GADS Data Collection and EFORd Calculations

Purpose

To review GADS data before use in the IRM study and calculate a Resource PTID EFORd for the previous 12 months.

Requirements

User must have access to the following systems/locations:

1. GADS Production Server (PPGADS1) with Administrative Privileges (Special Note: To manually login to the Data Entry or Analysis & Reporting Admin Consoles; use the UID/PW info found in:

PlanningAuctionsGADS/GADS Training/Administrators/GADS_Admin_Login).

2. \\ad.nyiso.com\corporate\Directories\NYISO\PlanningAuctionsGADS (Read/Write)

3. NYISO GADS Portal (https://gads.nyiso.com

Circumstances Where Procedure Is Appropriate or Required

Each month or whenever an error is found in previously submitted data, Market Participants (MP) must provide GADS data for their resources to the NYISO. Annually, the NYISO reviews the GADS data and twice a year calculates Derating Factors (AEFORd), which use the 12-month EFORd values, for the upcoming ICAP capability period.

Data Submission Using the NYISO GADS Portal

The NYISO only accepts Year-to-Date (YTD) data into the NYISO GADS Portal (https://gads.nyiso.com). All Market Participant (MP) users must be registered to Access the GADS Portal.

To Upload & Process GADS data an MP must meet the following criteria:

1. User must have a NAESB Digital Certificate which is linked to the Users MIS User Account with the NYISO.

2. User must have an MIS User Account with the privilege: 'GADS – GADS Observer'

3. User must inform the NYISO GADS Administrator what the User's GADS authorized MIS Username is and for which units the User will be providing GADS data.

Calculating EFORd Values

After the 20th of the month has passed the GADS data for calculating EFORd values for the previous 12 months should be available.

Note: All current years GADS Data is Uploaded & Processed through the NYISO GADS Portal (https://gads.nyiso.com).

Login to GADS using Remote Desktop: PPGADS1. All MPs registered in the ICAP Market must provide Year-to-Date (YTD) GADS data each month. The deadline for data submission is the 20th of the month by 5 PM ET. Open the GADS OS Dashboard and Select Unit Status. Sort the Unit Status by Performance Date (DESC), then by Unit Short Name (ASC). The image below shows that on May 6th certain units had already provided data for April and others have yet to do so.

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Monitor the progress of the data submissions during the month. Any active units that have a Status of ERR: errors exist for these units that have not been corrected. Any active units that have a Status of MOD: data has been uploaded but has not passed Validation. Any active units that do not have the Status OK by the GADS submittal deadline contact the user who submits data for these units to see why the data was not uploaded & properly processed.

Creating 12 month ICAP EFORd reports

- 1. Open the GADS OS Analysis Module
 - A. Select Generate Reports; Performance Statistics.
 - B. Monthly Performance Data Report Selection screen appears.
 - C. The report month selection: Starting Month and Ending Month (top right) defaults to ending month equal to the month of latest data that has been loaded, e.g., on May 22nd ending month should be April. You can select any period of time to do an EFORd report. The NYISO does 12-month EFORd reports each month to be used in calculating the Seasonal Derating Factors for the ICAP market.
 - D. Select: Export EFORd tables to Excel (NYISO Portal); (bottom left)
 - E. Select: Within Plant Mgt Control ONLY; (right middle)
 - F. Hit: Continue.

- G. The next screen appears: select which units will be in the 12-month EFORd reports you are about to run. You may select any number of individual units, with or without summary statistics, on the left side of the screen or you may select programmed Groups of units on the right side of the screen (*Units & Group*). The groups are used to produce reports that include programmed groups of units EFORd values. There are also groups of units that need to have a Fleet EFORd calculated each month. You must also run the reports for ICAP (*External, LI, NYC and ROS*).
- H. After selecting the unit(s) or a group for inclusion hit: **Continue**.
- I. Once the report is ready, you will be prompted for a folder where the report will be sent on the Remote Server desktop. For ICAP purposes select the UCAP Reports folder, hit OK. The report has now been sent to the UCAP Reports folder on the Remote Server desktop. <u>Special Note</u>: Any units that have been in an ICAP Ineligible Forced Outage (IIFO) or an Inactive Period (Mothball, Inactive Reserve or Retired) will have their Derating Factor calculated with the time period that covers the IIFO or Inactive Period excluded from the calculation. See ICAP Manual Section 4.4.12 Generating Units that are Retired, Mothballed, in Inactive Reserves or in a Forced Outage or ICAP Ineligible Forced Outage (See the Outage States Procedure)
- J. Open the Folder and refresh with the most recently updated file on top. This should be the report file you just created. Open the file and inspect for completeness. If the data is what you expected, Select File, Save As: converting the view as an EXCEL spreadsheet. There is a short cut for EFORd reports on the desktop which will send the report to the area where previous reports (generally last month's) have been sent:

\\10.2.1.214\NYISO\PlanningAuctionsGADS\Reports\EFORd\Year\Month

This process needs to be repeated for each ICAP group and for all groups of units that need a 12month Fleet EFORd value calculated. <u>Special Note</u>: All Run of River Hydros, Wind, Solar and Landfill Gas generators <u>do not</u> use GADS data to develop Seasonal Derating Factors.

L. Choose the folder for the Year/Month the report ends with and name the file with the following convention:

Company/Plant_YrMn.xls (e.g., Acme_1211.xls)

Company/Plant Name = Specific Company/Plant or group of plants

Yr = Two (2) Digit year, (e.g., 12 is 2012).

Mn = Month of latest data (e.g., 11 is November)

M. Copy the 12-month EFORd values for each unit in the report to the appropriate cells in NYISO_GADS_Data.xls located at: \\10.2.1.214\NYISO\PlanningAuctionsGADS\Submittals

CREATE HEADER FOR THIS TO LINK TO SEASON SETUP

*** The file NYISO_GADS_Data.xls is used to determine the Seasonal Derating Factors for all GADS units in the ICAP Auctions.

Enter the Seasonal Derating Factors for all GADS units, NYCA and External, into the Seasonal Derating Factor file located here:

\\10.2.1.214\NYISO\PlanningAuctionsICAP\Season\DeratingFactors

The file is named "Seasonal_DeratingFactors_SeasonYear". Perform a peer review and validation for the upload file by creating another file independently and doing a comparison.

To Upload Seasonal Derating Factors into the ICAP AMS, a csv file must be created that includes all Active PTIDs and their Derating Factors for the Season.

Example of Derating Factor Upload Data File shown below:

TRAN_TYPE=UCAP_UPLOAD_DERATING_FACTORS& USERID=userid& PASSWORD=userpsw& SEASON=summer& CAP_YEAR=2017& DATA_ROWS=390& 323615,0.3880 323671,0.0217 323603,0.0559 323628,0.5658 323607,0.0506 23767,0.1174 24207,0.6846 323681,0.0994 323710,0.9341 323629,0.2893

Validation of Derating Factors is accomplished by two people independently running the ICAP DSS UCAP Ratings Report and then doing a Zero Sum Check on the Override values which must match the values uploaded and each other. Example of the Data Check shown below:

Delivery Month : May 2017									
Org Name	Resource Type	Resource PTID	Resource Name	Override Value	Available For Sale UCAP	Location	Delivery Month	DF Uploaded	CHECK
innovative Energy Systems, Inc.	GEN	323619	DANCLFGE	0.4955	3.2	ROS	2017-05-01	0.4955	0.0000
innovative Energy Systems, Inc.	GEN	323620	HYLANDLFGE	0.1046	4.3	ROS	2017-05-01	0.1046	0.0000
Sheldon Energy LLC	GEN	323625	HISHELDN_WT_PWR	0.7834	24.4	ROS	2017-05-01	0.7834	0.0000
Noble Wethersfield Windpark LLC	GEN	323626	WETHRSFD_WT_PWR	0.8250	22.0	ROS	2017-05-01	0.8250	0.0000
Exelon Generation Company LLC	GEN	323628	MADISONCOUNTY_LFGE	0.5658	0.7	ROS	2017-05-01	0.5658	0.0000
Emera Energy Services Subsidiary No. 1, LLC	GEN	323656	EMPIRE_CC_1	0.0114	290.0	ROS	2017-05-01	0.0114	0.0000
Emera Energy Services Subsidiary No. 1, LLC	GEN	323658	EMPIRE_CC_2	0.0105	290.0	ROS	2017-05-01	0.0105	0.0000
nnovative Energy Systems, Inc.	GEN	323667	STEUBEN_REC_LFGE	0.4541	1.7	ROS	2017-05-01	0.4541	0.0000
Consolidated Edison Energy, Inc.	GEN	323671	BROOME_2_LFGE	0.0217	2.0	ROS	2017-05-01	0.0217	0.0000
Exelon Generation Company LLC	GEN	323681	ONEIDA_HERK_LFGE	0.0994	2.9	ROS	2017-05-01	0.0994	0.0000
Howard Wind LLC	GEN	323690	HOWARD_WT_PWR	0.8089	10.6	ROS	2017-05-01	0.8089	0.0000
Stony Creek Energy LLC	GEN	323706	ORANGEVILLE_WT_PWR	0.7519	23.3	ROS	2017-05-01	0.7519	0.0000
			Count: 121		16,255.2				
			Internal Locations Total:		34,640.9				

Running EFORd Comparison Reports for NYS Reliability Council

Before providing GADS data to the Reliability and Security department in System and Resource Planning, use the GADS Open Source software to compare each Supplier's GADS unit's previous one-year EFORd values to its own historic five-year EFORd value.

- 1. Open the *Analysis & Reporting program*.
- 2. Select Generate Reports, then Comparison Reports.
- 3. Check the box: NYISO EFORd Comparison Report.
 - A. Enter the Current Complete Year in the GADS Database.
 - B. Select the Lower Bound (e.g., 50%).
 - C. Select the Upper Bound (e.g., 50%).
 - D. If you want the report to list only the units that are Out of Bounds check the box for this option.
 - E. Hit Continue.
 - F. The Unit Selection Screen appears. To select individual units for comparison, use the individual unit template on the left. To compare groups of units, select from the group choices on the right. After selections are complete, Hit **Continue.**
 - G. The report will display, it should be exported as a (.pdf) document.
- To generate a detailed report that can be exported to Excel, check the box: <u>Export EFORd</u> <u>Comparison table to Excel</u>, instead of the box for <u>NYISO EFORd Comparison Report</u>, then repeat steps 1 through 7.

GADS Screening for NYSRC

Purpose

To screen GADS data before use in the IRM study.

Requirements

User must have access to the following systems/locations:

1. GADS Production (PPGADS1) with Administrative Privileges

2. \\ad.nyiso.com\corporate\Directories\NYISO\PlanningAuctionsGADS (Read/Write)

Circumstances Where Procedure is Appropriate or Required

Annually, before GADS data is used in the IRM study

Steps

1. Compare each supplier's current year EFORd values to its own historic five-year EFORd value by running the EFORd Comparison Report as detailed in the <u>Procedure</u>.

2. Set up a meeting with the Manager of ICAP Market Operations or designee, the Manager of Market Monitoring and Analysis (MMA) or designee, the Supervisor Resource Adequacy or designee, and the Supervisor of Scheduling or designee.

a. Review the EFORd Comparison Report.

b. Consider other relevant information, such as that collected by ICAP Market Operations when receiving GADS data from suppliers, information gathered through MMA reviews, investigations or audits, and outage information submitted to Scheduling.

1) This may include a review of information such as a generator's ability to impact reliability study results as determined by their current year capacity values and historical service hours.

c. If needed, request additional information from generator owners or perform analysis outside of the meeting, and reconvene the group to review.

d. Make recommendation to Reliability and Security on units whose EFORd values should be considered for replacement by proxy data.

GADS Data Updates after MMA Audit

Purpose

To assess the impact the corrected GADS data may have on Reliability Studies and Seasonal Derating Factors (previously used) in the ICAP Market

Requirements

User must have access to the following systems/locations:

- 1. GADS Production (PPGADS1) & GADS Staging (PSGADS1) with Administrative Privileges
- 2. <u>\\ad.nyiso.com\corporate\Directories\NYISO\PlanningAuctionsGADS</u> (Read/Write)

Circumstances Where Procedure Is Appropriate or Required

Whenever MMA has audited a Market Participant (MP) and had them resubmit GADS data

References

NYSRC Reliability Rule C-R3, Measurement C-M4

Procedure for GADS Data Collection and EFORd Calculations

Steps

- 1. MMA will alert IMO that a Market Participant has been asked to resubmit data
 - a. When the data has been resubmitted: MMA will check the data to assure all requested changes have been made. When corrections are complete: update the GADS Staging database (See GADSOSDataEntry Manual for Loading ASCII files, page 61; Manual is located at:\PlanningAuctionsGADS\GADS OpenSource\User Manuals) and <u>recalculate the Derating Factors</u> for all Capability Periods, for all units, that the data change has impacted
 - b. Send MMA the results
 - c. MMA will use the results to calculate a penalty and bring it before the Penalty Review committee for all units that have an ICAP Shortfall.
 - d. For Reliability: recalculate the reliability EFORd for all 1 year and 5 year calculations impacted by the data update
 - e. Enter the updated EFORd values into the following file: \PlanningAuctionsGADS\Reports\NYS-RC\GenClassAvg\201X-Reports\EFORd Results\GADS Units_201X-EFORd_Calcs_Reliability.xlsx (Special Note: the aforementioned file is updated every year, so the year may be different going forward. Always update the latest version that exists.)
 - f. Save the above file as a new revision and send to the Supervisor of Resource Adequacy and copy Manager of Installed Capacity Market Operations; specifically noting all units and values that have changed.
- Once the Penalty has been assessed: update the GADS Production Database (See GADSOSDataEntry Manual for Loading ASCII files, page 61; Manual is located at: \PlanningAuctionsGADS\GADS OpenSource\User Manuals).