



DSR Spin Event Meter Data Submission **Via CSV Upload**

In order to calculate credit for spinning event participation, PJM must calculate the change in demand at the Load Response facility. Therefore, the Load Response facility must communicate their telemetry to PJM, either automatically via ICCP to the PJM EMS, or alternately through a manual submission if the facility is not directly metered by PJM.

Curtailement data must be submitted within 24 hours of a spin event in order to receive credit for the event response. The load response facility must provide facility energy consumption data beginning one minute before the Spinning Event start, through one minute after the Spinning Event end, with a sampling rate of a data value every minute.

The CSP is not required to submit demand for every participating facility per event. However, without supplied data, PJM will not have sufficient information to generate response credit.

Method of Data Submission

There are two methods of submitting spin event meter data to PJM:

- 1) Upload a csv file through PJM's eSuite tool: www.esuite.pjm.com
 - a. Spin event data can be submitted for multiple facilities within a single csv file.
 - b. User must have Load Response R/W access in order to upload a csv file through eSuite.
 - c. Spin event data format must exactly match the format in Appendix A.
- 2) Submit XML file to PJM via web services (see DSR Spin Event Data Web Services Documentation)
 - a. Spin event data for each facility must be submitted individually.
 - b. User must have Load Response R/W access in order to upload a xml file
 - c. Spin event data format must be consistent with the schema definition.



Business Rules for CSV File Format (Spin Event Meter Data)

The following business rules apply to the CSV upload file format. Associated error messages are depicted in the table below. If you receive any of these format errors, the whole csv file will fail validation and will not be saved to PJM's database.

Business Rule	Associated Error Message
<p>If a header line exists in the CSV file, all the column names must exist in the correct sequence and must be spelled as follows: REGISTRATION_ID,ENERGY_UNITS,DATE_TIME,TIME_ZONE,ENERGY,FILE_TYPE.</p>	<p>If have an incorrect header line, you will get either of the following error messages, Your header is not in the right sequence - REGISTRATION_ID,ENERGY_UNITS,DATE_TIME,TIME_ZONE,ENERGY,FILE_TYPE.</p> <p>Your header contains empty field - REGISTRATION_ID,ENERGY_UNITS,DATE_TIME,TIME_ZONE,ENERGY,FILE_TYPE.</p>
<p>If the header line is not provided, the program will assume each line in the CSV file is in the same order as the header line.</p>	N/A
<p>Only MW, KW is allowed in the ENERGY_UNITS column. These values are not case insensitive.</p>	<p>If a different value is entered, you will get the following error, Line 2's ENERGY_UNITS need to have value of MW or KW.</p>
<p>You can have different Registration Ids in the same CSV upload file, but within any Registration Id, you must submit only one type of ENERGY_UNITS, either MW or KW.</p> <p>For example, you choose to submit two different Registration Ids, 1000 and 1001, in one upload file. You can submit registration id 1000 as KW and registration id 1001 as MW, but you cannot mix the energy units within a single registration id.</p>	<p>If you submit both MW or KW for a single registration id, you will get the following error, Line 6 has an ENERGY_UNITS of MW, ENERGY_UNITS must be consistent for each REGISTRATION_ID in the same upload file.</p>
<p>Date_Time must be in the following format: mm/dd/yyyy hh24:mi or mm/dd/yyyy hh24:mi:ss</p>	<p>If a different format entered, you will get the following error message, Line 2's DATE_TIME/TIME_ZONE is not valid.</p>
<p>Every field must contain a value. Null values are not accepted.</p>	<p>If any field is empty, you will get a error message like, Line 7 has no value for TIME_ZONE.</p>
<p>Registration ID must be submitted as a</p>	<p>If an invalid id exists in the file, you will get</p>



number, or a number preceded by an “R” or “r” as it is in the Load Response Application.	the following error Line 2 has an invalid REGISTRATION_ID of R23t.
Energy must be a number.	If energy is anything but a number, you will the following error: Line 2's ENERGY value is not a number.
File Type must be ‘1’	If File Type is not a ‘1’, you will get the following error: Line 1's FILE_TYPE value not match the type selected.



Appendix A: CSV File Format

Example csv file without any format errors:

```
REGISTRATION_ID,ENERGY_UNITS,DATE_TIME,TIME_ZONE,ENERGY,FILE_TYPE
4589,mw,4/2/2006 01:59:59,GMT,50.234,1
4689,mw,4/2/2006 02:00:21,GMT,51.234,1
1000,mw,4/2/2006 02:01:00,GMT,52.234,1
1000,mw,4/2/2006 02:02,GMT,53.234,1
1000,mw,4/2/2006 02:03,GMT,54.234,1
1000,mw,4/2/2006 02:04,GMT,55.234,1
1000,mw,4/2/2006 02:05,GMT,56.234,1
R1352,kw,4/2/2006 05:59,GMT,50.234,1
1352,kw,4/2/2006 06:00,GMT,51.234,1
r1352,kw,4/2/2006 06:01,GMT,52.234,1
1352,kw,4/2/2006 06:02,GMT,53.234,1
1352,kw,4/2/2006 06:03,GMT,54.234,1
1352,kw,4/2/2006 06:04,GMT,55.234,1
1352,kw,4/2/2006 06:05,GMT,56.234,1
```

Example Scenario Using Excel:

PJM RTO has declared issued a call for 100% Spinning Event on 2/17 starting at 14:00, lasting through 14:15. The Demand Side Response facility with registration ID number R12345 was able to curtail 5 MW of demand five minutes into the event. The CSP is **required** to submit data from 13:59 through 14:16 to prove that it responded to this spinning event. (PJM *recommends* submitting data from 10 minutes before the event through 10 minutes after the event in order to ensure that the timing guidelines are met.)

The CSP would submit the spin event reduction data for this facility to PJM in the following format, as it would read in MS Excel:

REGISTRATION_ID	ENERGY_UNITS	DATE_TIME	TIME_ZONE	ENERGY	FILE_TYPE
R12345	MW	02/17/2006 13:59	EST	52.25	1
R12345	MW	02/17/2006 14:00	EST	52.25	1
R12345	MW	02/17/2006 14:01	EST	51	1
R12345	MW	02/17/2006 14:02	EST	50.23	1
R12345	MW	02/17/2006 14:03	EST	49	1
R12345	MW	02/17/2006 14:04	EST	48.5	1
R12345	MW	02/17/2006 14:05	EST	47.25	1
R12345	MW	02/17/2006 14:06	EST	47.25	1
R12345	MW	02/17/2006 14:07	EST	47.25	1
R12345	MW	02/17/2006 14:08	EST	47.25	1
R12345	MW	02/17/2006 14:09	EST	47.25	1
R12345	MW	02/17/2006 14:10	EST	47.25	1
R12345	MW	02/17/2006 14:11	EST	47.25	1
R12345	MW	02/17/2006 14:12	EST	47.25	1



R12345	MW	02/17/2006 14:13	EST	47.25	1
R12345	MW	02/17/2006 14:14	EST	47.25	1
R12345	MW	02/17/2006 14:15	EST	47.25	1
R12345	MW	02/17/2006 14:16	EST	47.25	1