluntarily submit GADS data to NERC quarterly.	Reports GADS. No comment.
<u>Dominion Power</u> : Yes. Dominion currently collects most but not all of the GADS information as described above for all of its generators.	
<u>Minnesota Power</u> : Minnesota Power currently collects event and performance data on 30% of its fleet, which consists of steam, hydro, biomass and wind generators. Minnesota Power submits this data to NERC for	
Minnesota Power's largest thermal and hydro units only. These units constitute about 20% of the units which would fall under mandatory reporting. Minnesota Power limits the amount of data submitted	
to NERC in order to minimize the release of confidential information and minimize effort required to gather the significant amount of information required for submittal on a monthly basis. Design data	
has not been collected due to the volume of work this requires and a concern for providing this type of information to external entities due to its sensitive nature.	
Luminant Generating Company LLC: Yes. Luminant currently collects GADS event, performance, and design-type information and presently voluntarily reports such data to NERC.	
<u>PacifiCorp</u> : Yes, PacifiCorp has voluntarily submitted thermal generation data in response to GADS requests	

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Organization/Comment  for many years. Unfortunately, NERC's request for comment on March 22, 2011 was the first formal announcement that NERC was requiring mandatory reporting for hydro plants. PacifiCorp currently collects some (not all) of the data from a majority of PacifiCorp hydro facilities that will be required for reporting on December 31, 2011.  NextEra Energy: Yes, but not all data for all sites. GADS event, performance, and design-type information is gathered for most sites. Not all of the proposed "required" fields in the performance category are gathered from all sites.	GADSTF Response
Brookfield Renewable Power: Yes. Brookfield Renewable Power inc. (BRP) does report data to GADS for almost all of its generating stations. The reason why a few stations are not reporting their event and performance data to NERC is that the collection of such data is not possible at this time (cannot gather data on a unit basis).	
<u>Seattle Light</u> : Yes. We currently collect and report Generating Availability Data System (GADS) events and performance data.	
PPL Corporation: Yes.	
<u>Tenaska</u> : Yes.	
<u>FirstEnergy</u> : Yes.	
Progress Energy: Yes.	
Arizona Electric Power Coop., Inc. Yes. The company I presently work for currently collects GADS event, performance and design-type information and report as well.	
<u>Chelan County Public Utility District</u> . Yes. CHPD collects much data similar to that used by GADS although it may not exactly match the format or criteria set by GADS.	
Cogentrix Virginia Leasing Corporation (CVLC). Yes. Cogentrix Virginia Leasing Corporation (CVLC) does collect data identifying event, performance, and	

Organization/Comment	GADSTF Response
design-type information. This data is however not currently being reported to NERC. The data is gathered and submitted to CVLC's power off-taker in the form of a summary of the unit's status monthly.	CABOTA RESPONSE
Colorado Springs Utilities. Yes.	
LG&E and KU Energy LLC. Yes.	
Constellation Energy. Yes.	
<u>Consumers Energy</u> . Yes - we do collect the data and report it to NERC.	
Entergy. Yes.	
Massachusetts Municipal Wholesale Electric Co.  MMWEC currently collects GADS event data and is required to submit the data monthly to ISO-NE.  MMWEC does not submit performance data. MMWEC does not report GADS data directly to NERC.	
Pend Oreille County Public Utility District. Yes.	
<u>PSEG Services</u> . Yes. PSEG collects GADS data. However, substantial portions of the design data are not currently captured. This is especially true for older units.	
New York Power Authority. Yes. Currently submit the same data to NERC and NYISO.	
Southwest Generation. Harbor Cogeneration Company, LLC (NCR05177) is required by the CPUC to report GADS. The remaining Southwest Generation entities collect the data for other reports (see below).	
Tucson Electric Power Company. Tucson Electric Power Company ("TEPC") is a generator owner on the NERC Compliance registry. TEPC collects the Generating Availability Data System ("GADS") event, performance, and design-type information.	
We Energies. Yes, Wisconsin Electric does currently collects and report GADS events, performance and design-type information.	

Organization/Comment	GADSTF Response
Midwest ISO: No.	These companies do not currently report to
	GADS. However, they collect GADS-type data
<u>California Public Utilities Commission</u> : No.	for various uses.
Manitoba Hydro: No. At present Manitoba Hydro reports limited NERC GADS data to MISO for units larger than 10MW. GADS is not reported for units less than 10MW. The following data is not collected:	
a) Design Data: None;	
b) Event records: all required data except Cause Code Amplification Code and none of the voluntary data.	
c) Performance records: all records except Gross Generation and Primary Fuel Quality records.	
Redding Electric Utility. No. Redding does not currently collect our generation data per GADS requirements or report it to NERC. The amount of data requested by GADS is far beyond the amount of data we feel is appropriate to document and track for the Level of Service requirements that has been established by our local regulatory authority.	
Idaho Power. The Idaho Power Company collects some of the requested event, performance, and design data. However, the collected data is distributed and managed in and by different departments throughout Idaho Power Company. The more in depth design data is buried in technical manuals supplied by the vendors at the time of plant construction and for the older plants may not be readily available.	
ISO-New England. No.	
Puget Sound Energy. Not all GADS data. Most of the event and performance GADS data is collected to monitor generating unit performance including outages, starts, and gross/net generation. However, design-type information is not collected or maintained in the GADS format.	
Ingleside Cogeneration LP: No. Some of the data elements under the unit design section are collected for the Public Utility Commission. Others are provided to the Regional Entity's designees as required under	Does not report GADS data. GADSTF report states that NERC will work with ISO, balancing authorities and other groups so data is collected once for all groups. Currently, this

## Organization/Comment GADSTF Response

the MOD standards. None use the exact GADS format however. The data elements under the event section are reported to the regional Balancing Authority/ISO into their outage database. This includes many of the same items required by GADS to capture planned outages, forced outages, and deratings. However, the cause codes are not the same.

Generator availability, capacity factor, and other performance data elements are collected and provided to the ISO and the PUC on a regular basis. They do not use the same availability and outage factors specified in the GADS instruction guide.

<u>Entegra Power</u>: No. Most of the important data you are requesting is already being provided to the TOPs, BAs, RCs, and Planning Authorities. Why can't NERC use that Regional Data, again especially in these critical economic times?

Encore Consulting: No; these comments are based on past experience managing reporting compliance for plants. At the time, we reported metric data as best we could, but operations personnel really struggled with it. Our staff manually prepared metrics. Operations were responsible for event reporting, which they resented greatly, and typically did not do well. Quality of event reporting data was poor partly due to perceptions, partly due to operating personnel disinterest and lack of technical reporting skills. Training had only limited effectiveness making that job easier.

<u>Power & Pins Consulting</u>. No. Is a GADS reporting consultant.

information is not shared with NERC.

NERC will add a designated reporting entity function so organizations can report GADS information on behalf of their stakeholders.

Does not collect GADS data, but work with companies that are NERC stakeholders. Consulting company. No comment.

2. Is the data being requested in Section A of this data request reasonable and obtainable? If "no", please explain.

#### TABLE 4: DATA REQUEST COMMENTS

#### Organization/Comment

<u>Calpine Corporation</u>: Your design data requests are so extensive that I don't believe we could fulfill them even if we tried. Please pare them down to something reasonable that can actually be accomplished.

Luminant Generating Company LLC: The data referenced in Section A is obtainable, but not all of it is reasonable. Specifically, the vast majority of the Design information specified to be reported pursuant to Appendix I would not reasonably aid NERC in its assessment of either of risk or reliability. As discussed below, requiring such data to be reported would exceed the scope of NERC's authority under the Federal Power Act. Reportable Design data should be limited to data that has a tangible—not attenuated—connection to the assessment of risk and reliability. Accordingly, the Design data identified in Appendix I to be reported should be limited to Identification, Date the Unit Entered Service, Nameplate Power Factor, and Capacity Factor.

The GADS Proposal explains that NERC's proposed mandatory reporting of GADS data stems from NERC's obligations under Section 215 of the Federal Power Act, as authorized by Section 39.2(d) of the FERC's regulations.<sup>2</sup> The Proposal also explains that GADS data will enable NERC to perform a host of functions, many of which have a questionable link to NERC's stated justification for requiring mandatory reporting. For example, the GADS Proposal states that GADS data will enable NERC to analyze equipment and characteristics but does not articulate why this analysis, absent any evidence of a Reliability Standard violation, would assist NERC in its obligations to carry out its obligations set forth in Section 215 of the Federal Power Act.

#### **GADSTF Response**

Maintaining and improving the reliability of the bulk power system is outlined in the Energy Policy Act of 2005, Section 215. Both the bulk transmission and generating facilities are part of the bulk power system. There is a very important need to provide tools for power plants to analyze and improve their facilities by learning from other generating companies. The benchmarking tools provided by GADS for both design and operating information is used to improve the reliability of the bulk power system.

The proposed design data in the GADSTF reports was carefully reviewed by a group of reliability experts who consider the data important for filtering the GADS data for reliability needs. The upgrades to the fossil steam and combined cycle units were performed by an industry committee who uses GADS extensively to improve the quality and reliability of the power plant.

Not all NERC committees will use design information for their specific work. However, there are others involved in filtering GADS data by both operating and physical characteristics for benchmarking and plant improvement projects.

The GADSTF leadership and NERC staff discussed this matter and propose that the design data be limited to just the nine items:

- GADS utility code (assigned by GADS Services)
- GADS unit code (assigned by the reporting company following the guidelines in Appendix C of the GADS Data Reporting Instructions.)
- NERC Regional entity where the unit is located
- Name of the unit
- Commercial operating date
- Type of generating unit (fossil, combined cycle, etc.)

<sup>&</sup>lt;sup>2</sup> GADS Proposal at 2.

Specifically, as the Electric Reliability Organization approved by the FERC under § 215(c) of the Federal Power Act, NERC is responsible for overseeing the reliability of the bulk power system through the development and enforcement of mandatory Reliability Standards subject to the FERC's oversight.<sup>3</sup> However, the majority of the Design data specified for reporting under Appendix I is so attenuated to the goal of reliability oversight required reporting would exceed boundaries of NERC's jurisdiction. Stated plainly, there is not a specific reliability goal that would be served by NERC requiring the reporting of Design data related to the details regarding the construction of generating units.

Design data related to the specifics of various components of a facility (e.g., manufacturers of components) is not relevant to NERC's assessment of risk or reliability. This is especially the case when there is no evidence that a specific component part caused the event being reported. Notably, the GADS Proposal contains 29 pages describing the Design data to be reported but only 2 pages that set forth reportable Event and Performance data when the latter two categories are directly related to impacts on reliability. Accordingly, mandatory reportable Design data should be limited to information that would give meaningful context to the Event and Performance being reported, which Identification, Date the Unit Entered Service (to show age trends), Nameplate Power Factor, and Capacity Factor. Mandatory reporting of detailed Design data regarding the specific components of generating units is beyond NERC's jurisdiction.

<u>Tenaska</u>: The question about whether the data request is reasonable depends on the rationale for acquiring the data. While acquiring the data from

#### **GADSTF** Response

- MW size (nameplate)
- State or province location of the unit.
- Energy Information Administration (EIA) Plant number.

The GADSTF will continue to review and will recommend to the Planning Committee any additional design data needed in the future.

Design data already in GADS will be transferred to the new design data collection software. GADS is not asking for original design specifications but current design in its design database – which is voluntary.

The nine design data fields for units 50 MW and larger are desired by December 31, 2011. Conventional unit design information for units 20-49 MW are needed by December 31, 2012.

<sup>&</sup>lt;sup>3</sup> 16 U.S.C. § 824o(c) (providing that the Federal Energy Regulatory Commission may certify a person as the Electric Reliability Organization to develop and enforce reliability standards that provide for an adequate level of reliability of the bulk-power system); see also Order Certifying North American Electric Reliability Corporation as the Electric Reliability Organization and Ordering Compliance Filing, 116 FERC ¶ 61,062 (2006).

#### **Organization/Comment GADSTF** Response 100% of the generator owners connected to the BES would arguably improve the database, it's not clear at all that the increased value to generator owners, or the industry as a whole, is commensurate with making the data submittal mandatory. While some of the data may be relevant to generator owners and manufacturers who wish to understand whether there is a common problem with a particular type of unit/piece of equipment (i.e. the metric associated with power plant benchmarking), it is questionable whether NERC should use its Rule 1600 authority to obtain data for that purpose. The remaining reliability metrics described in Section A can be derived with far less data than the data required in Appendix I. One does not need to know the Flue Gas Desulfurization Manufacturer, for example, in order calculate LOLE, reserve margins, or evaluate the impact of transmission events. Caution also needs to be exercised with any data that is collected. When creating a mandatory requirement for historical data not all generating units are, or will be continued to be, owned by the original owners. We would suggest that a new owner only be required to provide data from the time it acquires the unit. Requiring a new owner to use reasonable efforts to acquire historical data may be acceptable so long as there is no penalty if the new owner fails to obtain any historical data. Finally, historical design data may not provide any relevance to future reliability trends if the units have been modified or altered during their lifetime. FirstEnergy: In Section A Item 1 regarding the request for design records and characteristics for equipment analysis and projected performance, we feel these activities are not in accordance with the mission of ensuring bulk power system The detailed level of information reliability. referenced in this section (Appendix E) would not enhance the reliability of the bulk power system and may pose a distraction for personnel tasked with adherence to bulk power reliability standards. The level of design detail will require a large effort

Organization/Comment	GADSTF Response
to supply, and a larger ongoing effort to maintain the accuracy of the database as changes and modifications are made to the systems. Also, some of the detailed information requested is primarily tracked in other systems/processes and this duplication of effort or the increase of possibility of data inconsistencies between the systems is greatly increased. Regarding Section A Item 5 which addresses the confidentiality of this information, FirstEnergy has concerns the information is being provided outside the primary mission of bulk power system reliability. NERC is supplying the data in their PC-GAR product. Although there are assurances that the data cannot be focused on a certain plant or unit there are concerns as to the availability of this information to non-Generator Operators or being "data mined" to narrow performance data to a plant or unit level. Also, other regulatory agencies, i.e. the EPA, are referencing NERC GADS data in proposed legislation. NERC should make a concerted effort to appropriately limit the mandatory reporting requirements to information that further supports their role as the ERO. As proposed, the more detailed information requested presents more exposure of commercial aspects of power plant operations. In relation to Section A, Item 6 addressing the relative burden imposed on the Generator Operators, the preceding comments address the view that some of the requests would greatly increase the amount of effort and validation of the information of this process	
NextEra Energy: The amount of detailed equipment design data requested along with its periodic maintenance will impose a resource burden.	
Chelan County Public Utility District. While most of the design data can be readily obtained on most units, it is not available for older units (early 20th century). Event and performance data is available, although it is not necessarily in the format requested for GADS. We also note that definitions vary widely from one utility and agency to the	

**GADSTF** Response

next. For example, "failed start" and "forced outage" are defined in a variety of ways by different entities.

CHPD believes it is not reasonable to request the data specified in Section A. Most of it is already provided to the region (WECC). The data provided to WECC is more useful than that for GADS in many cases. It is unnecessarily burdensome for entities to be required to provide data to WECC and to NERC regarding the same equipment. The regions understand their systems and equipment and provide analysis including measuring the severity risk effects from transmission/generation outages. This is a primary need stated by NERC and provides an example of how working with the regions could meet the needs of the agency. The regions are also well focused on bulk power system reliability improvement. We see no benefit to duplicate efforts by NERC.

Constellation Energy. With the exception of historical data, the data requested appears to be reasonable. Mandatory responsibility for data when a unit changes hands raises concerns. New owners can only be responsible for data collected once they own the unit. In addition, requirements for historical design data potentially impose an unreasonable burden for data reporting with questionable relevance to reliability. If historical design data already exists in GADS, then NERC should be responsible for transferring that design data from the old owner to the new owner. If there is no data in GADS, then NERC should request the current design information, not the original design specs.

Minnesota Power: Submission of the data being requested is not reasonable in that it is in conflict with confidentiality requirements which exist in Minnesota Power's fuel, transportation and vendor contracts. Based on experience with the existing GADS system, Minnesota Power believes that the confidential information submitted to NERC is accessible to other Registered Entities who use pc-GAR and is concerned that existing systems

GADSTF did not review individual contracts by various operating companies because it was not asked to do so. The GADS data is for reliability work and not marketing matters.

The GADS event and performance data has been confidential and remains confidential as per the GADS Data Release Guidelines for the last 30 years. Under Section 1500 of the NERC *Rules of Procedure*, the GADS data will again be

#### **GADSTF Response Organization/Comment** are not robust enough to alleviate concerns confidential as it is now. No competitor will have competitor intelligence regarding and access to your data. confidentiality. In addition, the level of detail is unreasonable and does not merely involve a single design report as the Request for Public Comment suggests, but would also require regular updates in order to maintain reliable information. The effort it would take to keep design data accurate due to the amount of redesign on a large number of units would render the information unreliable. PacifiCorp: The requested data is obtainable, see The GADS Data Reporting Instructions (DRI) response to #3. However, the reasonableness of required all generating companies who wished to the request is complicated by inconsistencies in report to GADS to report all their units. If GADS the unit reporting parameters and the lack of clear becomes mandatory, then the GADS DRI will be instructions on the treatment of specific hydro modified to reflect the same recommendations by operational issues. Examples: - Inconsistencies--the NERC Planning Committee and NERC Board of The threshold compliance registry criteria cited Trustees for the generator sizes, generator types, within the March 21, 2011, Request for Public etc. Comment on Data Request for Generating Availability Data System: Mandatory Reporting of There is uniformity needed and already Conventional Generation Performance Data established by the many hydro units reported to indicated that reporting be confined to individual GADS – 1,084 hydro units reporting to GADS in generating units in excess of 20 MVA and 2009. We expect all new hydro units reporting to generating plant/facility in excess of 75 MVA. This GADS will follow the same examples as those is in contradiction to the Data Reporting hydro units already in the database. Instructions (Effective January 2011) in both the unit size and the units of measure, MW versus MVA. - Hydro operational issues-- Hydro unit significant reporting creates uncertainty concerning unit restrictions. It is assumed that restrictions to unit capacity due to river flow or reservoir elevation are not requirements as they would create an infinite number of events, be cost prohibitive to document and likely would not provide any meaningful information. However, because these factors are routinely the primary influence on hydro plant capacity, reporting on other equipment restrictions would usually give the false impression that such restrictions control unit output. It is recommended that hydro units report only on planned and forced outage. The value of submitted information will questionable until a process to resolve these issues

is established.

Ingleside Cogeneration LP: The data requested in Section A can be located and provided, but we would like to see a commitment from NERC that a single collection process across regulators be seriously addressed. At the high level, the requests overlap significantly; but at the granular level, they are effectively incompatible. Whether the differences lie in the formats, the cause codes, or the performance factors; it is time to come to an agreement on a common data set. This may be achievable in stages — perhaps starting with a single data entry tool.

Massachusetts Municipal Wholesale Electric Co.: The required data is obtainable and reasonable as long as it is required only for generators larger than 20 MVA and if it is not duplicating existing data submission efforts to the ISO.

<u>Southwest Generation:</u> Qualified yes (see below). Collecting this data serves a useful purpose; however, as explained below, the redundant reporting requirements of this type of information to multiple regulatory bodies is administratively unreasonable and burdensome particularly for smaller GO/GOPs.

Encore Consulting: It depends on the size of the facility, how much is request and how simple the format is. Without even explaining the format of the data requested, the answer to this question could easily be "no." Having developed this data or managed its submittal in for many years a traditional utility, my experience has been that systems may not be available to collect useful data, personnel may not be trained or skilled enough, and that data formatting presentation may not be simple or standardized enough to the minimize burden and thereby obtain useful data. In that event, the information sought may not be obtainable for some classes of generators. The lack of reporting in the past probably reflects (1) onsite staff's dislike of reporting requirements, (3) the perception of the onerous burden and methods required, and (3) difficulty doing specific manually required calculations involved making subjective

#### **GADSTF** Response

NERC is currently working with ISO and associations to identify options that reduce double reporting of data. There are talks underway at this point.

NERC will add a designated reporting entity function so organizations can report GADS information on behalf of their stakeholders.

In the future, perhaps NERC can be the filtering source for many reports completed by the operators to governmental agencies.

The formats and processes for data collection have been in place for many years. There are many owners who use GADS data but don't report to GADS. They require collecting and managing outage information so they can justify new equipment, repairs, changing operational procedures, and other important issues that can only come from diligent data reporting. We can only suggest that there is a need to prove that data reporting is important to make the operator's job easier.

The data collection instructions are updated annually and are located on GADS website at <a href="http://www.nerc.com/page.php?cid=4|43|45">http://www.nerc.com/page.php?cid=4|43|45</a>. As part of the GADS Data Reporting Instructions (DRI) are industry-recognized definitions and equations for measuring unit availability and reliability from the captured, required event and performance records.

Organization/Comment	GADSTF Response
interpretations to collect and submit.	
In the past, generators submitted a significant amount of erroneous or incorrect information to GADS. In most instances, I believe that reflects the perceived burden and preference at generating stations to do "real work." There are two reporting dimensions: (1) metrics and (2) event information.	
Generators must develop metrics like availability of forced outage rate. Ideally, today that would be fully automated and require no manual calculation.	
Event information includes fault determination information about the cause(s). In many instances, operating personnel and their support know causes only by inference; the true nature of an event may never be fully transparent to the person who must report. This is especially true identifying causes. "Root causes," especially are difficult to develop and requires a combination of engineering plant familiarity and persist sleuthing. Operators (real people) sometimes make errors and won't disclose an action. In these cases, reports need to submit the best information available in a timely way. Developing event information is judgmental, tedious and therefore needs to be kept simple and timely. Event reporting must occur on the same shift events occur, or within 4 hours, whichever is less. Updating reports with cause information should follow as soon as possible. Some legacy systems are extremely difficult for operating staffs to use.  Whatever methods NERC develops, they should validate them by observing representative groups of personal collecting and submitting the data at real sites. That way they (NERC) will see the actual problems and challenges and be able to make appropriate adjustments and changes based on those.	

Organization/Comment	GADSTF Response
Midwest ISO: Not applicable	No comments.
<u>California Public Utilities Commission</u> : (No comment.)	
Entegra Power: (No comment provided.)	
ISO-New England: No comment.	
Power & Pins Consulting: No comment.	
PPL Corporation: Yes	No comments.
<u>Dominion Power</u> : Yes	
Manitoba Hydro: Yes	
Southern California Edison Co.: Yes	
Brookfield Renewable Power: BRP already collects the Design, Event and Performance data for almost all of its generating station. The request is reasonable and obtainable.	
Progress Energy: Yes	
<u>Seattle Light</u> : We have no issues with the current reporting format.	
Arizona Electric Power Coop., Inc.: Data requested in Section A is reasonable and obtainable.	
Cogentrix Virginia Leasing Corporation: Yes, data request is reasonable as long as the design data is populated throughout the quarterly submissions until facility modifications are conducted.	
Colorado Springs Utilities: Yes.	
LG&E and KU Energy LLC: Yes.	
<u>Consumers Energy:</u> Yes – the data is reasonable and obtainable.	
Entergy: Yes.	

Organization/Comment	GADSTF Response
Pend Oreille County Public Utility District: Yes.	GABSTI Response
New York Power Authority: Yes. Currently submit the same data to NERC and NYISO.  Tucson Electric Power Company: Yes, the data request is reasonable and obtainable.  We Energies: Yes, if voluntary data remains as voluntary.	
Redding Electric Utility: The data being requested may be reasonable and obtainable per the future planning needs of NERC and the industry, however it is not reasonable to require small generation owners to change our data collection methods and requirements The data currently being collected is sufficient for the local generator operators and does directly affect the reliable operation of the BES. To make this mandatory and require small entities to comply is an overreach of FERC jurisdiction over elements and systems necessary to operate an interconnection transmission system".	NERC will phase in data collection based on unit size. This phase-in approach of the unit size will provide time for small units to adapt and prepare for GADS data reporting. Units 50 MW and larger are due January 1, 2012; units 20 MW and larger are due January 1, 2013.  The design data was reduced to 9 elements from 290 elements in the fossil design fields, a one-time entry. The remainder of the design data will be voluntary.
Idaho Power: Some of the data is obtainable; however, reasonableness of the data is questionable. The detailed design data being requested appears to be well beyond a reasonable request and will take many labor hours to gather and input into the GADS form. A good share of the plant data is already submitted to the DOE on the EIA-860 form which NERC also receives. The request for more detailed design information made under the flag of higher reliability will have a limited benefit at a high dollar cost to the utilities. The benefit of this higher reliability as put forth by the drafting team includes:	
Understanding the performance of existing and new resource technologies is essential to comprehend the reliability of the projected bulk power system in North America;      Power plant benchmarking equipment analysis.	
2. Power plant benchmarking, equipment analysis, design characteristics, projected performance, avoid long-term equipment/ unit failures, etc.	
Many utilities spend millions of dollar investigating	

Organization/Comment	GADSTF Response
the best resources to meet their generation, and reliability needs. It is not necessary for NERC to do the work of generation engineering companies. The goal of any utility is to provide the least cost energy while having a high degree of reliability as reliability impacts the generation company's bottom line.	
Collecting this data immediately impacts the bottom line of the utility in labor costs and software costs creating on-going expenses as the event and performance data is required to be reported quarterly.	
<u>PSEG Services</u> : No, some of the design-related data in Appendix 1 are not readily available and will require substantial efforts to collect and maintain.	
For GADS events and performance data, PSEG's systems are built and customized to meet the needs of the different ISOs requesting the data. PSEG suggests utilizing the data structures currently implemented by the various ISOs. Changing the design criteria will require costly software changes with no reliability benefit.	
Puget Sound Energy. Puget Sound Energy: No. PSE has estimated it will cost \$50,000 to purchase software that can effectively collect NERC GADS data across our fleet. This does not include the labor hours required to install the software, maintain, and train personnel to use it.	
In addition, it will be a significant effort to collect the design-type information for PSE's entire fleet. In some cases, the data may be simply unavailable because of the age of the units, particularly for the hydro units.	
Please consider that there are other resources (local Areas and Regions) that already complete long term reliability assessments. NERC may gain the same benefit by obtaining data and information about these other sources rather than relying on the GADS system to complete its own separate set of assessments. This would lessen the compliance burden on registered entities.	

3. Is the data request schedule in Section A of this data request reasonable? If "no" please explain.

TABLE 5: DATA REQUEST SCHEDULE COMMENTS

#### **Organization/Comment**

#### **GADSTF** Response

<u>Calpine Corporation</u>: Yes the data request schedule is reasonable.

**PPL Corporation: Yes** 

**Dominion Power: Yes** 

Luminant Generating Company LLC: The data request schedule in Section A, which requires the reporting of GADS data 30 days after the close of each calendar quarter is reasonable. However, NERC Staff should have flexibility to grant extensions to this deadline for good cause. To this end, a provision that would require a reporting entity to promptly notify NERC Staff of the reason(s) for the entity's inability to timely report should be included with any proposed mandatory reporting. Such provision should also allow NERC Staff to grant an extension if it finds that the reason(s) articulated by the entity is reasonable.

California Public Utilities Commission: NERC proposes to implement mandatory data-reporting by January 1, 2012, with the first mandatory submissions due April 30, 2012. Given the magnitude of technological improvements and staff resources that will be needed to accommodate the increased data flow; the current schedule provides an aggressive timeline. We encourage NERC to develop and issue for comment a specific implementation plan that will accommodate expanded GADS reporting and maintain the quality of GADS data and services. We look forward to the opportunity to provide further input or comment.

Southern California Edison Co.: Yes

<u>Ingleside Cogeneration LP</u>: The time frames can be accommodated.

<u>Brookfield Renewable Power</u>: 30 days after the end of each quarter seems very reasonable and easily obtainable.

Late data will be flagged by the NERC staff. Phone calls and emails to set goals for data collection for delinquent data will be sent to GADS will follow. NERC staff will be available to edit and return data to the operators in a timely manner so that quarterly data can be corrected and saved while events are still fresh in the reporter's mind.

Training and software will be available to bring company personnel up to speed.

Units between 20-49 MW are not required until January 1, 2013.

Organization/Comment	GADSTF Response
Progress Energy: Yes	
<u>Arizona Electric Power Coop., Inc.:</u> Data request schedule in Section A is reasonable.	
Cogentrix Virginia Leasing Corporation: Yes	
Colorado Springs Utilities: Yes.	
LG&E and KU Energy LLC: Yes.	
Constellation Energy: Yes.	
<u>Consumers Energy:</u> Yes – the data request schedule is reasonable.	
Entergy: Yes.	
Redding Electric Utility. The data schedule appears reasonable if a generator owner was required to adopt the GADS methods, however the schedule is not the issue, it is the amount of data and the process being requested. Forcing this on a small entity will require significant costs to respond to the request.	
Massachusetts Municipal Wholesale Electric Co. It is reasonable for generators that are already collecting and submitting this data.	
Pend Oreille County Public Utility District: Yes.	
Southwest Generation: Yes.	
<u>Tucson Electric Power Company</u> : Yes, the schedule in Section A of this data request is reasonable.	
We Energies: Yes.	
Minnesota Power: No. Minnesota Power suggests that the data request schedule be worded such that mandatory reporting begins 18 months following NERC Board of Trustees approval. This would allow utilities a timeframe that would not be affected by	GADS data is essential to the many new and existing reports required of NERC. Delaying GADS mandatory work would affect the ERO work.
any updates or revisions that may delay approval and therefore shorten the timeframe for implementation. Given the amount of data that	The GADSTF leadership reviewed the requirements for reporting GADS event and performance information. Based on additional

needs to be gathered to comply with the design data reporting requirement, Minnesota Power believes an implementation plan of 18 months is appropriate.

Manitoba Hydro: No. More time for implementation should be allowed to ease the burden. Not all mandatory data is readily available and it may not all be obtainable in the time frame allowed. July 2012 would be a more reasonable date to begin GADs reporting.

PacifiCorp: NERC's current timeline for full implementation seems unnecessarily short. A more reasonable timeline would allow the resolution of hydro operational and guideline inconsistencies in advance of the adoption of any mandatory schedule. Many of the older hydro facilities (some are up to 100 years old with 50 year-old equipment) are not equipped with automatic data recording equipment. These facilities need the budgeting, approval, installation tracking systems and of hiring/training of personnel in order to manage the system and reporting practices. A more realistic deadline for this level of data reporting would be to require mandatory reporting effective December 31, 2012, for calendar year 2013.

<u>Tenaska</u>: A phased approach should be given strong consideration as not all of the data can be considered a priority. As an additional consideration, only require data to be submitted in a mandatory context once it becomes apparent that an issue exists. Entities would still be expected to gather the data and report on a voluntary basis, but mandatory reporting would only be required once an absolute need has been established.

NextEra Energy: It is our opinion that GADS reporting should not be mandatory at this time. If GADS reporting should become mandatory, we would like to recommend that the start date be January 1, 2013 in order to allow time for input verification. This additional time would allow for information gathering, program changes, training, testing, and report automation.

Chelan County Public Utility District: This quarterly

#### **GADSTF** Response

analyses, it is proposed that Generator on the NERC Compliance Registry report generating units according to the following schedule:

- Starting January 1, 2012, all generating units 50 MW and larger nameplate are required to report to NERC. The revised list (9 items) design data will be completed by December 31, 2011. Event and performance data for the first quarter of 2012 will be to NERC by April 30, 2012.
- Starting January 1, 2013, all generating units 20 MW and larger nameplate are required to report to NERC. The revised list (9 items) design data will be completed by December 31, 2012. Event and performance data for the first quarter of 2013 will be to NERC by April 30, 2013.
- All generating units under 20 MW nameplates will be invited to be part of NERC GADS on a voluntary basis. All smaller than 20 MW units who currently report to GADS on a voluntary basis are encouraged to continue reporting to GADS.

"MW Nameplate" is calculated by multiplying the MVA recorded of the generator times the power factor. For example, a 100 MVA unit with a .90 power factor would be a 90 MW unit.

Training and software will be available to bring company personnel up to speed.

NERC, under Section 1600 of the NERC *Rules of Procedure* can not penalize organization for late data submittals. We will continue to be flexible with delayed information by using phone calls and emails to all levels of the reporting company officers to encourage timely data submittals. NERC staff accepts reasonable delays and will work with GADS reporters to correct errors and train as needed.

NERC intends to develop quarterly trend assessments and metric development to ensure industry can be quickly informed of ongoing trends and take advantage of learning

data requirement would add workload with no discernable benefit. CHPD believes that if the data is required, it should not be submitted any more frequently than it will be used. Does NERC intend to run the associated models and studies quarterly? If not, the frequency of submission should be reduced to support the work and not additionally burden GOs.

Idaho Power: As mentioned above the reasonableness of the data is in question. At a time when the economy is struggling additional burden on utilities and the utility customers is unwarranted. While the drafting team may feel the labor costs associated with the data request are minimal, those costs are still passed onto the customer as operating costs resulting in higher bills. While this data request by itself may not directly appear to impact the cost to the customers, it is governance which when viewed in total with all the other NERC compliance requirements is increasing at an alarming rate.

<u>PSEG Services:</u> There would not be enough time if additional software needed to be developed for a NERC data structure that is incompatible with the data structures used by ISOs.

<u>Puget Sound Energy:</u> It is not clear in the instructions how often the design-type data would be submitted. It is inferred that this is not included in the quarterly reporting (only event and performance) however this is not made clear. PSE would consider most of this data to be static. As a result, we would not want to be obligated to expend resources every quarter to verify the data is still correct. Our recommendation, if this becomes mandatory, would be to make the design-type data submittals a onetime request, with significant updates submitted to NERC as they occur.

New York Power Authority: No. NYPA collects data for 79 units. Currently, it is difficult to collect the data within 30 days every quarter for nearly half of this due to the way the data is being collected. The collection method may change by then, but we request that we be given an additional time of 2 to 3 weeks on top of the 30-day window being provided.

#### **GADSTF** Response

opportunities. This is the reason that quarterly submittals are imperative, so industry learning can be expedited when valuable information is made available from trends and metrics.

Organization/Comment	GADSTF Response
Midwest ISO: Not applicable	No comment.
FirstEnergy: (No comment.)	
Entegra Power: (No comment provided.)	
Seattle Light: (no comment provided.)	
ISO-New England: No comment.	
Power & Pins Consulting: No comment.	

#### 4. Please provide any other comments you may have about this data request.

#### **TABLE 6: ADDITIONAL COMMENTS**

#### **Organization/Comment**

Calpine Corporation: The unit level versus block level reporting issue for combined cycle plants needs to be resolved. As of last year, we had submitted over 5 years of data on ~25-28,000 MWs of capacity – only one 55 MW unit has been included in any GADS published statistics. I think you may have recently started to include some of our simple cycle only peaking units in some numbers – a very small part of our fleet. It seems NERC, after deciding that by unit reporting is the preferred format for combined cycles, can't use the data since it can't reconcile the unit and block level reporting. My understanding is that 75% of the combined cycle owners use by unit reporting. If a method can't be worked out to combine them (and it probably can't), NERC needs

#### Power & Pins Consulting.

 Please clarify whether combined cycle block reporting will still be allowed, or will individual component reporting be required? I believe the granularity of the data will be improved by requiring individual reporting of each unit in the block.

to standardize on unit level reporting, and stop trying to support/maintain both submittal methods.

• Ensure the first time pedigree data submittals can be submitted on an electronic form through a GADS website.

PPL Corporation: PPL believes that the proposed data request is reasonable with a caveat. In the recent NERC webinar on the proposed mandatory GADS reporting, PPL was informed that the Design Data submittal software would be available by the end of April with training to follow. If this deadline is held, then meeting the December 31, 2011 due date for design data update is reasonable. If the software is not available by the end of April 2011, PPL believes that the design date should be delayed accordingly. Additionally, the December 31, 2011 due date (which was discussed at the webinar) is not found in the public comment document and PPL feels it should be added. PPL currently provides GADS data for all of its plants on a voluntary basis.

#### **GADSTF Response**

The new GADS design software merges combined cycle components into block statistics. The software to start the merging process was released in May 2011.

NERC agrees that component reporting of combined cycle blocks is better than reporting only block units to GADS. This will be much easier with the support of industry for this Information and data request.

Web submission of GADS data is being review and program specification being developed.

The GADS design software was released on May 12, 2011. Training on the software will be scheduled in June 2011. Recording of the training will be placed on the website for those not attending the webinars.

The design data question was reduced to just 9 elements, a one-time entry. The remainder of the design data will be voluntary reporting to GADS.

If any additional design data is needed, then the GADSTF will request it through the Section 1600 process, requiring industry review and comment.

LG&E and KU Energy LLC. LG&E and KU Energy currently submit all unit data on the voluntary basis. The NERC GADS Task Force has reported that they "plan" to send Companies currently in the voluntary program, by the end of April, 2011, the Design Data for each unit as currently documented in GADS. A recent NERC webinar indicated that the Design Data under the mandatory reporting requirements will be due December 31<sup>st</sup>, 2011 (slide 21, GADSTF April 19 Webinar). However, this due date is not stated in this Request for Public Comment or the GADS Task Force Report. LG&E and KU Energy believes it is reasonable to be able to submit updated Design Data back to NERC GADS by the December 31, 2011 due date (which is eight months hence) if the NERC GADSTF provides the current GADS Design Data by the end of April, 2011. However, should the current GADS Design Data not be provided by April 30, 2011, the submittal date for the updated Design Data should be delayed accordingly?

LG&E and KU Energy believes certain types of generation (wind and solar) should not be excluded from the mandatory data reporting. One specific topic discussed by the Design Subgroup in the Report was "The variable nature of [solar] and other renewable resources (such as wind) could negatively impact the reliability of the grid if their performance was not monitored and analyzed using GADS or similar-type databases in a way that is consistent with what is done for other generators." The Report indicates that "These [wind and solar] variable energy resources will be covered in a future report." LG&E and KU Energy share NERC's concerns to include variable energy resources (such as solar and wind) and desire NERC to continue pursuing that effort with GADS. Moreover, it appears that GADS is using "variable energy resource" and "renewable energy" as interchangeable; while they are not.

LG&E and KU Energy suggests incorporating definitions of Variable Energy Resource and Renewable Energy as defined by FERC ((Integration of Variable Energy Resources, 133 FERC ¶ 61,149 (2010) (Integrating VERs NOPR)) and the U.S. Department of Energy ((U.S. DOE Glossary of Energy

#### **GADSTF** Response

If a company is already reporting to GADS, then these 9 items are already in GADS and no additional design data information is required.

Renewable power sources (wind and solar) are not part of this data request. Renewable sources will be addressed in the near future.

NERC is investigating an improved approach to submit GADS data to GADS. New plans should be released later this year.

#### **Organization/Comment GADSTF** Response Related Terms) respectively. Constellation Energy. Because the mandatory nature of the proposal changes the implications of the data reporting program, mandatory data, in particular the design data, should be strictly limited to the electric system data. Data requirements beyond electric system data must be clearly justified for reliability purposes. Consideration should be given to rolling out the data reporting requirements in an iterative process. First, make mandatory the basic, electric system design data and align it with the performance data reporting in a useable way. Then, if an issue becomes evident, for instance with boilers, then add boiler data to the mandatory list. All of the data currently reported under the voluntary program may continue to be collected, but the mandatory obligation would apply only to a subset of reliability justified data. Dominion Power: Dominion supports the collection NERC, under Section 1600 of the NERC Rules of of GADS information for its generators; however, we Procedure can not penalize organization for late respectively request NERC to consider the following data submittals. We will continue to be flexible with delayed information by using phone calls concerns prior to moving to a mandatory structure: and emails to all levels of the reporting company 1. Generators should not be penalized for officers to encourage timely data submittals. updating/correcting GADS data after the NERC staff accepts reasonable delays and will submission date. work with GADS reporters to correct errors and a. A penalty structure will be a disincentive to train as needed. updating/correcting GADS data. b. A penalty structure will likely impede a generator owner's ability to collaborate with others in the industry concerning GADS reporting. FirstEnergy: The classification of the data submittals as mandatory is a cause of concern. FirstEnergy has voluntarily participated in this program and supplied data in a timely manner. Validation of this data has occurred in a level appropriate to this participation. In the future more complex processes may have to be instituted to comply with this mandatory request depending on the required level of detail and accuracy of data submittals. This we feel would constitute a far greater effort in supplying this information.

#### **Organization/Comment GADSTF** Response Minnesota Power: There are a number of GADS We will endeavor to improve. issues that need clarification and definition for the existing system to be credible. These include the implementation definitions, of well-defined procedures and methodologies to best serve the stated objectives of this proposal. There have been many failed attempts by groups of utility representatives at past Annual NERC GADS Users Conferences to secure concise instructions and directives in completing GADS reports; questions that have been posed year after year. As an individual utility Minnesota Power has also made several phone calls requesting clarity regarding existing processes and has not received the requested clarity. At this time Minnesota Power does not believe that the existing processes are robust enough to support an information system on which loss of load studies, resource allocation and other critical decisions will be made. Midwest ISO: MISO supports Section A: Mandatory NERC recognizes and supports ISOs and other Generating Availability Data Request Information, organizations that require more information or which was posted on March 21, 2011. The Midwest ask that smaller generating units outside the ISO tariff requires market participants to submit NERC mandatory requirement be reported. NERC Generator Availability Data to the Midwest ISO for a will ask for uniformity in reporting event and generator that is greater than or equal to 10MWs in performance data is consistent with the NERC order to qualify the capacity that could be used by a GADS requirements, regardless of the unit size. load serving entity to meeting their Resource Adequacy Requirements under the Midwest ISO tariff. MISO supports the mandatory GADS collection of event and performance data by NERC to gain experience with technology behavior, operating characteristics, and optimal planning approaches in order to properly assess reliability and improve performance analysis. Luminant Generating Company LLC: GADS data has been a source for focusing on d) GADS data must be collected and used for problems and trends at power plants. It is informational purposes only. Because there will understood that reports from GADS may need inevitably be variation in the manner that updating as plant investigations conclude. For generator owners report GADS data (e.g., level this reason, GADS data can be updated by the reporters as needed. That is one reason that of detail, interpretation of information requested), GADS data should not be used as a GADS reporter sends GADS data to NERC on a proxy for event reporting that would be year-to-date basis - to allow for updates and

required under NERC's Reliability Standards.

Further, GADS data should not be used as

corrections to older data as more information is

discovered.

evidence in a subsequent compliance investigation, audit, or enforcement action. The use of GADS data in these other arenas would result in inconsistent enforcement, which is antithetical to the Federal Energy Regulatory Commission's ("FERC") delegation to NERC to enforce reliability standards.

Because the information reported by entities in response to a compliance investigation, audit, or enforcement action is very detailed and results from comprehensive internal investigation by the subject entity, NERC's use of reported GADS data as a part of these other processes would lead to inconsistent results. For example, event data reported as part of the GADS process may not be as thoroughly investigated as event data for which an entity has been specifically noticed by NERC to review as part of a compliance audit or enforcement proceeding. However, the initial lack of detail in GADS reporting should not be permitted to be used against a reporting entity in a subsequent proceeding. Further, any discrepancy, which would likely be inadvertent, between the two sets of data should not be used as evidence to further penalize the reporting entity.

To resolve issues regarding the proper use of GADS data, NERC should clarify that generation outage information reported to NERC as part of the mandatory GADS reporting process will be used only for purposes of measuring and assessing general trends with respect to generation reliability. Accordingly, the proposed GADS request should clearly state that reported information will not be used against the submitting generator owner in any compliance audit, enforcement proceeding, or other similar proceeding.

e) GADS Data Must Be Protected from Disclosure to Other Industry Participants. Luminant agrees with the GADS Proposal's statement that "GADS data will continue to be confidential under NERC's Rules of Procedure, Section 1500: Confidential Information." This protection

#### **GADSTF Response**

GADS data will continue to be a source of unit trends, projections, equipment evaluations and other records.

Section 1500 of NERC's Rules of Procedures will protect GADS data from unauthorized use of data.

#### **Organization/Comment GADSTF** Response should be further clarified to ensure that information submitted in response to a NERC request for mandatory reporting of GADS data qualifies for protection under the confidentiality provisions of Section 1605 of the NERC Rules of Procedure such that the applicable provision of Section 1500 will apply without further action by a submitting entity. However, even with these protections, for confidentiality to have any meaning, NERC must ensure that unit and owner specific GADS data is not released to any members of the industry even if those members serve on NERC committees, subcommittees, working groups or task forces. The GADS Proposal explains that the collection of GADS data will provide "NERC committees, subcommittees, working groups, and task forces" data for a host of functions. This statement raises concerns that GADS data will be shared with industry participants who serve on these groups and will, thus, cause competitive and financial harm to reporting entities. Even if GADS data were assembled in a compilation form, it is possible that the identity of individual generator owners and their respective units could be identified. Accordingly, any GADS data that can reveal unit or owner specific information (even if part of a compilation) must not be shared in any form with industry participants even in such participants' capacity as members of NERC committees, subcommittees, working groups, and task forces. Confidentiality of GADS data is of particular concern to Luminant because it operates as a generator owner in the Electric Reliability Council of Texas ("ERCOT"). In ERCOT, where market structure in the competitive areas of the State of Texas is required, by statute, to be unbundled into power generation, transmission and distribution, and retail sales (with the municipal entities exception of and cooperatives), GADS data is, by design, competitive information. GADS data reflects the

#### **Organization/Comment GADSTF** Response operating characteristics of generators in the wholesale electric market. Consequently, providing this data to select industry members would severely disadvantage the reporting entity. Specifically, release of key operational information about generating units, which is what GADS is designed to collect, could create unfair competitive market advantages. That release would disadvantage generator owners whose unit-related information is released. Accordingly, disclosure of GADS data to industry participants who serve on NERC committees, subcommittees, working groups or task forces would cause the reporting entities substantial competitive harm while providing competitors who serve on these NERC groups an unfair competitive advantage. To resolve issues associated with confidentiality, only NERC Staff should be permitted to access and review GADS data. Under no circumstances should GADS data be released to industry participants, even in their capacity as members of NERC committees, subcommittees, working groups or task forces. In the event NERC determines that a compilation of GADS data should be released to NERC committees, subcommittees, working groups or task forces, such compilation should be in a form that renders impossible the identification of the reporting entities or individual generating unit data. Further, prior to releasing the compilation, NERC should provide reporting entities whose data appears in the compilation advance notice of the release (along with a copy of the compilation) and provide the reporting entity a reasonable opportunity to object to the release. If the reporting entity can demonstrate that its individual information can be identified from the compilation, NERC must either disallow the release of the compilation or permit the reporting entity to opt out of the release and redact their respective information. With respect to the release of GADS data to

FERC and other governmental authorities, such

Organization/Comment	GADSTF Response
releases must only be made consistent with the confidentiality provisions set forth in Section 1500 of the NERC Rules of Procedure. Advance notice to reporting entities affected by such release must also be made.	GADSTF Response
PacifiCorp: Hydro units typically have the ability to be brought on-line quickly, rapidly ramp load and modulate load. Many units are operated in a fashion that creates a number of "on and off" events in a short time period. A record of such events would be both laborious and distracting for control room personnel, whose function it is to provide critical ancillary services in support of the bulk power supply. These shutdowns are typically categorized as "Reserve Shutdowns." Often, a number of hydro units spend the majority of their available hours in reserve shutdown, and often are utilized for reserves even while generating or spinning. To avoid distraction of plant operations staff and unnecessary monitoring expense, it is recommended that hydro units not report outages as "Reserve Shutdowns." If the unit is both offline and available, it is recommended that no event record is required. Instead, only planned and forced outages for maintenance, unit improvement or plant trips should be reported.	NERC GADS recognizes this issue for hydro units as well as cycling gas turbines. Other hydro units expressed the same comments.  As mentioned earlier, if the NERC Planning Committee and the NERC Board of Trustees approves mandatory GADS reporting for units 50 MW nameplate and larger starting January 1, 2012 and 20 MW and larger starting in January 2013, this will remove the need for design and event reporting for the smaller, older hydro and other units for two years.
California Public Utilities Commission: We support NERC's goal to expand the scope of data collection, which will increase NERC's capability to assess generator reliability and perform complex reliability assessments (i.e. planning reserve margin, loss of load expectation, risk assessment, predictive modeling, and detailed event and performance monitoring). Our primary concern is to ensure timely and accurate data submissions, and that NERC will continue to provide prompt attention to our GADS data needs. We encourage NERC to increase permanent, dedicated staff resources, automate the GADS system, and consider national or regional standards to support the expanded data reporting that will result from the Section 1600 data request. NERC's proposal to institute a mandatory GADS reporting requirement will add an additional 2,600 units per quarter, a corresponding increase of more than 60% to NERC Services' work load. Currently, NERC GADS Services staff consists of one	NERC will continue to support GADS work by providing personnel and resources to automate many of the GADS services currently performed manually. There will be more reports and easier access to grouped NERC information. Confidentiality will be paramount to ensure the GADS, TADS and DADS information remains confidential yet accessible to those who need generator data following Section 1500 of the NERC Rules of Procedure.

#### **Organization/Comment GADSTF** Response manager and one full-time support staff dedicated to GADS work. CPUC staff believes that without additional staff support and resources, expanded GADS reporting will overwhelm NERC's existing resources and very capable staff, to the detriment of the program. The current data collection process is labor-intensive for NERC, and cumbersome to generators. First, generators submit GADS data quarterly via e-mail in a text or ASCII file. Next, NERC staff performs multiple, iterative steps to process the files and coordinate with generators, and state regulatory staff. NERC's GADS Services staff: 1) Receive and input data files. 2) Review and validate the data. 3) Resubmit the files back to the generators for corrections/edits. 4) Receive and process the corrected data. 5) Generate reports of output data. 6) Coordinate and follow up with PUCs and ISOs staff regarding the status of generator submissions. Given NERC's estimate of 2,600 additional reporting units, NERC will be processing a minimum of 10,400 additional transactions each quarter (assumes that four of the six steps described above will be repeated for each of the 2,600 units). In addition to staff resources, we encourage NERC to consider additional measures to support the increased transactions. For example: • Validation/verification algorithms built in to the GADS data entry software could flag abnormal or incorrect data inputs (low or high relative to historical data), and therefore alert a registered generator of the need to validate its data prior to submission to NERC. Automated reports based on each generator's submitted data could summarize performance data; create a list of outage events; and alert generators, state regulators and control area operators to the status of generator submissions. • A NERC or regional standard similar to Reliability First Corporation's proposed MOD-025-RFC-01: Verification and Data Reporting of Generator Gross and Net Reactive Power Capability could

Organization/Comment	GADSTF Response
also support NERC's GADS data validation and verification functions on an ongoing basis.	·
Ingleside Cogeneration LP: It is our belief that the collection, aggregation, and display of data in support of reliability analyses requires fundamentally the same systems approach and rigor necessary to support real-time wide-area view systems. If the data types, formats, and updating intervals can be commonly agreed upon by the receiving entities – the PUCs, REs, the ISOs, NERC, and the DOE – then the problem becomes greatly simplified.	NERC will work with ISOs and government agencies (local, state and national) to coordinate data collection to ease the burden on reporting companies. NERC will add a designated reporting entity function so organizations can report GADS information on behalf of their stakeholders.  There has been some call/ correspondence with ISOs about coordinating GADS reporting. This work will continue.
What we see today is each regulator taking legal steps to force entities to comply to their unique data requirements — with little incentive for them to coordinate their data needs. Even if each request can be individually justified — as in the case of GADS — the burden of this inefficiency is placed upon the facility owners and operators.  NextEra Energy: Duplication and consistency in reporting to regional entities (e.g. ISO's and RTO's) should be addressed prior to making reporting mandatory	NERC is investigating an improved approach to submit GADS data to GADS. New plans should be released later this year.
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Brookfield Renewable Power:  a. Is there a target date to have the "advanced data collection and verification system" will be in place? (Reference to Section A, 2nd point – A description of how the data or information will be collected and validated). If so, what is it, and will there be a test period prior to this date?	
b. In October 2010, during the NERC GADS workshop, there was a discussion around the submission of the data. Many Generator owners submit the GADS data to both NERC and an ISO. To ease the data submission it was discussed that perhaps all data could be sent to NERC and the ISO could collect whatever data they would need for their own reliability purposes. Is that idea still being considered?	
c. What will be the penalty to not deliver the GADS data on time?	

Organization/Comment	GADSTF Response
Chelan County Public Utility District. CHPD stopped	
participating in the GADS submissions because of	
the internal costs of providing the information and	
the limited usability of the data as presented.	
A significant amount of this data is already being provided to the region (WECC) for reliability purposes. CHPD believes that if NERC needs the data for studies independent of the regions, perhaps obtaining the data from the regions is more efficient. Duplicate data submittal requirements are a burden to the GO.  The Reliability Coordinators, Planning Coordinators, Transmission Planners, and such need the data. There is no indication that they are not getting it. CHPD believes that efficiencies could be gained by NERC relying on the local Areas and Regions to	
complete long-term reliability assessments.  CHPD suggests that annual reporting would be preferable for GADS and would be consistent with current TADS reporting requirements. As noted in the proposal, there are several hundred fields collected by GADS, it seems unrealistic that all of these fields provide essential information to perform the studies and modeling NERC identifies. CHPD would recommend and support mandatory data reporting for a smaller set of critical fields.	
ISO-New England. ISO New England fully supports NERC's proposal for the mandatory reporting of conventional generator availability data. Furthermore, ISO New England encourages NERC to continue its effort in the development of appropriate performance and event reporting requirements associated with the renewable resources, in particular the data requirements relating to wind generation.	
As noted in the GADSTF discussions, several ISOs/RTOs collect varying levels of generation availability data for their market systems, but Generator Owners have raised concerns that the NERC mandatory reporting of generation availability data would result in doubling their data reporting responsibilities. In this regard, ISO New England	

Organization/Comment	GADSTF Response
suggests that the NERC data request should make	
clear that ISOs/RTOs may elect to be the responding	
entity to the data request on behalf of registered	
Generator Owners because of the efficiencies that	
may be gained by having one entity collect all	
Generator Owner data within its footprint. In	
instances where ISOs/RTOs elect to perform such a	
role, the data request should specify that the ISO/RTO has represented to NERC that it has put	
rules in place to compel registered Generator	
Owners to submit the information to the ISO/RTO.	
Finally, the ISO/RTO needs the same liability	
protections as NERC since the correctness of data is	
ultimately the responsibility of each Generator	
Owner.	
NERC's attention to this matter is appreciated and	
the opportunity to work together to address, and	
resolve, these issues will be welcomed.	
Massachusetts Municipal Wholesale Electric Co.	
a) As is proposed in Section A, MMWEC agrees that	
small (< 20 MVA) generators should be exempt	
from reporting GADS data. Quarterly reporting	
of Events and Performance data for small	
generators would yield a limited improvement in	
reliability relative to the administrative cost.	
<b>b)</b> Prior to implementation, NERC should	
coordinate with Reliability Coordinators (e.g.,	
ISO-NE) who are collecting GADS data so that	
NERC collects data directly from the RC rather	
than requiring a duplication of effort on the part	
of generator owners. c) NERC should improve the GADS software to	
c) NERC should improve the GADS software to reduce the administrative effort required to	
submit the data.	
Southwest Generation.	
Southwest Generation entities currently report	
generation monthly to EIA-923M and annually	
generation, income/MW(s) generated, gas	
usage, water usage and emissions to EIA-923S	
and EIA-923A. Water usage and emissions are	
new required reporting statistics for the EIA-	
923.	
We report quarterly through EQR Generation	
MWh, Generation sales \$, Capacity earnings,	

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	GADSTF Response
<ul> <li>Organization/Comment</li> <li>startup, etc quarterly.</li> <li>Quarterly we report through the EDR: emissions, run hours, starts, gas usage, etc.</li> <li>In addition to this reporting, we have NERC and WECC reporting requirements to the RC that also duplicates some reporting of the EIA-860 (Generation status and development) and others listed above.</li> <li>Now NERC has requested to add generating availability data by using GADS. Each report has some level of duplication.</li> <li>Southwest Generation entities recommend combining the reporting, remove duplication and allow the different government entities to share the databases to remove the reporting burden from the GO(s)/GOP(s).</li> <li>Entegra Power: Are we putting more \$\$ at work chasing the next incremental piece of data that might provide some enhancement that would be</li> </ul>	The data elements proposed for mandatory reporting has been reviewed by a number of committees and task forces representing both
nice to have, but not absolutely necessary for reliability beyond what is currently being done. Especially, when you would be putting an even greater economic burden on the private sector which is barely keeping its head above water now. One of the objectives clearly stated by the GADS Team on this week's Web Conference was "How can we help you"? If that is truly the objective, I would simply ask; don't most of the generators in this country operate under a profit motive? Therefore, wouldn't they already be analyzing and assessing their own plant's equipment and efficiencies, and coordinating with manufacturers and other entities in the industry to seek effectiveness, efficiency, and reliability enhancements? This question came to mind as I listened to the Web Conference: Is a government bureaucracy unnecessarily inserting itself in the area of a private generator's own effectiveness and performance enhancements? And finally, please recognize, I make these comments with not only my children and grandchildren in mind, but yours as well.  PSEG Services. The most burdensome part of the request is the gathering and maintaining of the designed data. PSEG believes that much of this data is of limited utility for enhancing reliability.	the generator owners and resource planning personnel. These groups recommend specific data is collected for the reliability of the bulk power system, with others being nonessential. Data fields not vital for bulk power system reliability and performance analysis trend assessment are identified as "voluntary reporting".

Organization/Comment	GADSTF Response
Encore Consulting: NERC may be able to simplify and standardize reporting processes that users will actually report in the field before it finalizes this action by testing applications in the field. In the case of software, that must be extremely simple to use and should use active web pages to report. Furthermore, reporting depends on a common plant format to report events against. It's harder to do than it seems. NERC should provide that common format to all the mandatory-reporting entities to make it as simple as possible. Providing this with an application to submit under would be the simplest solution.	NERC provides several, simple no-cost software programs to data collection. There are also software vendors that have software to do many tasks for the reporting companies.
<u>Tenaska</u> : (None)	No comment.
Manitoba Hydro: (None.)  Southern California Edison Co.: None  Progress Energy: None	
Seattle Light: None	
Cogentrix Virginia Leasing Corporation. CVLC has no additional comments to add about the data request.  Colorado Springs Utilities. No comment. Consumers Energy. We currently collect and submit all the required data voluntarily so NERC's proposed change is of no additional burden to us.  Pend Oreille County Public Utility District. None at this time.  New York Power Authority. Other than the answer for Question 3, NYPA does not have any issues regarding GADS submittals to NERC.	NEDC will allow and angurage undetical
Arizona Electric Power Coop., Inc. A few months back it was brought to my attention by one of my managers that the data(s) collected is not trustworthy. This came from another power company who addressed the fact that they do not put down every forced outage and many times label it as different type outage to prevent from labeling it forced outage. The validity of the data and its use instantly became non-sense in the mind of some.  With mandatory reporting how would this be addressed or corrected?	NERC will allow and encourage updating/correcting historical data for more than 30 years. If errors are found, we encourage the reporters to re-send their data (no matter how old the data is) to GADS for replacing newer data with old, erroneous data.  NERC will offer training to GADS reporters to monitor and send us correct data. We are not auditing power plants to check for errors. As recommended in the GADSTF report, we expect each reporting company to audit their own data.

I believe there should be a "requested" dedicated person, outside Operations, assigned to reporting this information instead of many such as operations personnel. This would help in the data being consistent. Some would believe that reporting of this data from Operations personnel would help in correctness. My belief is that Operations personnel would have tendency to reflect themselves as better than data might truly reflect if reported properly. I believe that most companies presently reporting do have a single point of contact to review for correctness and completeness. This should be mentioned in the documentation somewhere as to the need or request for dedicated persons to report to NERC all GADS data.

We Energies. During the recent NERC GADS Mandatory reporting conference call held on April 19, 2011, Mike Curley of NERC stated that all entities will have the ability to correct previously reported GADS data and also advised that NERC cannot apply penalties for non-reporting and/or missing reporting of GADS data. Is this a correct understanding?

#### Entergy.

- During the Webinar it was mentioned that NERC could "hand a utility over to FERC" if the data is not submitted after NERC had sent letters and phone calls inquiring about the data. Can you explain a little more about what it meant by "handing the utility over to FERC"?
- Was this request for comment sent out to all GO's on the NERC Compliance Registry?

Is there a list of units by company that NERC is expecting to see reported? If so, could this list be made available?

Redding Electric Utility. Redding does not see evidence that the RoP team has considered the economic impact this requirement will have on small generator owners. FERC and NERC have expressed their concern that any increased compliance burdens should be weight against their benefit to reliability. While, the industry and vendors may, over the years, benefit from this type of granular data, there is no direct benefit to the local level of

#### **GADSTF** Response

We assume data reporters are honest in their reporting practices. Each reporting company should determine the best practice of insuring consistent, correct and accurate data.

If a company is a registered entity with NERC, then it falls under the NERC *Rules of Procedure* guides. NERC will do everything in its power to request required data but if the company refuses to comply, then under the *Rules of Procedure*, we are obligated to let FERC know what we did and who didn't comply.

All GOs (both those that are registered and those that are not) were contacted about this GADSTF request.

The GO registered list is on the NERC website.

The North American Electric Reliability Corporation's (NERC) mission is to ensure the reliability of the North American bulk power system. NERC is the electric reliability organization (ERO) certified by the Federal Energy Regulatory Commission to establish and enforce reliability standards for the bulk-power system. The bulk-power system consists of both transmission and generation facilities. As NERC

service; this data is perceived as "necessary to operate an interconnected transmission system". Currently, NERC's Standards for Generator Owners and Operators do not pertain to plant equipment, therefore there is not reasonable justification that NERC has the authority to "require" this amount and magnitude of data that is not related to actual reliable operation of the interconnected transmission system.

Does the Regulatory Flexibility Act of 1980 (FRA) pertain to this requirement? If so, has NERC demonstrated a reasonable, good faith effort to review the impact the proposed requirement will place on small entities?

Idaho Power. I strongly disagree with the idea that the GADS data collection will have little impact on utilities. I am responsible to review and collect some of this data and understand the impact that this will have on the operating groups. I am thinking of the individual who has to collect the data from several sources and then input the data into a form and submit the form on a quarterly basis. I am estimating a week of labor per quarter for the performance and event data, more hours will be necessary as switching operations are increased to match operational requirements or system events occur. In addition, modifications to our performance monitoring and recording system will need to be made to meet the data request. I am also estimating several months to collect and submit the detailed design data request on the form. The form as shown in the request for public comment seems to imply that the data to be provided is in much more detail than shown on the form. The wording "all parts required" for a single data field as shown on the form indicates that there are multiples parts to that single data field.

I question how the mandatory data will be used to make the system more reliable. The GADS data has been collected voluntarily for some time and yet I have not seen the benefits as described by the eight points listed in the request for comment. Most utilities review operating and performance data and make adjustments to their equipment and

#### **GADSTF** Response

moves to unite the transmission and generation data systems, it is important to have a full understanding of the reliability of power generating stations.

To help easy some of the burden to small generators, mandatory reporting of generating units will be phased-in. Conventional units 50 MW and larger will be required starting January 1, 2012 and units 20 MW and larger January 1, 2013.

The design data question was reduced to just 9 elements, a one-time entry. The remainder of the design data will be voluntary reporting to GADS. If a company is already reporting to GADS, then these 9 items are already in GADS and no additional design data information is required. If any additional design data is needed, then the GADSTF will request it through the Section 1600 process, requiring industry review and comment.

NERC intends to develop quarterly trend assessments and metric development to ensure industry can be quickly informed of ongoing trends and take advantage of learning opportunities. This is the reason that quarterly submittals are imperative, so industry learning can be expedited when valuable information is made available from trends and metrics.

#### **Organization/Comment GADSTF** Response operations. The economic forces to stay competitive are already in place, and being competitive means reliable and low cost. I am aware of the argument that this information is vital to measure generation reliability and that the performance data will be used in models. However, the tangible benefits to the data collection, while enumerated in the request for comment, are not tangible benefits but studies whose results and interpretations can be challenged. There is little, if any benefit, to a utility who is already striving to make their equipment as reliable as possible. Clearly, the impact to a utility is cost and not reliability. Puget Sound Energy. NERC GADS group should also Standards for transmission and the look at how the NERC Reliability Standards definition definitions for generating plants were developed of planned/real-time outages (for example see TOPindependent of each other. GADS uses IEEE 762, 003) is different than the GADS reporting "Definitions for Reporting Electric Generating Unit Reliability, Availability and Productivity" and classifications for outages. There is some confusion over how to classify and coordinate various types of has been accepted by the industry for more than generator outages because the GADS codes 30 years. There is no effort to unite the (planned/maintenance/forced outages) do not align transmission and generation definitions. with the reliability standards processes for coordinating outages. Would NERC consider aligning these two outage processes by modifying GADS coding or the NERC reliability standard definitions? Tucson Electric Power Company. Page 7 of the The generators can delegate who will report March 2011 GADS Mandatory Reporting - Section their GADS data to NERC. We will allow either 1600 Data Request states that the GADS database is the reporting company to send us their data or missing performance data from generator owners they can assign a Designated Reporting Entity When the reporting becomes and operators. (DRE) to provide GADS with data. The DRE can be mandatory, is the generator owner or the generator an ISO, association, regional office or whomever operator responsible for providing the data or the reporting company chooses. information, or is both required reporting such data Data should be supplied by the generator or information? TEPC would like some clarification operator for those units with multiple owners. regarding the responsibility for supplying the data or information for jointly-owned facilities. In other words, will each joint owner be responsible for submitting the same data or information individually, or may the joint owners collectively delegate responsibility for responding to such mandatory data requests to a single designated joint owner on behalf of all the participants in the jointlyowned facilities?