



PJM Load Management Test proposed changes

DRS

6/19/19

- CP requires DR to be available on annual basis for up to 15 hours per day
 - Limited DR only required for 10 days for 6 hours per day
- Test performance (123%) does not reflect prior event performance (97%)
- Mandatory Load Management has not been dispatched in over 5 years (but accounts for > 5% of overall capacity)
- DR load reduction capability under a variety of conditions is not clear

- Testing reflective of LM product availability requirements
- Testing results consistent with expected performance during LM events under various conditions (time of day, time of year, etc.)
- Both resource capability and PJM/CSP communications are tested
- Streamline process for resource energy compensation for reductions provided when performing tests (Currently done through economic DR)
- Test notification process aligns with actual event process (i.e.: Emergency messages prior to LM event day)
- Load not paying for CP DR winter testing through an uplift mechanism
- LM will be compensated for test events
- Avoid unnecessary testing
- Align rules for PRD (note: PJM waiting for FERC Order on PRD)

- PJM managed test will better simulate event conditions and therefore the true DR load reduction capability
 - Avoid CSP “open book” test
 - Align with ISOs/RTOs/utilities best practices (PJM is the rare entity that allows DR to manage their own testing)
- Conduct test throughout the Delivery Year since DR is required to perform throughout the Delivery Year
- Leverage communication/notification mechanism used for real events.

High Impact / Low Frequency event – requires training/practice/testing to be ready
DR only dispatched when we are in emergency conditions (expected to be short on reserves)

- Testing only required when there is no event in the Delivery Year
 - If we have summer event across PJM then at least $\frac{1}{2}$ of all the zones will not need to do a test.
- Only 1 test per year required when there is no event
 - $\frac{1}{2}$ the zones tested in the summer and $\frac{1}{2}$ tested in the winter
- Only test for 2 hours whereas typical events are ~ 5 hours
 - load reduction averaged over 2 hours, provides more flexibility in case load reduction starts late.
- Allow CSP to get prepared and schedule necessary maintenance activities
 - PJM will provide month ahead and day ahead notification of zones that will be tested
 - PJM will provide normal lead time advanced notification on the test day.
 - Testing only done from HE12-18 which is in line with summer peak, winter second peak and normal workday
 - Avoid winter early morning test which would require personnel to be ready before typical work hours.
 - Testing only done on non-NERC holiday weekdays
- Compensate for load reductions in the energy market as a price taker to help offset cost.

Ability to retest (“do-over”) and improve score if you get at least a C on the test

- Performance aggregated to zone
 - customer over-performance can offset another customer’s underperformance
- Allow CSP to self direct zonal retest(s) if performance >75%.
 - More chances to test if performance was decent but had a few issues
 - Leverage status quo CSP directed retest provisions
 - minimize rule changes
 - provide retest flexibility (multiple retests, only registrations that had performance issue are retested)

If CSP scores < 75% after receiving advanced notification and narrow test window (so CSP can prepare), then they still with test result since they probably would have done worse if there was an actual event

- One time retest.
- CSP selects which registrations to retest
- PJM directs when the test will occur in same manner as initial test.

This is a one time “Do Over”.
CSP can do nothing on the test (0% performance across portfolio of customers) and be eligible to retest



Use Case – PJM Proposal 1

Zone	Test Month	Season	MW	Event	Test Status	Test Result	Retest 1 with test result	Retest 2 with test result	Retest 3 with test result	Final test Performance	Penalty Volume (%)	Penalty Volume (MW)	
					Tested but subsequent								
Meted	7	summer	35	8/20/2019	event	na	na	na	na	na	na	0	
Peco	8	summer	25			78%	83%	95%	90%	95%	5%	1.25	
PPL	9	summer	35			95%	102%	na	na	102%	0%	0	
Dom	10	summer	50			50%	na	na	na	50%	50%	25	
AEP	11	winter	60			103%	na	na	na	103%	0%	0	
DPL		winter	40	8/20/2019	No test, prior event	na	na	na	na	na	na	0	
DEOK	1	winter	35			101%	na	na	na	101%	0%	0	
Comed	2	winter	50			85%	92%	104%		104%	0%	0	
Total			330								Penalty	26.25	
											Committed MW	330	
											Penalty/Committed MW	8.0%	