Instructions for completing the Capacity Verification Test Upload File

Download the test upload file from PJM eGADS. To do this, log into PJM eGADS and navigate to PJM eGADS/Verification Data and select Net Capacity Verification Export and create a file from one of the generators to which you have access.

Keep in mind that in order to have a successful upload, the data must be uploaded to PJM eGADS in a csv (comma delimited) formatted file; any attempt to upload as an Excel formatted file will cause errors and will be unsuccessful.

If you edit the file in Excel or other spreadsheet application, please ensure that you delete about 50 rows below the data and about 50 columns to the right of the last variable column. Spreadsheet programs tend to keep null cells if they were copied or deleted using the delete key. Including these null cells will cause errors and the upload will fail.

The test format is below, with the format and length of the fields along with values and their respective units; also included is a brief description of the needed information:

Variable Name	Format/Length	Value/Units	Description
CARD	Alphanumeric/2	90	Value must be 90; the system then
			understands that this data is test data
Utility	Alphanumeric/3		This is the NERC utility code for the unit
Unit	Alphanumeric/3		This is the NERC unit code for the unit
Year	Numeric/4		This is the 4 digit year of the test; for winter
			tests performed in Jan or Feb of year
			YYYY+1 the year input must be YYYY.
Period	Alphanumeric/1	S or W	S for summer test; W for winter test
Test Index	Numeric/1	1-10	1 for in period tests only; 2-10 for out of
			period tests; out of period tests must be
			numbered sequentially starting with 2
REVISIONCODE	Alphanumeric/1	0, R, D	U for the first test; once entered R for any
			data past this column must be null
Corrected Net Capacity	Numeric/6 1	No entry	This value will be calculated by the system
	Numeric/0.1	needed	after entry of other data on this form
Claimed Installed Capacity	Numeric/6 1	No entry	This value will be populated by the system
		needed	after entry of other data on this form
Difference	Numeric/6.1	No entry	This value will be calculated by the system
		needed	after entry of other data on this form
Unit Type	Alphanumeric/2	ST, NU, FB,	ST-Steam, NU-Nuclear, FB-Fluidized Bed,
		CC, DS, CT,	CC-Combined Cycle or its individual
		MS, PS, HD	components, DS-diesel or reciprocating,
			CT-Combustion Turbine, MS-Fuel Cells,
T. (0) (D.)			PS-Pumped Storage, HD-Hydroelectric
			Example: 06/01/2020 00:00
Test End Date			Example: 08/15/2020 03:15
Gross MW	Numeric/6.1	MW	Example: 595.0
Station Service	Numeric/6.1	MW	Example: 45.2
Process Load Served	Numeric/6.1	MW	Example: 10.0
Net Test Capability	Numeric/6.1	MW	This value will be checked by calculation
			but must be entered
Reactive Generation MVAR	Numeric/6.1	MW	Example: 15.2
Total Power MVA	Numeric/6.1	MW	This value will be checked by calculation
			but must be entered
Power Factor	Numeric/6.4	MW	Example: 0.9950

Dry Air Temperature Observed	Numeric/4.1	°F	Example: 95.0
Dry Air Temperature Rated	Numeric/4.1	°F	Example: 86.9
Air Temperature Correction	Numeric/6.1	MW	Example: 5.2
Relative Humidity Observed	Numeric/5.1	Percent	Example: 56.0
Relative Humidity Rated	Numeric/5.1	Percent	Example: 46.5
Relative Humidity Correction	Numeric/6.1	MW	Example: -0.5
Cooling Water Temperature Observed	Numeric/4.1	°F	This parameter has been retired
Cooling Water Temperature Rated	Numeric/4.1	°F	This parameter has been retired
Cooling Water Temperature Correction	Numeric/6.1	MW	This parameter has been retired
Intake Water Temperature Observed	Numeric/4.1	°F	Example: 82.0
Intake Water Temperature Rated	Numeric/4.1	°F	Example: 83.9
Intake Water Temperature Correction	Numeric/6.1	MW	Example: -2.6
Wet Bulb Temperature Observed	Numeric/4.1	°F	Example: 75.0
Wet Bulb Temperature Rated	Numeric/4.1	°F	Example: 76.9
Wet Bulb Temperature Correction	Numeric/6.1	MW	Example: -1.5
Barometric Pressure Observed	Numeric/5.2	In Hg	Example: 29.92
Barometric Pressure Rated	Numeric/5.2	In Hg	Example: 30.10
Barometric Pressure Correction	Numeric/6.1	MW	Example: -0.8
Observed Site Code	Numeric/1	1,2,3	0 No Weather Data Needed 1 Plant Weather Station 2 Local/City/Airport Weather Station 3 Other
Observed Site Specified	Alphanumeric/50	User Input	If the Observed Site Code above is 0 or 1 then this field can be left null If the Observed Site Code above is 2 or 3, this field must contain an official weather station identifier; if more than 50 characters are needed, use the notes area
Rated Site Code	Numeric/1	1,2,3	0 No Weather Data Needed 1 Plant Weather Station 2 Local/City/Airport Weather Station 3 Other
Rated Site Specified	Alphanumeric/50	User Input	If the Observed Site Code above is 0 or 1 then this field can be left null If the Observed Site Code above is 2 or 3, this field must contain an official weather station identifier; if more than 50 characters are needed use the notes area
note	Alphanumeric/400	User input	Additional clarification of test information

Notes on certain fields:

- 1) Any variable name above that is highlighted in yellow, does not need to be input; the fields can remain null; it will be calculated from the other input fields.
- 2) The test duration must be one hour, exactly, for fuel cell, diesel, reciprocating, combustion turbines (not part of a combined cycle unit), hydro and pumped storage units; the test duration must be two hours, exactly, for combined cycle (or its components), steam, nuclear, or fluidized bed units.

- 3) **Test Index** If the system does not accept your summer or winter in-period test with a test index of '1' check your test dates and times.....one, the other or both, may not be within the respective test period. All in-period tests must have a test index of 1.
- 4) Claimed Installed Capacity If the claimed installed capacity that is pre-populated on the test screen or input via the upload file, is not correct, the application will correct it once the test has been submitted. If it does not, please contact <u>gadssupport@pim.com</u>
- 5) Process Load Served If the generator is a co-generator or a unit that delivers steam and/or electric to an on-site or nearby facility, the full gross capability of the unit must be entered with the appropriate auxiliary load and any process load for the onsite or nearby facility to which the generator sends steam or electricity. It may also be necessary to 'convert' steam load to MW in some cases.
- 6) All MW and MVAR values must be precise to one decimal; temperature and humidity values can be no more precise than one decimal; barometric pressure values can be no more precise than two decimals.
- 7) Diesel and reciprocating engine generating units, hydroelectric and pumped storage generating units and fuel cell generating units do not need to input temperatures, humidity or barometric pressure. Both the **Observed Site Code** and the **Rated Site Code** must be set to '0'.
- 8) Observed Site Code if the observed conditions at the time of the test are determined from a plant weather station, plant data recorders or manually by plant employees, set this code to 1. If the observed conditions at the time of the test are determined from a local, city or airport weather station, set this code to 2. If the observed conditions at the time of the test are determined in a different manner set this code to 3. Typically if the weather conditions are a blend of plant, city and/or airport weather stations set this code to 3. Starting in the summer 2021 test period, both the observed site code and the rated site code must be the same; Manual 21, update 15, effective May 26, 2021 requires that weather data used at a plant for both observed and rated conditions must come from the same weather data source.
- 9) Observed Site Specified if the observed site code is set to 0 or 1, no entry is needed for this parameter. If the observed site code is set to 2, then entry of the weather station used must be entered in this area. If an airport weather station was used please specify the airport code such as ORD, PHL, ACY, etc.; if a local or city weather station was used, please enter the station identifier and the website used, such as NOAA WBAN 13739 or weather underground and the weather station name. If the observed site code is set to 3, then entry of the details used, must be entered in this area. If the information is a blend of weather stations and plant data please provide appropriate details.
- 10)**Rated Site Code** if the rated conditions are determined from a plant weather station or plant data recorders, set this code to 1. If the rated conditions are determined from a local, city or airport weather station, set this code to 2. If the rated conditions are determined in a different manner set this code to 3. Typically if the weather conditions are a blend of plant, city and/or airport weather stations set this code to 3. Starting in the summer 2021 test period, both the observed site code and the rated site code must be the same; Manual 21, update 15, effective May 26, 2021 requires that weather data used at a plant for both observed and rated conditions must come from the same weather data source.
- 11)**Rated Site Specified** if the rated site code is set to 0 or 1, no entry is needed for this parameter. If the rated site code is set to 2, then entry of the weather station used must be entered in this area. If an airport weather station was used please specify the airport code such as ORD, PHL, ACY, etc.; if a local or city weather station was used, please enter the station identifier and the website used, such as NOAA WBAN 13739 or wundergound and the weather station name. If the rated site code is set to 3, then entry of the details used must be entered in this area. If the information is a blend of weather stations and plant data please provide appropriate details.

- 12)If any observed or rated value is input without a corresponding rated or observed value, respectively, the file will not upload. In other words, for any unit that enters an observed parameter, a corresponding rated parameter must be entered. For any unit that enters a rated parameter, a corresponding observed parameter must be entered.
- 13)Please refer to Manual 21 at this link: <u>https://www.pjm.com/-/media/documents/manuals/m21.ashx</u>

If at any time, assistance is needed, please email gadssupport@pim.com