

WRAP Data Request Instruction Manual

1/15/2026

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Overview

The purpose of this document is to provide guidance on completing the Excel data request for participating entities in the Western Resource Adequacy Program (WRAP). The data provided will be used in the Loss of Load Expectation (LOLE) and Effective Load Carrying Capability (ELCC) studies, as well as Qualified Capacity Contribution (QCC) calculations. Please fill out all required data fields and return the submission to the Program Operator by the deadline specified in the Business Practice Manuals.

All megawatt (MW) values in the data request should be reported to the tenth of a megawatt (0.1 MW) and all percentage values should be reported to the hundredths of a percentage (0.01 %).

Storage Hydro

This section includes all Storage Hydro resources planned to be used for WRAP. The list of resources consists of those fully or partially owned by the reporting entity. Storage Hydro facilities that are under long-term Power Purchase Agreements (PPAs) should also be reported.

For upgrades, create a **new record** for the upgraded resource and enter the date the resource became/will become operational after the upgrade for “In Service Date”. Note in the “Comments” field what was upgraded. In the pre-upgrade record, enter the date the unit went/will go out of operation for the upgrade as the “Retirement Date”.

If one Participant is aggregating multiple entities and submitting on their behalf, then the submitting Participant would also need to provide all the resource information for all aggregated entities as well.

As applicable, the latest list of EIA-860 information can be found at this location:

<https://www.eia.gov/electricity/data/eia860/>

Description	Instructions
Plant Name	Plant Name of the resources. If possible, utilize the EIA-860 Plant Name given for US resources. This should match the Facility Name in EDST if applicable.
Unit ID	The unique generator identification commonly used by plant management. If possible, utilize the EIA-860 Generator ID given for US resources.
Prime Mover	Utilize the predetermined dropdown list of EIA-860 Prime Mover identifiers located in Appendix A. For combined cycle resources, a prime mover code must be entered for each generator. If specified as “ Other (HK) ” please explain the reasoning in the comments section.
Host Balancing Authority	Please provide the Balancing Authority for which the resource is located.
Ownership or Contracted Percentage	Enter the percentage owned or contracted by the Participant. This should also include any PPAs where the Participant has fully contracted for the capacity from a facility but not include short-term PPAs with another Load Serving Entity (LSE). For example, if the Participant has a PPA with an entity for an extended period of time (e.g. 15 years or life of the facility) then that percentage should be listed here.

Nameplate (MW)	Provide the plant's nameplate capacity.
Monthly QCC (MW)	Provide the monthly QCC values in each respective column as calculated in the Storage Hydro workbook.
In-Service Date Month-Year	Provide the month and year of the original effective date that the resource became operational. If possible, the operating year used in EIA-860 should be submitted for all resources within the US. For planned resources, enter the month and year the resource is projected to become operational. For upgraded resources, enter the month and year the resource became operational after upgrading.
Retirement Date Month-Year	Provide the month and year for resources that have been either formally announced or marked for retirement or upgrade.
State or Province	Enter the state acronym where the resource is physically located. For resources in Canada, enter the province.
County or County Equivalent	Enter the county or county equivalent where the resource is located.
Comments	Enter, if applicable, any additional comments about the submitted information.

Other Resources

Resources in the Other Resource tab should include all resources, excluding Storage Hydro, planned to be used for WRAP. The list of resources consists of those fully or partially owned by the reporting entity. Facilities that are under long-term PPAs should also be reported in the Other Resources tab. For Hybrid/collocated resources, resource components should be listed separately (e.g. solar a separate line item from a battery), and the facility limitation (i.e. Point of Interconnection) be listed in both line items.

For upgrades, create a **new record** for the upgraded resource and enter the date the resource became/will become operational after the upgrade for “In Service Date”. Note in the “Comments” field what was upgraded. In the pre-upgrade record, enter the date the unit went/will go out of operation for the upgrade as the “Retirement Date”.

If one Participant is aggregating multiple entities and submitting on their behalf, then the submitting Participant would also need to provide all the resource information for all aggregated entities as well.

As applicable, the latest list of EIA-860 information can be found at this location:

<https://www.eia.gov/electricity/data/eia860/>

Required Resource data fields are listed below:

Description	Instructions
Plant Name	Plant Name of the resources. If possible, utilize the EIA-860 Plant Name given for US resources. This should match the Facility Name in EDST if applicable.
Unit ID	The unique generator identification commonly used by plant management. If possible, utilize the EIA-860 Generator ID given for US resources.
Prime Mover	Utilize the predetermined dropdown list of EIA-860 Prime Mover identifiers located in Appendix A. For combined cycle resources, a prime mover code must be entered for each generator. If specified as “ Other (OT) ” please explain the reasoning in the comments section.
Fuel Type	Utilize the predetermined dropdown list of fuel types used as the primary energy source to power the generator. If specified as “ Other ” please explain the reasoning in the comments section.
Host Balancing Authority	Please provide the Balancing Authority for which the resource is located.
Ownership or Contracted Percentage	Enter the percentage owned or contracted by the Participant. This should also include any PPAs where the Participant has fully contracted for the capacity from a facility but not include short-term PPAs with another LSE. For example, if the Participant has a PPA with a wind developer, solar developer, or city that has local generation for an extended period of time (e.g. 15 years or life of the facility) then that percentage should be listed here.

Summer Max Capacity or Nameplate (MW)	Provide the generator's maximum net summer capacity for the primary energy source. The net expected capacity as determined from a summer capability test can be used for all resources. If the summer net capability is not known, please provide the nameplate of the resources. For Wind, Solar, Run of River, and Energy Storage Resources, provide the nameplate of the resource. If providing the nameplate, the EIA-860 nameplate capacity should be used utilized as applicable for resources located in the US.
Winter Max Capacity or Nameplate (MW)	Provide the generator's maximum net winter capacity for the primary energy source. The net expected capacity as determined from a winter capability test can be used for all resources. If the winter net capability is not known, please provide the summer net capability value in this cell. For Wind, Solar, Run of River, and Energy Storage resources, provide the nameplate of the resource. If providing the nameplate, the EIA-860 nameplate capacity should be used utilized as applicable for resources located in the US.
In-Service Date Month-Year	Provide the month and year of the original effective date that the resource became operational. If possible, the operating year used in EIA-860 should be submitted for all resources within the US. For planned resources, enter the month and year the resource is projected to become operational. For upgraded resources, enter the month and year the resource became operational after upgrading.
Retirement Date Month-Year	Provide the month and year for resources that have been either formally announced or marked for retirement or upgrade.
State or Province	Enter the state acronym where the resource is physically located. For resources in Canada, enter the province.
County or County Equivalent	Enter the county or county equivalent where the resource is located.
Inverter Loading Ratio (only for Solar and Wind)	For Solar and Wind only resources, enter the loading ratio of the inverter compared to the nameplate of the resource. As an example, if the nameplate of a solar resource is 150 MW and the inverter is limited to 125 MW (oversizing of solar panels), then the ratio would be 1.2 (150 / 125). If the nameplate of the resource is the same as the inverter or the loading ratio is not known, the provided loading ratio would be 1.0.
ESR Duration (Only for ESRs)	For Energy Storage Resources (ESRs), enter the maximum continuous hour duration for which the ESR can be utilized at its Max Capacity.
Facility Limitation MW (Only for Hybrid/collocated facilities)	For Hybrid/collocated facilities, provide the max capability for which the combined amount of the resources behind a shared POI can output to the system. This is typically based on the inverter limit before generation is output to the system.

Grid Charging (Only for Hybrid facilities)	For Hybrid facilities, select “Yes” to indicate if the storage component can be charged from the BES. Select “No” if it can only be charged by the other Hybrid/collocated component(s).
Comments	Enter, if applicable, any additional comments about the submitted information.

Outage Data

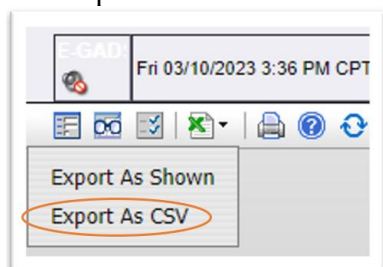
NERC GADS

Outage information is a key element in the ELCC and LOLE studies. The requested outage data provided needs to contain all thermal and long duration storage resources provided in the Forward Showing Submittal to adequately model outage information in the Advance Assessment studies. The required source of information is data provided to the NERC GADS system. Outage data only need to be provided by one Participant for resources that are jointly owned or owned by an external entity and partially contracted to multiple Participants. For Participants that previously provided GADS data, only the previous year's NERC GADS data are needed. For new Participants or newly acquired resources, the previous **seven** years should be submitted. Each event or event type will need to be reported as well. Please follow the below steps to deliver the requested files. *(Note: If a Participant is aggregating multiple entities and submitting on their behalf, then the Participant would also need to provide all the outage information for those entities as well.)*

Information regarding NERC GADS data can be found at this link:

<https://www.nerc.com/pa/RAPA/gads/Pages/Data%20Reporting%20Instructions.aspx>

1. From the [NERC webPortal](#), filter your data to the **year** being requested.
 - a. If needed, contact personnel that has access to GADS so that the data can be obtained and provided for the resources included in the Advance Assessment and FS Submittals.
2. SPP is requesting that these data be delivered in **CSV** format.
 - a. **Events** and **Performance** data from those specific tabs in the webPortal. **Please do not provide 'Unit Metrics'**
 - b. These data can be exported from the toolbar in the top right of your webPortal screen. Select the dropdown arrow next to the green Excel symbol and select the **Export as CSV** option in the dropdown. The file extension should be *yourfile.csv*



- c. The process should be nearly the same for both the Events and Performance data. Please remember to download both data types and try to avoid renaming the files. Additionally, do not make changes to the files because the file encoding could change upon saving the file; this may require resubmission of the data. Please ensure you do not have any filters unless necessary. It is acceptable to submit data which has been submitted previously; SPP processes will identify duplicate records. You do not need to filter individual months per reporting period.
3. Provide Event and Performance data exports to SPP.

Non-NERC GADS

For non-NERC GADS resources, submit outage or hourly output data using the method below that aligns with how the resource is dispatched.

Dispatchable: Historical Outages

For dispatchable Thermal and Long Duration Storage resources that do not report GADS data, fill out and submit the [WRAP Non NERC GADS Resources Outage Data Submission Form](#) posted on the WPP SharePoint (BPM 105, section 4.2.3, Option 2). Please include at least the most recent seven years of outage data, or as many years as are available for newer resources.

Non-dispatchable: Historical Output

For non-dispatchable Thermal and Long Duration Storage resources accredited using 10 years of historical output data, fill out the [Contract & Non-NERC Resource Accreditation Worksheet](#) posted on the WPP SharePoint (BPM 105, section 4.2.3, Option 1) and include it with the next two FS Submittals.

External Contracts & Obligations

This tab is meant to capture purchases and sales, or transactions, between a Participant and a non-Participant. Transactions between two Participants do not need to be provided for this data request. The transactions would need to be for anything between the timeframe of Year 2 and Year 5 of the Advance Assessment. For entities that are purchasing capacity from a generation only entity through a long-term continuous agreement, those would need to be provided on the Resources tab so that the resource is modeled in the studies. If it is a short-term agreement, then those transactions would need to be provided on this tab.

Each change in MW for a contract would need to be provided as separate line items. For example, given a contract begins June 1 of 2028, ends September 30 of 2028, and has 100 MW for the first two months and 50 MW for the second two months, two line items would need to be entered. One line item would represent the 100 MW from June 1 to July 31 of 2028, and the second line item would represent the 50 MW from August 1 to September 30 of 2028.

For Participants that are aggregating multiple entities and submitting on their behalf, the submitting Participant would also need to provide the transactions those entities have with other entities external to WRAP.

Required External Contracts & Obligations data fields are listed below:

Description	Instructions
Transaction Name	Specify the name of the contract or agreement
Source Entity (From)	Provide the selling entity's name.
Sink Entity (To)	Provide the purchasing entity's name.
Start Date (Month-Year)	Provide the start month and year for the contract or agreement. This assumes that the contract covers the entirety of the month included in the Binding Season.
End Date (Month-Year)	Provide the end month and year for the contract or agreement. This assumes that the contract covers the entirety of the month included in the Binding Season.
Contract Type	Identify if the contract is a "System" or "Resource Specific" contract.
Specify Resource	If the contract or agreement is Resource Specific, provide the name of the resource or facility.
MW	Provide the MW listed in the agreement.
Comments	Enter, if applicable, any additional comments about the submitted information.

Demand Response Programs

This tab is meant to capture the parameters and assumptions associated with controllable and dispatchable Demand Response programs. This is only applicable to Participants with those programs and includes the projected impact of any Demand Response programs that are directly controlled or dispatched by the LSE or BA. For Participants aggregating multiple entities and submitting on their behalf, then the submitting Participant would also need to provide the data for those entities as well.

Required Demand Response Programs data fields are listed below:

Description	Instructions
Program Name	Specify the name of the program
Program Type	Specify the type of Demand Response program (e.g. thermostat program, etc.)
Summer Max Capability (MW)	The projected amount of enrolled (i.e. installed, registered) controllable and dispatchable Demand Response programs for the Summer Binding Season. If the program is only applicable for one season, enter zero MW for the season the program is not utilized.
Winter Max Capability (MW)	The projected amount of enrolled (i.e. installed, registered) controllable and dispatchable Demand Response programs for the Winter Binding Season. If the program is only applicable for one season, enter zero MW for the season the program is not utilized.
Min Consecutive Hours	Provide, if applicable, the minimum number of consecutive hours that the program must be called. If there is a different limitation between seasons, please specify. If nothing is provided, the assumption would be no restrictions.
Max Daily Hours	Provide, if applicable, the maximum number of daily hours that the program must be called. If there is a different limitation between seasons, please specify. If nothing is provided, the assumption would be no restrictions.
Max Energy Limitation (MWh)	Provide, if applicable, the program's max energy limit. If there is a different limitation between seasons, please specify. If nothing is provided, the assumption would be no restrictions.
Energy Constraint	Provide, if applicable, how often the energy limit is applied. For example, if 400 MWh can be used each month, then the program is limited to 400 MWh every month and will restart at the beginning of the next month. The options for this variable are: Daily, Monthly, Seasonally, or Yearly. If nothing is provided, the assumption would be no restrictions.
Number of Calls for Max Dispatch	Provide, if applicable, the maximum number of times the program can be called upon. For example, if the program can only be called upon three times per month, then the amount of times would be a max of three and would restart the count every month. This value is in conjunction with the Max Dispatch parameter. If nothing is provided, the assumption would be no restrictions.
Max Dispatch	Provide, if applicable, the constraint for the maximum number of times the program can be called upon. The options for this variable are: Daily, Monthly, Seasonally, or Yearly. This value is in conjunction with the Number of Calls for Max Dispatch parameter. If nothing is provided, the assumption would be no restrictions.
Included in Hourly Load Profiles?	Select "Yes" if this program is represented in the Historical Load Profiles tab. Otherwise select "No".
Comments	Enter, if applicable, any additional comments about the submitted information.

Hourly Load Profiles

This tab is meant to capture the historical hourly load profiles of the Participant submitting the data. Participants that have previously submitted hourly load profiles for the previous 10 years only need to include historical hourly load profiles for the most recent full calendar year. New Participants need to provide historical load data from the previous 10 years, as well as November and December of the preceding year. Also, please make all hourly load profile data submissions in the **Pacific Prevailing Time zone** using the **hour beginning** format. **The Pacific Prevailing Time zone should have one less hour in March and one extra hour in November.** The dataset for each year should be thought of hour 1 to hour 8,760 (for non-leap day years).

Note if Hourly Load Profiles include Demand Response data in cell F2.

Break out Hourly Load Profiles by Load and Resource Zone and **note which Zone the load values belong to.**

Hourly Wind, ROR Hydro, and Solar Profiles

These three tabs are meant to capture the historical hourly Wind, Solar, and Run of River profiles for resources provided in the Other Resources tab. Please provide the information on a resource level. Also, please make all hourly profile data submissions in the **Pacific Prevailing Time zone** using the **hour beginning** format. **The Pacific Prevailing Time zone should have one less hour in March and one extra hour in November.** The dataset for each year should be thought of hour 1 to hour 8,760 (for non-leap day years).

Please leave the plant output blank for any hours that the facility is on outage instead of using 0. Blanks in the hourly plant output are treated as missing data and will be substituted with synthetic data. These tabs are meant to be representative templates. It is acceptable to provide the information in separate Excel documents if the file becomes too large. If the resource is part of a Hybrid/collocated configuration, then only include non-ESR output data. For resources belonging to current Participants that previously provided hourly data, only the most recent year is needed. For new Participants and any new resources, the previous 10 years, as well as November and December of the preceding year, should be submitted.

Appendix A: Prime Mover Codes

Code	Term
BA	Energy Storage, Battery
CE	Energy Storage, Compressed Air
PS	Energy Storage, Reversible Hydraulic Turbine (Pumped Storage)
ES	Energy Storage, Other (specify in comments section)
ST	Steam Turbine, including nuclear, geothermal and solar steam (does not include combined cycle)
GT	Combustion (Gas) Turbine (includes jet engine design)
IC	Internal Combustion Engine (diesel, piston, reciprocating)
CA	Combined Cycle Steam Part
CT	Combined Cycle Combustion Turbine Part (type of coal or solid must be reported as energy source for integrated coal gasification)
CS	Combined Cycle Single Shaft (combustion turbine and steam turbine share a single generator)
CC	Combined Cycle Total Resource (use only for plants/generators in planning stages, for which specific generator details cannot be provided)
HA	Hydrokinetic, Axial Flow Turbine
HK	Hydrokinetic, Other (specify in comments section)
HY	Hydroelectric Turbine (includes turbines associated with delivery of water by pipeline)
BT	Turbines Used in a Binary Cycle (including those used for geothermal applications)
PVT	Photovoltaic – Tracking (PVT)
PVS	Photovoltaic – Stationary (PVS)
WT	Wind Turbine
OT	Other/Unknown (specify in comments section)