

MSRS Reports – Interval Ending 24



- In July 2017 MSS presentation, PJM described how 5 Minute time intervals would be displayed on MSRS reports
- <http://www.pjm.com/-/media/committees-groups/subcommittees/mss/20170720/20170720-item-01a-msrs-reports-on-sub-hourly-time-basis.ashx>
- When opening CSV download files in Microsoft Excel, the Interval Ending columns are automatically formatted by Excel's default formatting to a m/d/yyyy h:mm date format

- The Excel default date formatting causes issues with Interval Ending 24:00 values:

4001.4	4001.41
EPT Interval Ending	GMT Interval Ending
12/1/2016 18:45	12/1/2016 23:45
12/1/2016 18:50	12/1/2016 23:50
12/1/2016 18:55	12/1/2016 23:55
12/1/2016 19:00	42706
12/1/2016 19:05	12/2/2016 0:05
12/1/2016 19:10	12/2/2016 0:10
12/1/2016 23:55	12/2/2016 4:55
42706	12/2/2016 5:00

- Excel default formatting sets the Interval Ending 24:00 values to the numerical date equivalent

To correct for the default date formatting issue, the value for Interval Ending for 24:00 will be updated to remove the minutes and instead be 24

4001.4	4001.41
EPT Interval Ending	GMT Interval Ending
12/1/2016 18:45	12/1/2016 23:45
12/1/2016 18:50	12/1/2016 23:50
12/1/2016 18:55	12/1/2016 23:55
12/1/2016 19:00	12/1/2016 24
12/1/2016 19:05	12/2/2016 0:05
12/1/2016 19:10	12/2/2016 0:10
12/1/2016 23:55	12/2/2016 4:55
12/1/2016 24	12/2/2016 5:00

4001.4	4001.41
EPT Interval Ending	GMT Interval Ending
12/1/2016 18:45	12/1/2016 23:45
12/1/2016 18:50	12/1/2016 23:50
12/1/2016 18:55	12/1/2016 23:55
12/1/2016 19:00	42706
12/1/2016 19:05	12/2/2016 0:05
12/1/2016 19:10	12/2/2016 0:10
12/1/2016 23:55	12/2/2016 4:55
42706	12/2/2016 5:00

4001.4	4001.41
EPT Interval Ending	GMT Interval Ending
12/1/2016 18:45	12/1/2016 23:45
12/1/2016 18:50	12/1/2016 23:50
12/1/2016 18:55	12/1/2016 23:55
12/1/2016 19:00	12/1/2016 24
12/1/2016 19:05	12/2/2016 0:05
12/1/2016 19:10	12/2/2016 0:10
12/1/2016 23:55	12/2/2016 4:55
12/1/2016 24	12/2/2016 5:00

- XML download files have no formatting issues with 24:00 interval ending value.
- With updated value to 24, XML file simply drops the :00

```
<?xml version="1.0" encoding="UTF-8"?>
- <MSRS xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  - <HEADER>
    <START_DATE INTERVAL="DAY">2016-12-01</START_DATE>
    <END_DATE INTERVAL="DAY">2016-12-01</END_DATE>
  </HEADER>
  - <ROWSET>
    - <ROW>
      <EPT_INTERVAL_ENDING COL_ID="4001.4">12/01/2016 18:45</EPT_INTERVAL_ENDING>
      <GMT_INTERVAL_ENDING COL_ID="4001.41">12/01/2016 23:45</GMT_INTERVAL_ENDING>
    </ROW>
    - <ROW>
      <EPT_INTERVAL_ENDING COL_ID="4001.4">12/01/2016 18:50</EPT_INTERVAL_ENDING>
      <GMT_INTERVAL_ENDING COL_ID="4001.41">12/01/2016 23:50</GMT_INTERVAL_ENDING>
    </ROW>
    - <ROW>
      <EPT_INTERVAL_ENDING COL_ID="4001.4">12/01/2016 18:55</EPT_INTERVAL_ENDING>
      <GMT_INTERVAL_ENDING COL_ID="4001.41">12/01/2016 23:55</GMT_INTERVAL_ENDING>
    </ROW>
    - <ROW>
      <EPT_INTERVAL_ENDING COL_ID="4001.4">12/01/2016 19:00</EPT_INTERVAL_ENDING>
      <GMT_INTERVAL_ENDING COL_ID="4001.41">12/01/2016 24:00</GMT_INTERVAL_ENDING>
    </ROW>
    - <ROW>
      <EPT_INTERVAL_ENDING COL_ID="4001.4">12/01/2016 23:55</EPT_INTERVAL_ENDING>
      <GMT_INTERVAL_ENDING COL_ID="4001.41">12/02/2016 04:55</GMT_INTERVAL_ENDING>
    </ROW>
    - <ROW>
      <EPT_INTERVAL_ENDING COL_ID="4001.4">12/01/2016 23:55</EPT_INTERVAL_ENDING>
      <GMT_INTERVAL_ENDING COL_ID="4001.41">12/02/2016 04:55</GMT_INTERVAL_ENDING>
    </ROW>
    - <ROW>
      <EPT_INTERVAL_ENDING COL_ID="4001.4">12/01/2016 24:00</EPT_INTERVAL_ENDING>
      <GMT_INTERVAL_ENDING COL_ID="4001.41">12/02/2016 05:00</GMT_INTERVAL_ENDING>
    </ROW>
    - <ROW>
      <EPT_INTERVAL_ENDING COL_ID="4001.4">12/01/2016 24:00</EPT_INTERVAL_ENDING>
      <GMT_INTERVAL_ENDING COL_ID="4001.41">12/02/2016 05:00</GMT_INTERVAL_ENDING>
    </ROW>
  </ROWSET>
</MSRS>
```

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- <MSRS xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  - <HEADER>
    <START_DATE INTERVAL="DAY">2016-12-01</START_DATE>
    <END_DATE INTERVAL="DAY">2016-12-01</END_DATE>
  </HEADER>
  - <ROWSET>
    - <ROW>
      <EPT_INTERVAL_ENDING COL_ID="4001.4">12/01/2016 18:45</EPT_INTERVAL_ENDING>
      <GMT_INTERVAL_ENDING COL_ID="4001.41">12/01/2016 23:45</GMT_INTERVAL_ENDING>
    </ROW>
    - <ROW>
      <EPT_INTERVAL_ENDING COL_ID="4001.4">12/01/2016 18:50</EPT_INTERVAL_ENDING>
      <GMT_INTERVAL_ENDING COL_ID="4001.41">12/01/2016 23:50</GMT_INTERVAL_ENDING>
    </ROW>
    - <ROW>
      <EPT_INTERVAL_ENDING COL_ID="4001.4">12/01/2016 18:55</EPT_INTERVAL_ENDING>
      <GMT_INTERVAL_ENDING COL_ID="4001.41">12/01/2016 23:55</GMT_INTERVAL_ENDING>
    </ROW>
    - <ROW>
      <EPT_INTERVAL_ENDING COL_ID="4001.4">12/01/2016 19:00</EPT_INTERVAL_ENDING>
      <GMT_INTERVAL_ENDING COL_ID="4001.41">12/01/2016 24</GMT_INTERVAL_ENDING>
    </ROW>
    - <ROW>
      <EPT_INTERVAL_ENDING COL_ID="4001.4">12/01/2016 23:55</EPT_INTERVAL_ENDING>
      <GMT_INTERVAL_ENDING COL_ID="4001.41">12/02/2016 04:55</GMT_INTERVAL_ENDING>
    </ROW>
    - <ROW>
      <EPT_INTERVAL_ENDING COL_ID="4001.4">12/01/2016 23:55</EPT_INTERVAL_ENDING>
      <GMT_INTERVAL_ENDING COL_ID="4001.41">12/02/2016 04:55</GMT_INTERVAL_ENDING>
    </ROW>
    - <ROW>
      <EPT_INTERVAL_ENDING COL_ID="4001.4">12/01/2016 24</EPT_INTERVAL_ENDING>
      <GMT_INTERVAL_ENDING COL_ID="4001.41">12/02/2016 05:00</GMT_INTERVAL_ENDING>
    </ROW>
    - <ROW>
      <EPT_INTERVAL_ENDING COL_ID="4001.4">12/01/2016 24</EPT_INTERVAL_ENDING>
      <GMT_INTERVAL_ENDING COL_ID="4001.41">12/02/2016 05:00</GMT_INTERVAL_ENDING>
    </ROW>
  </ROWSET>
</MSRS>
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