Annex A

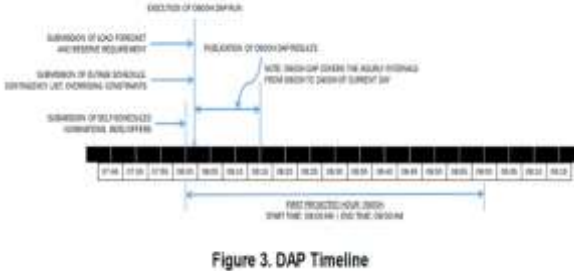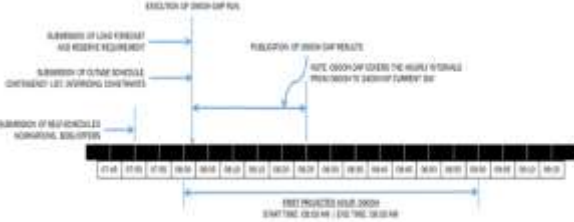**Proposed Amendments to the WESM Manual on Dispatch Protocol for the Optimal Timing of Market Runs**

Dispatch Protocol No. 13						
Title	**Clause**	**Provision**	**Proposed Amendment**	**Rationale**	**Stakeholder Comments**	**Stakeholder Rationale**
Categories of WESM Timetable – Background	4.1.4	(new)	**The Market Operator shall review and update if necessary the WESM Timetable after the commencement of the full operations of the new Market Management System in accordance with DOE Department Circular Nos. 2016-10-0014 and 2018-04-0007.**	The Market Operator Performance Standards shall be revised accordingly to be consistent with any changes to the market data publication timelines and the relevant obligations of the MO.		
Categories of WESM Timetable – Day-Ahead Projection (DAP)	4.4.2	The activities that shall be performed for the DAP, within the time specified, using inputs for the covered study period of that specific DAP run, are provided in Table 2. The covered periods for all DAP runs within a day are provided in Table 3. Table 2. DAP Timeline	The activities that shall be performed for the DAP, within the time specified, using inputs for the covered study period of that specific DAP run, are provided in Table 2. The covered periods for all DAP runs within a day are provided in Table 3. Table 2. DAP Timeline	The proposed changes will reflect the optimal timing of activities for the market runs considering the actual performance of the NMMS. Specifically, the justifications for the proposed changes for the Day-Ahead Projection (DAP) run are as follows: • Before [STPH1* - 10 minutes]: Submission of self-scheduled nominations, bids/offers – To allow more processing time		

Table 2. DAP Timeline (Provision)

Timeline	Activity	Responsible Party
Before STPH1*	Submit the most recent self-scheduled nominations, bids and offers for all relevant hours of the DAP run	Trading Participants
Before [STPH1 + 2 minutes]	Provide updates on the following, if any: 1. Outage Schedules 2. Contingency List 3. Over-riding Constraints 4. Reserve Requirements 5. Real-time system snapshot 6. VRE Aggregated Generation Forecasts 7. Forecasts on the loading levels of Must dispatch generating units	System Operator
Before [STPH1 + 2 minutes]	Submit load forecast for the covered period	Market Operator

Table 2. DAP Timeline (Proposed Amendment)

Timeline	Activity	Responsible Party
Before [STPH1* **- 10 minutes**]	Submit the most recent self-scheduled nominations, bids and offers for all relevant hours of the DAP run	Trading Participants
Before [STPH1 + 2 **1** minutes]	Provide updates on the following, if any: 1. Outage Schedules 2. Contingency List 3. Over-riding Constraints 4. Reserve Requirements 5. Real-time system snapshot 6. VRE Aggregated Generation Forecasts 7. Forecasts on the loading levels of Must dispatch generating units	System Operator
Before [STPH1 + 2 **1** minutes]	Submit load forecast for the covered period	Market Operator

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Title	**Clause**	**Provision**	**Proposed Amendment**	**Rationale**	**Stakeholder Comments**	**Stakeholder Rationale**

Provision:

[STPH1 + 2 minutes]	Execute DAP	Market Operator
Before [STPH1 + 15 minutes]	Publish DAP Results in the MPI	Market Operator
	Transmit DAP Results to System Operator	Market Operator

*STPH1 refers to the Start Time of the first Projected Hour (1) covered by the DAP run. For example, the Projected Hour of 0900H has a start time of 08:00 AM and an end time of 09:00 AM.

(DAP Timeline Illustration)

Figure 3. DAP Timeline

Proposed Amendment:

[STPH1 + 2 1 minutes]	Execute DAP	Market Operator
Before [STPH1 + 15 25 minutes]	Publish DAP Results in the MPI	Market Operator
	Transmit DAP Results to System Operator	Market Operator

*STPH1 refers to the Start Time of the first Projected Hour (1) covered by the DAP run. For example, the Projected Hour of 0900H has a start time of 08:00 AM and an end time of 09:00 AM.

(DAP Timeline Illustration)

Figure 3. DAP Timeline

Rationale:

for market participant interface (MPI) transfer

- Before [STPH1 + 1 minute]: (a) Submission of load forecast and reserve requirement, (b) Submission of outage schedule, contingency list, overriding constraints and (c) Execution of DAP run - To align the processes to be as close as possible to the Start Time of the first Projected Hour (1) covered by the DAP run
- Before [STPH1 + 25 minutes]: (a) Publish DAP Results in the MPI and (b) Transmit DAP Results to System Operator – To allow sufficient time for the performance of five (5) DAP run

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<td>scenarios (1 base DAP run, 4 different load scenarios) which may take up to four (4) minutes each</td><td></td><td></td>
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<td>Categories of WESM Timetable – Hour-Ahead Projection (HAP)</td>
<td>4.5.2</td>
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The following activities shall be performed for the HAP, within the time specified, using inputs for the covered study period of that specific HAP run.

Table 4. HAP Timeline

Timeline	Activity	Responsible Party
Before [STDI1* – 8 minutes]	Submit the most recent self-scheduled nominations, bids and offers for all relevant hours of the HAP run	Trading Participants
Before [STDI1 – 7 minutes]	Provide updates on the following, if any: 1. Outage Schedules 2. Contingency List 3. Over-riding Constraints 4. Reserve Requirements 5. Real-time system snapshot	System Operator
Before [STDI1 – 7 minutes]	Submit load forecast for the covered period	Market Operator
[STDI1 – 7 minutes]	Execute HAP	Market Operator
Before [STDI1 – 1 minute]	Publish HAP Results in the MPI	Market Operator
	Transmit HAP Results to System Operator	Market Operator

*STDI1 refers to the Start Time of the first dispatch interval (1) covered by the HAP run. For example, the 0815H dispatch interval has a start time of 08:10 AM and an end time of 08:15 AM. And if this is the first dispatch interval of the HAP run, then it will cover the period until 09:10 AM.

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The following activities shall be performed for the HAP, within the time specified, using inputs for the covered study period of that specific HAP run.

Table 4. HAP Timeline

Timeline	Activity	Responsible Party
Before [STDI1* – 8 **9** minutes]	Submit the most recent self-scheduled nominations, bids and offers for all relevant hours of the HAP run	Trading Participants
Before [STDI1 – 7 minutes]	Provide updates on the following, if any: 1. Outage Schedules 2. Contingency List 3. Over-riding Constraints 4. Reserve Requirements 5. Real-time system snapshot	System Operator
Before [STDI1 – 7 minutes]	Submit load forecast for the covered period	Market Operator
[STDI1 – 7 minutes]	Execute HAP	Market Operator
Before [STDI1 – 2 minute]	Publish HAP Results in the MPI	Market Operator
	Transmit HAP Results to System Operator	Market Operator

*STDI1 refers to the Start Time of the first dispatch interval (1) covered by the HAP run. For example, the 0815H dispatch interval has a start time of 08:10 AM and an end time of 08:15 AM. And if this is the first dispatch interval of the HAP run, then it will cover the period until 09:10 AM.

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For the Hour-Ahead Projection (HAP) run, the following changes are proposed to consider actual system performance and accommodate SO's requirement:
- Before [STDI1 – 9 minutes]: Submit the most recent self-scheduled nominations, bids and offers for all relevant hours of the HAP run – To ensure timely processing prior to HAP run execution considering actual system performance
- Before [STDI1 – 2 minute]: Transmit HAP Results to System Operator – To

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Dispatch Protocol No. 13						
Title	**Clause**	**Provision**	**Proposed Amendment**	**Rationale**	**Stakeholder Comments**	**Stakeholder Rationale**
				accommodate SO's request that results shall be submitted two (2) minutes before the start of the dispatch interval in order to allow processing time for different SO applications		
Categories of WESM Timetable – Real-Time Dispatch Schedule (RTD)	4.6.2	The following activities shall be performed for the RTD, within the time specified, using inputs for the covered study period of that specific RTD run: Table 5. RTD Timeline	The following activities shall be performed for the RTD, within the time specified, using inputs for the covered study period of that specific RTD run: Table 5. RTD Timeline	For the Real-Time Dispatch (RTD) run, the following changes are proposed to consider actual system performance and accommodate SO's requirement: • Before [STDI1 – 9 minutes]: Submit the most recent self-scheduled nominations, bids and offers for all relevant hours of the RTD run – To ensure timely processing prior to RTD run execution considering actual system performance		

Provision – Table 5. RTD Timeline:

Timeline	Activity	Responsible Party
Before [STDI1* – 8 minutes]	Submit self-scheduled nominations, bids and offers for all relevant hours of the RTD run	Trading Participants
Before [STDI – 7 minutes]	Provide updates on the following, if any: 1. Outage Schedules 2. Contingency List 3. Over-riding Constraints 4. Reserve Requirements 5. Real-time system snapshot	System Operator
Before [STDI – 7 minutes]	Submit load forecast for the relevant dispatch interval	Market Operator
[STDI – 7 minutes]	Execute RTD	Market Operator
Before [STDI – 1 minute]	Publish RTD Results in the MPI	Market Operator
	Transmittal of Energy and Reserve Schedules, and WESM Merit Order Table to the System Operator	Market Operator

*STDI refers to the Start Time of the relevant dispatch interval.

Proposed Amendment – Table 5. RTD Timeline:

Timeline	Activity	Responsible Party
Before [STDI1* – 8 **9** minutes]	Submit self-scheduled nominations, bids and offers for all relevant hours of the RTD run	Trading Participants
Before [STDI – 7 minutes]	Provide updates on the following, if any: 1. Outage Schedules 2. Contingency List 3. Over-riding Constraints 4. Reserve Requirements 5. Real-time system snapshot	System Operator
Before [STDI – 7 minutes]	Submit load forecast for the relevant dispatch interval	Market Operator
[STDI – 7 minutes]	Execute RTD	Market Operator
Before [STDI – 1 **2 minutes**]	Publish RTD Results in the MPI	Market Operator
	Transmittal of Energy and Reserve Schedules, and WESM Merit Order Table to the System Operator	Market Operator

*STDI refers to the Start Time of the relevant dispatch interval.

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<td>• Before [STDI1 – 2 minute]: Transmittal of Energy and Reserve Schedules, and WESM Merit Order Table to the System Operator – To accommodate SO's request that results shall be submitted two (2) minutes before the start of the dispatch interval in order to allow processing time for different SO applications</td>
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