

Transition process to relieve CSP of RPM commitments for DR that can not be delivered due to 30 minute notification requirement (FERC order on DR operational resource flexibility)

CSTF  
9/12/14

- 30 minute lead time mandatory for all resources unless physically not capable and qualify for exemption
  - PJM to work with stakeholders on transition mechanism that would allow CSPs that are no longer able to deliver amounts of demand response *[because of 30 minute lead time requirement which becomes effective for 15/16 DY]* previously cleared in PJM's capacity auctions *[through 16/17 DY]* to be relieved of part, or all of, their obligation and have their capacity payments commensurately reduced accordingly.

- 8/21 – MRC first read
- ~9/3 – CSTF vote
- 9/12 – CSTF (review tariff language for proposed change)
- 9/18 – MRC endorsement
- 10/30 – MC endorsement
- 10/31 – File at FERC
- 1/1 – Order from FERC
- 1/16/15 – Final date for CSPs to submit non-viable MW for transition

- **[1 week prior to posting planning parameters for IA]** – CSP to provide PJM cleared MWs from prior RPM auction(s) that cannot be delivered due to 30 minute lead time requirement by product by zone.
  - 15/16 – CSP must notify based on 3<sup>rd</sup> IA schedule
  - 16/17 – CSP must notify based on 2<sup>nd</sup> IA and/or 3<sup>rd</sup> IA schedule
  - CSP IA offer restriction
    - CSP is not permitted to sell MWs in any modeled LDA (including any modeled sub-LDA of the LDA) for which non-viable DR MWs are declared for such Delivery Year
- **[planning parameters posting date for IA]** – PJM to publish aggregate non-viable DR MWs

Consensus on proposed changes at CSTF - IA offer restriction has been updated

- **[IA start date]** – PJM to aggregate all adjustments (CSP non-viable MWs, forecast adjustment, etc.) and include in 1<sup>st</sup> or 2<sup>nd</sup> auction if amount exceeds threshold (lessor of 1% or 500 MW – *as currently defined in tariff*) and if it does not exceed threshold then include in 3<sup>rd</sup> IA
  - PJM to increase capacity procured (or reduce capacity released) in IA (as necessary)
    - Cost will be allocated *consistent with current tariff* provisions for forecast adjustment
  - Bilateral transactions are subject to review and referral to MMU and/or FERC Office of Enforcement and should not be executed for non-viable MWs for financial gain.
- **[Prior to start of DY]** PJM to reduce CSP capacity commitment in eRPM by product by zone and prorate amount of non-viable MW as necessary if CSP cleared MWs in multiple auctions
- **[Prior to start of DY]** CSP responsible to register enough DR to cover final capacity commitment or receive daily deficiency charge.
- **[normal bill cycle during DY]** PJM to only pay capacity revenue based on final CSP capacity commitment

Meets FERC direction (relieve obligation & reduce payments) & leverage concept used for revised generator capability verification testing

- 2015/16 - Non-viable MW IA restriction by zone by LDA (sub-LDA)
- 2016/17 - Non-viable MW IA restriction by zone by LDA (sub-LDA)
- Example 1 – General example for 15/16
- Example 2 – CSP specific example
- Example 3 – CSP specific example

**Non-Viable Zone DR cannot sell DR in Zone/Sub Zone marked with "X" for 15/16 Delivery Year 3rd Incremental Auction**

Offer Zone/Sub Zone	LDA	AECO	AEP	APS	ATSI (excluding Cleveland LDA)	Cleveland LDA	BGE	COMED	DAYTON	DEOK	DOM	DPL (excluding DPL SOUTH LDA)	DPL SOUTH LDA	DUQ	EKPC	JCPL	METED	PECO	PENELEC	PEPCO	PPL	PSEG (excluding PS NORTH LDA)	PS NORTH LDA	RECO
		EMAAC	RTO	RTO	ATSI	ATSI	SWMAAC	RTO	RTO	RTO	RTO	EMAAC	DPLS	RTO	RTO	EMAAC	MAAC	EMAAC	MAAC	SWMAAC	MAAC	PS	PS-N	EMAAC
AECO	EMAAC	X										X	X			X		X				X	X	X
AEP	RTO	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
APS	RTO	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ATSI (excluding Cleveland LDA)	ATSI				X	X																		
Cleveland LDA	ATSI					X																		
BGE	SWMAAC						X													X				
COMED	RTO	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
DAYTON	RTO	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
DEOK	RTO	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
DOM	RTO	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
DPL (excluding DPL SOUTH LDA)	EMAAC	X										X	X			X		X				X	X	X
DPL SOUTH LDA	DPLS												X											
DUQ	RTO	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
EKPC	RTO	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
JCPL	EMAAC	X										X	X			X		X				X	X	X
METED	MAAC	X					X					X	X			X	X	X	X	X	X	X	X	X
PECO	EMAAC	X										X	X			X	X	X	X	X	X	X	X	X
PENELEC	MAAC	X					X					X	X			X	X	X	X	X	X	X	X	X
PEPCO	SWMAAC																			X				
PPL	MAAC	X					X					X	X			X	X	X	X	X	X	X	X	X
PSEG (excluding PS NORTH LDA)	PS																					X	X	
PS NORTH LDA	PS-N																						X	
RECO	EMAAC	X										X	X			X		X				X	X	X
<b>MODELED LDAs for 15/16 DY</b>		RTO, MAAC, EMAAC, SWMAAC, PS, PS NORTH, DPL SOUTH, PEPCO, ATSI																						

**Non-Viable Zone DR cannot sell DR in Zone/Sub Zone marked with "X" for 16/17 Delivery Year 2nd & 3rd Incremental Auctions**

Offer Zone/Sub Zone	LDA	AECO	AEP	APS	ATSI (excluding Cleveland LDA)	Cleveland LDA	BGE	COMED	DAYTON	DEOK	DOM	DPL (excluding DPL SOUTH LDA)	DPL SOUTH LDA	DUQ	EKPC	JCPL	METED	PECO	PENELEC	PEPCO	PPL	PSEG (excluding PS NORTH LDA)	PS NORTH LDA	RECO
		EMAAC	RTO	RTO	ATSI	ATSI	SWMAAC	RTO	RTO	RTO	RTO	EMAAC	DPLS	RTO	RTO	EMAAC	MAAC	EMAAC	MAAC	SWMAAC	MAAC	PS	PS-N	EMAAC
AECO	EMAAC	X										X	X			X		X				X	X	X
AEP	RTO	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
APS	RTO	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ATSI (excluding Cleveland LDA)	ATSI				X	X																		
Cleveland LDA	ATSI					X																		
BGE	SWMAAC						X													X				
COMED	RTO	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
DAYTON	RTO	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
DEOK	RTO	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
DOM	RTO	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
DPL (excluding DPL SOUTH LDA)	EMAAC	X										X	X			X		X				X	X	X
DPL SOUTH LDA	DPLS												X											
DUQ	RTO	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
EKPC	RTO	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
JCPL	EMAAC	X										X	X			X		X				X	X	X
METED	MAAC	X					X					X	X			X	X	X	X	X	X	X	X	X
PECO	EMAAC	X										X	X			X		X				X	X	X
PENELEC	MAAC	X					X					X	X			X	X	X	X	X	X	X	X	X
PEPCO	SWMAAC																			X				
PPL	MAAC	X					X					X	X			X	X	X	X	X	X	X	X	X
PSEG (excluding PS NORTH LDA)	PS																					X	X	
PS NORTH LDA	PS-N																						X	
RECO	EMAAC	X										X	X			X		X				X	X	X
<b>MODELED LDAs for 16/17 DY</b>		RTO, MAAC, EMAAC, SWMAAC, PS, PS NORTH, DPL SOUTH, PEPCO, ATSI, ATSI CLEVELAND																						

- CSPs cleared 1,000 MW of Limited DR in BRA for 15/16 @ \$150/MW-Day
- 1/16/15 – CSPs notifies PJM that 300 MW non-viable due to 30 minute lead time rule (do not qualify for defined 30 minute lead time exceptions)
- 1/23/15 – PJM publishes aggregate non-viable MWs due to 30 minute lead time requirement with other planning parameters
  - Aggregate non-viable DR MW = 300 MW (PJM may need to buy)
  - Forecast adjustment = -200 MW (PJM may need to sell)
- 2/23/15 – 3<sup>rd</sup> IA Opens – PJM buys 100 MW (300 – 200) in auction
  - CSP is not permitted to sell or offer to sell MWs (of any DR product) if they have non-viable MWs
- CSPs must register 700 MW of DR before 6/1/15 or receive daily deficiency charge
- CSP will receive 700 MW \* \$150 per day for capacity commitment, instead of original 1,000 MW.

- Acme CSP cleared 500 MW of Limited DR in BRA in PECO for 16/17 @ \$119/MW-Day
- 2nd IA
  - (~6/5/15) CSP notifies PJM that 50 MW non-viable due to 30 minute lead time rule (do not qualify for defined exemption)
  - (~6/12/15) PJM publishes aggregate non-viable MWs due to 30 minute lead time requirement with other planning parameters
  - (7/13/15) 2<sup>nd</sup> IA Opens – PJM buys in auction as necessary
    - CSP is not permitted to sell or offer to sell MWs in EMAAC zones
- 3<sup>rd</sup> IA
  - (1/22/16) CSP notifies PJM that additional 10 MW non-viable due to 30 minute lead time rule (do not qualify for defined exemption)
  - (1/29/16) PJM publishes aggregate non-viable MWs due to 30 minute lead time requirement with other planning parameters
  - (2/29/16) 3<sup>rd</sup> IA Opens – PJM buys in auction as necessary
    - CSP is not permitted to sell or offer to sell MWs in EMAAC zones
- CSP must register 440 (500 – 50 – 10) MW of DR before 6/1/16 or receive daily deficiency charge
- CSP will receive 440 MW \* \$119 per day for capacity commitment, instead of original 500 MW.

- Delta CSP cleared 480 MW of Limited DR in BRA in Comed for 16/17 @ \$119 MW-Day and 20 MW of Limited DR in 1st IA in Comed for 16/17 @ \$90 MW-Day.
- 2nd IA
  - CSP does not sell or offer MWs
- 3<sup>rd</sup> IA
  - (1/22/16) CSP notifies PJM that 60 MW non-viable due to 30 minute lead time rule (do not qualify for defined exemption)
  - (1/29/16) PJM publishes aggregate non-viable MWs due to 30 minute lead time requirement with other planning parameters
  - (2/29/16) 3rd IA Opens – PJM buys in auction as necessary
    - CSP is not permitted to sell MWs in any zone in RTO
- CSPs must register 440 (500 – 60) MW of DR before 6/1/16 or receive daily deficiency charge
- CSP will receive  $440 \text{ MW} * \$117.84$  ( $[480 \text{ MW}/500\text{MW}] * \$119 + [20 \text{ MW}/500 \text{ MW}] * \$90$ ) per day for capacity commitment, instead of original 500 MW. Non-viable MWs prorated based on amount cleared in prior auctions.