

# Load Management & PRD Testing Requirements

MIC

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- Tests do not reflect event conditions
  - Much easier to perform during a test than an event because customer is notified of the test hour well in advance plus have unlimited "Do-Overs".
- Test requirement developed based on Limited DR availability requirements which no longer exists:
  - Limited DR only required for 10 days for 6 hours per day during the summer months
  - CP requires DR to be available on annual basis for up to 15 hours per day
- Mandatory Load Management has not been dispatched in over 5 years (but accounts for > 5% of overall capacity)
  - Low Frequency, High Impact event critical to perform when needed

Load reduction capability under variety of event conditions is not clear



- Expanded to include PRD test requirements
  - PRD test requirements were based on DR test requirements
- Matrix updates
  - Cleaned up language
  - Included PRD
  - Added component that clarifies how test load reductions will be handled in RT energy market operations.
  - Clarified when PJM will provide month-ahead notification

Discussed at 8/13 and 9/5 DRS meetings



Known test time in advance, easy to prepare



Lessnotification, similar to an event

Actual events are not predictable and require CSPs to be ready for events that do not occur.

All proposals minimize "Get ready to test but cancel" because of cost/inconvenience

More like an event Less predictable

### 5 proposals

PJM directed test two 3.5 hour tests, 1 in each season. 2 tier advanced notification, 1 PJM directed retest per season

PJM directed test one 2 hour test/yr, 3 tier advanced notification unlimited CSP directed retest if performance >75% or 1 PJM directed retest

**CSP** directed test one 2 hour test/yr, advanced notification of day/hour to prepare, unlimited CSP directed test and retest (>75% performance)

PJM3

PJM1a CSP2

PJM directed test one 5 hour test/yr, 2 tier advanced notification, unlimited CSP directed retest if performance >75%

PJM directed test to short season, Optional 2<sup>nd</sup> test one 2 hour test/yr 4 tier advanced notification unlimited CSP directed retest if performance >75%

All proposals include energy compensation during the test, "Do-Over" for poor score & 23/24 DY implementation

Less like an event Known time, easy to get ready



## Key differences between CSP2 and PJM1a

	CSP2	PJM1a
Test/Retest period	Narrow test window 3 months per season	Wide test window 5 months per season
Test event limit (number of times test may be performed)	Two (90 days to notify PJM)	One
Retest qualification	Status Quo. If performance <75% then CSP can do a second test of all registrations.	Status Quo but if performance is <75% can do one retest of subset of registrations that performed <100% (end of next month to notify PJM).
Notification time prior to test	Same as PJM1a except also includes: Week-ahead notification: PJM provides each CSP with a 5-day test window at least 5 business days in advance (i.e. in advance of 1st potential test day)	1 Month ahead (by the 21rst of prior month) and 1 day ahead (by 10am) and registered lead time on test day.
Resource Test Compliance Target	Summer average RPM commitment for summer test. Non-Summer average RPM commitment for Non-Summer test.	Status Quo – Summer average RPM commitment.



#### **Load Management Testing Requirements - Work Plan (2019-2020)**

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Detailed Work Plan	Feb (2019)	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan (2020)	Feb (2020)
Provide Education - DRS	27th	28th											
Document Interests - DRS	27th	28th											
Develop Components - DRS		28th	24th										
Develop Component Options - DRS		28th	24th	28th	19th								
Develop Packages - DRS				28th	19th								
DRS Build Consensus				28th	19th	23rd	13th	5th					
First Read @ MIC							7th						
Vote @ MIC								11th					
First Read @ MRC								26th					
Vote @ MRC									31st				
Vote @ MC										No Mtg	5th		
PJM Board												No Mtg	X
FERC Filing													X
New rules effective											2023/2	024 Deliver	y Year

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## Draft list of Governing Document Changes

- Test Event Compliance
  - RAA
    - Schedule 6 PROCEDURES FOR DEMAND RESOURCES AND ENERGY EFFICIENCY, Sections H and K
    - Schedule 6.1 PRICE RESPONSIVE DEMAND
  - OATT Attachment DD.11A, DEMAND RESOURCES TEST FAILURE CHARGE
  - OA Schedule 1, Section 8.9, Reporting and Compliance
  - PJM Manual 18, PJM Capacity Market, Section 8.8 Load Management Test Compliance
- Test Event Energy Settlements
  - PJM Manual 28: Operating Agreement Accounting, Section 11: PJM Load Response Programs Accounting
  - PJM Manual 11: Energy & Ancillary Services Market Operations, Section 10: Overview of the Demand Resource Participation



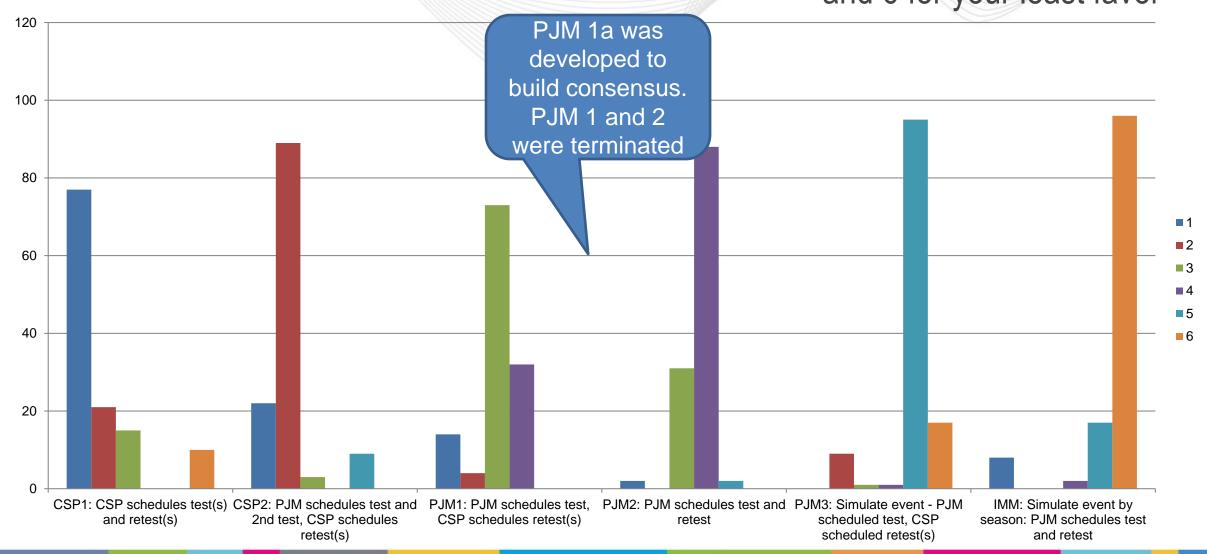


## Status Quo - Load Management/PRD Test Key Components

Design Components	Status Quo
Testing performance requirement waiver (you don't need to test if this happens)	Registration(s) dispatched of required to reduce load
Who schedules test/retest	CSP
Test/retest duration	1 hour
Test/Retest period	Summer Only, Non NERC holiday weekday
Test/Retest window (these are hours when test can be conducted)	LM -Summer period product definition hours of 10am (HE11) -10pm (HE22). PRD – summer period, at any time (whenever and Max Emergency Gen event can occur)
Registration test deployment requirement	All Registrations with same CSP in same zone of same product type at same time that were not dispatched in an event.
Test event limit (number of times test may be performed)	Unlimited
Retest qualification	Zonal Load reduction >75% of committed MW in test. CSP may elect to conduct a retest for registrations that did not reach their MW commitment
Retest registration eligibility	registrations that failed to meet Summer ICAP reduction value
Retest event limit (number of times retest may be performed)	Unlimited
Resource Test Compliance Target	Summer average RPM commitment from June 1st through September 30th
Energy market compensation (and associated cost allocation) during test/retest hours	No direct payment.



# DRS Poll Results: Please rank each package using 1 for your favorite, and 6 for your least favor



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