



PJM Market Suspension

Shell
ENERGY

Initial Timeline

6/9/21 MIC – Market suspension endorsed unanimously with the following rules for determining prices:

<=6 hours – use preceding hour and subsequent hour RT prices

>6 hours – use DA prices for corresponding hours. If DA unavailable, use \$0/MWh LMPs and make whole to lesser of Dispatch MW or actual MW using cost-based offers.

Design Components	Priority	Status Quo	A - PJM
Determination of RT clearing prices during market suspension	High	N/A	Less than or equal to 6 hours, average the preceding hour and subsequent hour interval prices, where at least six 5-minute intervals are available within the prevailing market hour. If greater than 6 hours, use DA market clearing prices for the market hours corresponding to the RT market disruptions. If DA & RT is unavailable, make resources whole to the lesser of their actual MW or Dispatch MW and the lesser of their cost-based or price-based offer.

<https://www.pjm.com/-/media/committees-groups/committees/mic/2021/20210513/20210513-item-05b-market-suspension-matrix.ashx>

<https://www.pjm.com/-/media/committees-groups/committees/mrc/2021/20210825/20210825-item-06-2-market-suspension-oa-revisions-redlines.ashx>

9/29/21 MRC – Market suspension vote deferred per written comments using week/month as an example of duration by Vistra and motion by Calpine to address longer-term market suspension.

<https://www.pjm.com/-/media/committees-groups/committees/mrc/2021/20211020/20211020-consent-agenda-a-draft-mrc-minutes-09292021.ashx>

<https://www.pjm.com/-/media/committees-groups/committees/mrc/2021/20210929/20210929-item-03-4-vistra-energy-longer-term-market-suspension-considerations.ashx>

PJM/IMM Package Design Component #3

5/11/22 & 7/13/22 MIC – Changes to market suspension matrix in green represent changes through 5/11/22 and changes in red and black lines represent 7/13/22 changes made by PJM.

Less than or equal to ~~6~~ 24 hours, average the preceding hour and subsequent hour interval prices, where at least six 5-minute intervals are available within the prevailing market hour. ~~If greater than 6 hours but less than or equal to 168 hours (7 days), use DA market clearing prices for the market hours corresponding to the RT market disruptions. If DA & RT is unavailable for greater than 6 hours but less than or equal to 168 hours (7 days), make resources whole to the lesser of their actual MW or Dispatch MW and the lesser of their cost-based or price-based offer.~~ If greater than ~~168~~ 24 hours (~~7 days~~), LMPs will be priced hourly based on aggregate supply curve as per Design Component #16 11 below. Energy LMP will be determined from the supply curve, Loss LMP and Congestion LMP will be set to \$0.

Language more consistent with 6/8/21 MIC Endorsement

Friendly Amendment to maintain intent on short-term suspension as originally approved by the 6/9/21 MIC and improvements to long-term suspension deferral vote at 9/29/21 MRC:

<=6 hours – use preceding hour and subsequent hour RT prices

>6 hours and <=24 hours – use DA prices for corresponding hours. If DA unavailable, use preceding hour and subsequent hour RT prices

>24 hours – Use aggregate supply curve per Design Component #11

Less than or equal to 6 hours, average the preceding hour and subsequent hour interval prices, where at least six 5-minute intervals are available within the prevailing market hour. If greater than 6 hours but less than or equal to 24 hours, use DA market clearing prices for the market hours corresponding to the RT market disruptions, else average the preceding hour and subsequent hour interval prices, where at least six 5-minute intervals are available within the prevailing hour. ~~make resources whole to the lesser of their actual MW or Dispatch MW and the lesser of their cost-based or price-based offer.~~ If greater than 24 hours, LMPs will be priced hourly based on aggregate supply curve as per Design Component #11 below. Energy LMP will be determined from the supply curve, Loss LMP and Congestion LMP will be set to \$0.

Apply language logic above accordingly to other impacted design components.

Language Comparison

7/13/22 PJM/IMM Package Language Red Line

Less than or equal to ~~6~~ **24** hours, average the preceding hour and subsequent hour interval prices, where at least six 5-minute intervals are available within the prevailing market hour. ~~If greater than 6 hours but less than or equal to 168 hours (7 days), use DA market clearing prices for the market hours corresponding to the RT market disruptions. If DA & RT is unavailable for greater than 6 hours but less than or equal to 168 hours (7 days), make resources whole to the lesser of their actual MW or Dispatch MW and the lesser of their cost-based or price-based offer. If greater than 168~~ **24** hours (~~7~~ **7** days), LMPs will be priced hourly based on aggregate supply curve as per Design Component #~~16~~ **11** below. Energy LMP will be determined from the supply curve, Loss LMP and Congestion LMP will be set to \$0.

Friendly Amendment Red Line

Less than or equal to 6 hours, average the preceding hour and subsequent hour interval prices, where at least six 5-minute intervals are available within the prevailing market hour. If greater than 6 hours ~~but less than or equal to 24 hours~~, use DA market clearing prices for the market hours corresponding to the RT market disruptions, ~~else average the preceding hour and subsequent hour interval prices, where at least six 5-minute intervals are available within the prevailing hour. make resources whole to the lesser of their actual MW or Dispatch MW and the lesser of their cost-based or price-based offer.~~ If greater than 24 hours, LMPs will be priced hourly based on aggregate supply curve as per Design Component #11 below. Energy LMP will be determined from the supply curve, Loss LMP and Congestion LMP will be set to \$0.

