

schedule the test and retest and provides notifications that do not reflect the reality of a load management event.

The Market Monitor recommends that the April 17th Filing be approved only with the modifications needed to ensure that testing reflects true load reduction capabilities during actual event conditions.

I. COMMENTS

A. Testing Should Be Designed to Serve as an Accurate Proxy for Load Management Events.

PJM requires Emergency and Pre-Emergency Load Response resources to test reduction capability when the resources are not otherwise dispatched for a PJM load management event during the relevant delivery year. A test that represents the same conditions that occur in a load management event in procedure, duration and notification will appropriately measure reduction capability in a manner comparable to a load management event. The current load management testing requirements are not a good proxy for how the resources would be required to respond during a PJM initiated load management event, are not just and reasonable. PJM's filing is a recognition of the shortcomings of the current testing requirements but does not go far enough.

When system conditions require an actual load management event, PJM will dispatch all resources in a zone or subzone, with little or no notice. Dispatched resources must respond within 30 minutes to 120 minutes, based on the registered lead time of each resource type. The Capacity Performance demand response product is dispatchable by PJM at any time during the hours of 10:00 AM to 10:00 PM Eastern Prevailing Time (EPT) for the months of June through October and the following May, and 6:00 AM through 9:00 PM EPT for the remaining months.³ The Summer-Period demand response product is dispatchable

³ PJM Manual 18: PJM Capacity Market, Section 4.3.1 at 68.

by PJM at any time during the hours of 10:00AM to 10:00 PM EPT for the months of June through October and the following May. The Price Responsive Demand (PRD) product must respond to LMP during the entire Delivery Year. A load management event must be a minimum of one hour, and a maximum of 12 hours during the summer months, or 15 hours during the winter months.

The current load management testing requirements allow the Curtailment Service Provider (CSP) to select a one hour test time during June through October or the following May of the delivery year.⁴ The load management test by the CSP dispatches all registrations within a zone simultaneously for one hour to measure reduction capability. If the CSP's aggregate test performance is greater than 75 percent of the committed MW, the CSP can retest any registration an unlimited number of times to improve total performance. If the CSP's aggregate test performance is less than 75 percent of the committed MW, the CSP can retest the entire portfolio. The current load management testing requirements are not comparable to an actual load management event. The test duration of one hour, scheduling the test only during summer months, allowing CSPs to schedule the test and retest and the notification process do not reflect PJM dispatch of load management events.

The April 17th Filing addresses some of the issues, but it fails to effectively align testing requirements with load management events. The April 17th filing does not require an adequate test duration, does not test reduction capability for each season, does not require PJM to schedule the test and retest and provides notifications that do not reflect the reality of a load management event. If modifications were made, consistent with the purpose of the April 17th Filing, reasonable testing requirements could be achieved.

⁴ OATT Attachment DD § 11A.b.ii.

B. Testing Duration Should Approximate Event Duration.

The April 17th Filing acknowledges that the current one hour testing duration is too short to accurately assess performance and requires a two hour load management test.⁵ A two hour test better represents the performance obligation of load management resources, but two hours does not align the duration of tests with the actual and reasonably expected duration of load management events. Approval of the April 17th Filing should be conditioned on the use of no less than the actual average of the zonal event durations as the test requirement, because PJM dispatches load management events by zone or subzone, not by individual resources. Table 1 shows the load management events and average zonal duration for load management events in the 2010/2011 through 2019/2020 delivery years.⁶ The average zonal duration is the average duration of the load management events for each zone. A three hour test duration would align with the average duration of PJM load management events over the past 10 delivery years. PJM should require a three hour load management test. It would be prudent to consider a longer duration as the evidence makes clear that an event can last longer than three hours.

⁵ OATT Attachment DD § 11A.b.iii.A.

⁶ See Historical Load Management Events, <<https://www.pjm.com/-/media/planning/res-adeq/load-forecast/alm-history.ashx?la=en>> (Accessed April 28, 2020).

Table 1 Load Management Events and Average Zonal Duration: 2010/2011 through 2019/2020 Delivery Years

Delivery Year	Load Management Events	Average Zonal Duration
2010/2011	7	3:39
2011/2012	1	5:34
2012/2013	2	2:15
2013/2014	13	2:55
2014/2015	2	3:25
2015/2016	0	NA
2016/2017	0	NA
2017/2018	0	NA
2018/2019	0	NA
2019/2020	1	1:48
Total	26	3:00

These changes to Attachment DD § 11A.b.iii.A, B and C would require a three hour test requirement for Annual and Summer-Period Demand Resources:

A. For Annual Demand Resources: if an Annual Demand Resource registration is not dispatched by the Office of the Interconnection for a Load Management event in a Delivery Year, then the registration committed by a Capacity Market Seller in a zone shall be tested as described below in section iii(c), for a ~~three~~ two-hour period between the hours of 11:00 EPT and 18:00 EPT of a non-NERC holiday weekday...

B. For Summer-Period Demand Resources: if a Summer-Period Demand Resource registration is not dispatched by the Office of the Interconnection for a Load Management event during June through October or the following May of the Delivery Year, then the registration committed by a Capacity Market Seller must demonstrate that it was tested as described below in section iii(c), for a ~~three~~ two-hour period between the hours of 11:00 EPT and 18:00 EPT of a non-NERC holiday weekday...

C. All registrations in a zone will be tested simultaneously for ~~three~~ two hours for each product. Registration performance will be calculated as the ~~three~~ two hour average reduction. The Office of the Interconnection may, at its discretion, cancel a test and retest on an event day to ensure system reliability.

These changes to Schedule 6.1.L.i.c would require a three hour test requirement for PRD Resources:

(c) For the 2023/2024 Delivery Year and subsequent Delivery Years, if the registered PRD is not required to reduce the load for a Performance Assessment Interval during the relevant Delivery Year, then such registered PRD shall test for a ~~three~~ ~~two~~ hour period between 11:00 EPT to 18:00 EPT on a weekday that is a non-NERC holiday during the relevant Delivery Year and in accordance with the following provisions...

C. Test Times Should Match Seasonal Obligations.

Compliance for Capacity Performance demand response resources is calculated differently in the summer and the winter.⁷ Events that occur during the summer months use the customer's Peak Load Contribution (PLC) to calculate a load reduction. Events that occur during the winter months use the customer's Winter Peak Load (WPL) to calculate a load reduction. Price Responsive Demand does not use the WPL metric, and therefore does not have a seasonal obligation. It is essential to the capacity market that all resources be capable of responding during the entire delivery. The 2020/2021 Delivery Year is the first delivery year in which demand resources must be annual resources and meet the requirements to be Capacity Performance resources, regardless of season. PJM's proposal requires only one test per year, that will alternate between a summer or winter test in each delivery year by zone.⁸ The proposed tariff changes provide for testing annual resources only "between the hours of 11:00 EPT and 18:00 EPT of a non-NERC holiday weekday during June through October or November through March of the relevant Delivery Year."⁹ The proposed testing times do not test both the summer and winter capability. The April 17th Filing's proposed tariff language should be revised to require PJM to test demand resources during each season in which the resource is not dispatched. This would ensure capability during the entire delivery year, and align with the seasonal reduction

⁷ OATT Attachment DD-1 § K.

⁸ *Id.* at 10.

⁹ See April 17th Filing, Attachment B, proposed revised OATT Attachment DD § 11A.b.iii.

calculations. Capacity Performance DR should be tested in summer and winter months, and Summer-Period DR should be tested in summer months.

These changes to Attachment DD § 11A.b.iii.A would create a seasonal test requirement for summer and winter months for Annual Demand Resources:

A. For Annual Demand Resources: if an Annual Demand Resource registration is not dispatched by the Office of the Interconnection for a Load Management event during the summer months in a Delivery Year, then the registration committed by a Capacity Market Seller in a zone shall be tested as described below in section iii(c), for a ~~three two~~-hour period between the hours of 11:00 EPT and 18:00 EPT of a non-NERC holiday weekday during June through October of the relevant Delivery Year, where date and time are selected by the Office of the Interconnection and notice is provided consistent with the procedure described below in section iii(d). If an Annual Demand Resource registration is not dispatched by the Office of the Interconnection for a Load Management event during the winter months in a Delivery Year, then the registration committed by a Capacity Market Seller in a zone shall be tested as described below in section iii(c), for a three-hour period between the hours of 11:00 EPT and 18:00 EPT of a non-NERC holiday weekday during November through March of the relevant Delivery Year, where date and time are selected by the Office of the Interconnection and notice is provided consistent with the procedure described below in section iii(d). If an Annual Demand Resource registration is dispatched by the Office of the Interconnection for a Load Management event during the summer months of the Delivery Year, then no test will be required during the summer months. If an Annual Demand Resource registration is dispatched by the Office of the Interconnection for a Load Management event during the winter months of the Delivery Year, then no test will be required during the winter months.

D. PJM Should Schedule All Tests.

Actual load management events are dispatched by PJM with little or no notice. Under the current rules, CSPs know when their demand resources will be tested because they decide when to test. Test dates can be picked months in advance, allowing CSPs to have an extended time period to plan for load reductions. PJM's proposal is an effort to address this issue, but continues to allow too much opportunity for CSPs and their customers to prepare for testing, resulting in an unrealistic test. The April 17th Filing would require tests to be scheduled by PJM, but does not require retests to be scheduled by PJM if

less than 25 percent of the registered MW fail the test. Allowing CSPs to schedule the retest weakens the credibility of the testing process and there is no reason that PJM should not schedule both test and any retest. The April 17th Filing should be approved only on the condition that PJM schedules tests and retests for all demand resources.

These changes to Attachment DD § 11A.b.iii.C would require PJM to schedule a one time retest for all registrations that failed to meet the required reduction amount for Annual and Summer-Period Demand Resources:

~~If less than 25 percent (by megawatts) of a Curtailment Service Provider's total Demand Resources in a zone fail the test, the Curtailment Service Provider may conduct re-tests limited to all registrations that failed to meet their seasonal nominated ICAP in the prior test, provided that such re-test(s) must be during the same season period (except if test was conducted in March in which case retest can be conducted in May), at the same time of day and under approximately the same weather conditions as the prior test, and provided further that all affiliated registrations must test simultaneously, where affiliated means registrations that have any ability to shift load and are owned or controlled by the same entity. If less than 25 percent of resources fail the test and the Curtailment Service Provider chooses to conduct a retest, the Curtailment Service Provider may elect to maintain the performance compliance result for the registration(s) that achieved during the test if Curtailment Service Provider: (1) notifies the Office of the Interconnection 48 hours prior to the retest under this election; and (2) the Curtailment Service Provider retests affiliated registrations under this election as set forth in the PJM Manual.~~

~~If 25 percent or more (by megawatts) of a Curtailment Service Provider's Demand Resources fail the test, the Curtailment Service Provider may request the Office of Interconnection to schedule a one-time retest limited to all registrations that failed to meet their seasonal nominated ICAP in the prior test, provided that all affiliated registrations must test simultaneously. Affiliated means registrations that have any ability to shift load and are owned or controlled by the same entity. The request must be made before the 46th day after the test. The Office of the Interconnection will select the date and time of the retest during the same season period (except if test was~~

conducted in March in which case retest may be conducted in May) and notice is provided consistent with the procedure described below.¹⁰

These changes to Schedule 6.1.L.ii.b would require PJM schedule a one time retest for all registrations that failed to meet the required reduction amount for PRD resources:

(b) For the 2023/2024 Delivery Year and subsequent Delivery Years, all PRD registered in a zone will be tested simultaneously for ~~three~~ two hours. The Office of the Interconnection may, at its discretion, cancel a test and retest to ensure system reliability. ~~If less than 25 percent (by megawatts) of a PRD Provider's total PRD registered in a Zone fails a test, the PRD Provider may conduct re-tests limited to all registered PRD that failed the prior test, provided that such re-test must be at the same time of day and under approximately the same weather conditions as the prior test, and provided further that all affiliated registered PRD must test simultaneously, where affiliated means registered PRD that has any ability to shift load and that is owned or controlled by the same entity. The PRD Provider may elect to maintain the performance compliance result for registered PRD achieved during the test if the PRD Provider: (1) notifies the Office of the Interconnection 48 hours prior to the re-test under this election; and (2) the PRD Provider retests affiliated registered PRD under this election as set forth in the PJM Manuals.~~

~~If 25 percent or more (by megawatts) of a PRD Provider's total PRD registered in a Zone fails the test the~~ The PRD Provider may request PJM to schedule a one-time retest limited to all registrations that failed the prior test, provided that all affiliated registrations must test simultaneously where affiliated means registered PRD that has any ability to shift load and that is owned or controlled by the same entity. The request must be made before the 46th day after the test. The Office of the Interconnection will select the date and time of the retest during the same season period (except if test was conducted in March in which case retest can be conducted in May) and notice is provided consistent with the following procedure.

¹⁰ See April 17th Filing, Attachment B, proposed revised OATT Attachment DD § 11A.b.iii.D.

E. Test and Retest Notification Should Be No Earlier than the Day Before.

PJM is proposing three phases of notifications for testing. PJM is proposing to give a two week warning, one day-ahead warning and post online the start time on the test day.¹¹ Actual load management events do not have three phases of notifications. PJM dispatches Load Management resources, with little or no notice, and they must respond based on their lead time. PJM recognizes the two week requirement is not necessary and does not provide a two week warning for a retest scheduled by PJM.¹² It is also inconsistent to require a three phase notification for the PJM scheduled test and a two phase notification for a PJM scheduled retest when 25 percent or more of the CSP's portfolio fails the initial test. In order to better align with actual load management events, the April 17th Filing should only be approved on condition of removal of the two week notification for PJM tests.

These changes to Attachment DD § 11A.b.iii.D would require PJM to schedule the test and retest for Annual and Summer-Period Demand Resources:

~~D. Notification of the initial Office of the Interconnection scheduled test will be provided based on the following procedure. On the first business day of a week, PJM will provide notice of all zones to be tested during the following two week test window. The test window opens the first business day of the week following the notice. By 10:00 EPT the day before the test, the Office of the Interconnection will post on its website the test date. The Office of the Interconnection will also notify the Curtailment Service Providers of the test date. On the test date, Curtailment Service Providers will be notified of start time of test through the same notification protocol used for an event and as described in the PJM Manuals.~~

Notification of any scheduled test or retest by the Office of the Interconnection will be provided based on the following procedure. By 10:00 EPT the day before the test or retest, the Office of the Interconnection will post the test or retest date on its website. PJM will also notify the Curtailment Service Providers the test or retest date. On the test or retest date,

¹¹ *Id.*

¹² *Id.*

Curtailment Service Providers will be notified of start time of test or retest through the same notification protocol used for an event and as described in the PJM Manuals.¹³

These changes to Schedule 6.1.L.ii.c would require PJM to schedule the test and retest for PRD:

(c) Notification of the initial Office of the Interconnection scheduled test and retest will be provided as follows:

~~On the first business day of a week, PJM will provide notice of all zones to be teste during the following two week test window. The test window opens the first business day of the week following the notice. By 10:00 EPT the day before the test, the Office of the Interconnection will post on its website the test date. The Office of the Interconnection will also notify the PRD Providers the test date. On test date, PRD Providers will receive start time through web service communications and as defined in the PJM Manuals.~~

~~Notification of any scheduled retest by the Office of the Interconnection will be provided as follows:~~

By 10:00 EPT the day before the test or retest, the Office of the Interconnection will post the test or retest date on its website. PJM will also notify the PRD Providers the test or retest date. On the test or retest date PRD Providers will receive start time through web service communications and as defined in the PJM Manuals.

Even modified as the Market Monitor proposes, CSPs and their customers would still receive notice on the day before a test or retest. Two weeks notice of a test date is excessive and should not be required

¹³ *Id.*

II. CONCLUSION

The Market Monitor respectfully requests that the Commission afford due consideration to these comments as it resolves the issues raised in this proceeding.

Respectfully submitted,



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Dated: May 8, 2020

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Eagleville, Pennsylvania,
this 8th day of May, 2020.



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