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2.3.1 Bidding & Operations Time Line

The day-ahead scheduling/bidding timeline for PJM energy markets consists of the following time frames:

1415 – The balancing market offer period closes- PJM performs a second resource commitment known as the Reliability Assessment and Commitment (RAC) Run, which includes the updated offers, updated resource availability information and updated PJM load forecast information and load forecast deviation. The focus of this commitment is reliability and the objective is to minimize startup, soak and no load costs for any additional resources that are committed.

2.3.3.1 Capacity Resource Offer Rules:

Generation Capacity Resources that have notification or, ~~,~~ startup~~, and minimum run~~ times that exceed 24 hours must submit binding price-based offer prices for the next seven days.

Generation Capacity Resources that have soak times plus minimum run times that exceed 24 hours must submit binding price-based offer prices for the next seven days.

2.3.4.1 Parameter Limits

Different limits may be applied to certain schedule parameters depending on a unit's Capacity commitment type and the applicable Delivery Year.

• PJM will define a list of minimum acceptable operating parameters for the 2018/2019 Delivery Year for generation resources of FRR Entities not committed as Base Capacity Resources or Capacity Performance Resources, based on an analysis of historically submitted offers, for each unit class for the following parameters:

o Turn Down Ratio

o Minimum Down Time

o Soak Time

o Minimum Run Time

o Maximum Daily Starts

o Maximum Weekly Starts

• For Capacity Performance Resources, and for the 2018/2019 and 2019/2020 Delivery Years for Base Capacity Resources, the list of minimum acceptable operating parameters will consist of the following parameters:

o Turn Down Ratio

o Minimum Down Time

o Minimum Run Time

o Soak Time

o Maximum Daily Starts

o Maximum Weekly Starts

o Maximum Run Time

o Start Up Time

o Notification Time

• For the 2018/2019 Delivery Year for generation resources of FRR Entities not committed as Capacity Performance Resources or Base Capacity Resources the limits set forth in the Parameter Limited Schedule Matrix shall apply, unless the generation resource is operating pursuant to an exception from the default values due to physical operational limitations that prevent the resource from meeting the minimum parameters. The Parameter Limited Schedule Matrix is found in Section 6.6(c) of Attachment K-Appendix of the Tariff and the parallel provision of Schedule 1 of the Operating Agreement found at: https://www.pjm.com/library/governing-documents.aspx.

o For the Delivery Years up to and including the 2018/2019 Delivery Year, the MMU shall review the Parameter Limited Schedule Matrix, included in Section 6.6(c) of Attachment K-Appendix of the Tariff and the parallel provision of Schedule 1 of the Operating Agreement, annually, and, in the event it determines that revision is appropriate, shall provide a revised matrix to PJM by no later than December 31 that occurs immediately prior to the commencement of the applicable Delivery Year.

• For Capacity Performance Resources and for the 2018/2019 and 2019/2020 Delivery Years for Base Capacity Resources, PJM will determine for each such resource its unit-specific parameter limits based on the operating design characteristics and other constraints of that resource. The resource's unit-specific parameter limits will apply for that resource unless it is operating pursuant to an exception from those limits under section 6.6(h) of Attachment K-Appendix of the Tariff and the parallel provision of Schedule 1 of the Operating Agreement due to operational limitations that prevent it from meeting the minimum resource parameters.

2.3.3.2 Generator Schedules

Generation Offer Business Rules

• Generation offers may consist of startup, soak, no-load and incremental energy offer.

• Market Sellers can select the 'Switch to Cost Schedule' flag in Markets Gateway (Detail Updates tab) beginning on the day prior to the operating day until 10:30 and again starting at 18:30 through 65 minutes prior to the operating hour. Selecting this flag will make the price-based schedule(s) unavailable for the remainder of the operating day selected and will ensure any future commitments for the operating day are made on an available cost-based schedule. Once the Switch to Cost Schedule option is selected, the Market Seller will not have the option to resume using the price-based schedule for the remainder of the operating day.

Startup, Soak and No-load Costs Business Rules:

• A price-based unit has the option to choose cost-based startup, soak and no-load costs~~fees~~. A price-based unit that chooses the cost-based option may specify the startup, soak and no-load costs~~fees~~ for each hour and update those values in real-time in accordance with the rules defined in Section 9.1 of this Manual. A priced-based unit that chooses the price based option will continue to be able to change the startup, soak and no-load costs~~fees~~ twice a year.

• The choice between using cost-based and price-based startup, soak and no-load costs~~fees~~ can be made twice a year during the open enrollment window (on or before 1100 hours March 31 for the period April 1 through September 30 and on or before 1100 hours September 30 for the period October 1 through March 31). Period 1 is defined as the period of time beginning April 1 and ending September 30. Period 2 is defined as the period of time beginning October 1 and ending March 31. If a priced based unit chooses the cost-based startup, soak and no-load costs~~fees~~ option, the decision cannot be changed until the next open enrollment period takes place.

• Generation resource soak cost must be submitting in conjunction with a soak output profile.

Units that choose the cost-based option for soak costs must submit a soak output profile in accordance with Schedule 2 of the PJM Operating Agreement and Manual 15. Units that choose the cost-based option will not be assessed balancing operating reserve deviation charges during their submitted soak time.

Units that choose the price-based option for soak costs must submit a soak output profile above zero MW. Units that choose the price-based option will be assessed balancing operating reserve deviation charges during their submitted soak time if both their price-based soak MW profile is not equal to the cost-based soak MW profile and their total Real Time soak MWh are greater than 110% of the submitted total soak MWH or less than 90% of the submitted total soak MWh.

Soak Output Profile is the unit's MWh per hour that the unit is expected to produce while the unit is operating during the Soak Time. Soak Output Profiles can vary with the unit offline time being categorized in three unit temperature conditions: hot, warm and cold.

o Resources enrolled in the ESR participation model cannot have startup, soak and no load costs entered.

Incremental Energy Offer Business Rules:

• Generation resource cost-based incremental energy offers may exceed $1,000MWh, but may not exceed $2,000/MWh for the purpose of dispatch and calculating LMP.

• Generation resource cost-based soak costs may exceed $1,000MWh, but may not exceed $2,000/MWh.

• Cost-based incremental energy offers greater than $1,000/MWh, and less than $2,000/ MWh, must be verified prior to being used in dispatch and the calculation of LMP as described in section 2.3.6.2.

• Cost-based soak costs greater than $1,000/MWh, and less than $2,000/ MWh, must be verified prior to being used in dispatch.

• Any cost-based offers greater than $1,000/MWh, which were not verified in time to set LMP, or any cost-based offers greater than $2,000/MWh may be eligible to receive credit for Operating Reserves. Market Sellers must submit all relevant documentation demonstrating the calculation of costs greater than $1,000/MWh to PJM and the MMU in accordance with Attachment D.

• Generation resource market-based incremental energy offers may not exceed $1,000/MWh unless cost-based incremental energy offer is greater than $1,000/MWh then the market-based incremental energy offer is capped at the lesser of the cost-based incremental energy offer or $2,000/MWh. In instances where the price-based incremental energy offer exceeds $1,000/MWh:

o A reference cost-based schedule with which to compare the price-based schedule must be specified. The reference cost-based schedule should have the same fuel type as the price-based schedule.

o The price-based schedule and the reference cost-based schedule must have the same offer slope selection and identical MW break points on their incremental energy offers in order to facilitate validation of the price-based offer.

o The incremental energy offer price for each segment on the price-based schedule must be less than or equal to the incremental energy offer price of the corresponding segment on the reference cost-based offer.

o The startup, soak and no-load costs~~fees~~ on the price-based offer must be less than or equal to those on the reference cost-based offer.

o Any price-based incremental energy offers submitted above $1,000/MWh will be capped at $1,000/MWh if the above requirements are not met.

o If, after validation, subsequent changes are made to the reference cost-based schedule that result in the price-based offer being out of compliance, any segments of the price-based incremental energy offer above $1,000/MWh will be capped at $1,000/MWh.

2.3.3.4 Aggregated Unit Business Rules

• Generating units that are connected to the system at the same electrical location may be aggregated and offered into the PJM market as a single unit.

• The aggregated unit must be offered into the PJM markets as a single unit with only one set of offer data, including startup, soak, no load and incremental energy. This rule applies to all energy and ancillary service markets into which the unit is offered.

2.3.3A External Market Sellers

An External Resource is a generation resource that is located outside the metered boundaries of PJM. External resources that are committed Capacity Resources must bid into the PJM Day-ahead Market as generation resources.

For an external resource to be offered into the Day-ahead Market a valid generator offer, as detailed in Section 2.3.3 of this Manual, is submitted in the Markets Gateway system and a valid energy schedule is submitted in the ExSchedule system.

External Market sellers report the following data for resource-specific offers, reported on the business day before the next operating day, up to seven days in advance:

• Specific generation resource (the CCPPTTUUSS reference number and resource name from the Markets Database). This number is supplied by PJM to the PJM Member upon creation of the resource in the Markets Database. If the resource is submitted at least 30 days before the bid date, see PJM Manual 10: Pre-Scheduling Operations.

• Minimum and maximum energy for each hour

• Minimum and maximum generation for each hour

• Soak, Minimum and maximum run times

• Resource availability for each hour

• Availability of regulation upper and lower energy limits for each hour

• Response and constraint data

• Whether or not to use startup, soak and no-load costs~~fees~~

2.3.4.2 Unit Specific Parameter Adjustments

Only actual physical operational limitations, fuel contractual constraints, environmental limitations and other actual constraints on a resource will be considered for adjustment requests. The following list is not an exhaustive list, but provides examples of the types of information and documentation PJM would request to support adjusted unit-specific parameter limits requests:

o Start Up Time adjustments –OEM (Original Equipment Manufacturer) backup documentation, control room data, startup/loading curves and a detailed start-up sequence listing the required steps along with the time required to perform each step.

o Maximum Daily/Weekly Starts adjustments –OEM backup documentation and/ or detailed start-up and shutdown sequences that show why the default start parameters cannot be physically met.

o Soak Time adjustments - OEM backup documentation for physical unit constraints that requires the unit to be held at a certain output level for the requested time period (e.g due to boiler drum or turbine shell soaking requirements, staggered CT start times for combined cycles, etc.).

o Minimum Run Time adjustments –OEM backup documentation for physical unit constraints that requires the unit to be operated for the requested time period after it is dispatchable.

o Minimum Down Time adjustments - OEM backup documentation and a detailed shut down sequence listing the required steps to bring the unit into a ready for startup condition along with the time required to perform each step.

o Notification Time Adjustment –A detailed sequence of events of the tasks required prior to startup along with the time required to perform each step. In addition gas pipeline contracts may be submitted for review.

o Turn Down Ratio Adjustments –Requests for adjustments to this parameter based on physical equipment limitations should include OEM backup documentation describing the equipment limitation. Requests for adjustments to this parameter based on emissions permit limitations and related concerns will require inclusion of the applicable Air Permit as well as emissions data for justification.

2.3.4.4 Real Time Values

• Market Sellers can communicate the resource's current operational capabilities to PJM before and after Day-ahead Energy Market closes through the 'Real Time Values' function in Markets Gateway.

• Real Time Values should be utilized when a resource cannot operate according to the unit specific parameters (Capacity Performance and Base Capacity resources), default Parameter Limited Schedules (non-Capacity Performance resources), or approved Parameter Limit exceptions.

• The parameters eligible for Real Time Value overrides consist of the following values:

o Turn Down Ratio

o Minimum Down Time

o Soak Time

o Minimum Run Time

o Maximum Run Time

o Start Up Time

o Notification Time

2.3.6 PJM Activities

The following business rules apply to PJM activities:

• PJM shall post on the Markets Gateway System, the PJM load forecast, total bid demand, and Day-ahead Scheduling Reserve (Operating Reserve) objective for each hour of the next Operating Day by 1330 at the completion of the day-ahead scheduling process.

• PJM shall post forecasts of total hourly demand for the next four days and peak demand for the subsequent three days.

• PJM shall post hourly LMP, Congestion Price, and Loss Price values for the next operating day at the completion of the day-ahead scheduling process by 1330.

• PJM shall post the schedule of demand, supply, and bilateral transactions for private viewing by market participants.

• PJM may perform supplemental resource commitments after the day-ahead schedule is posted in order to maintain reliable operation. Such supplemental commitments are based on minimizing startup, soak and no-load costs.

2.3.6.1 Market Power Mitigation

PJM tests for the concentration of local market power under transmission constrained conditions and applies measures to mitigate such power when detected. If transmission limits are identified during the day-ahead scheduling process or during real-time operations, the appropriate generators (those for which the owner fails the Three-Pivotal Supplier Test ("TPS Test") as detailed in Section 6.4.1 paragraphs (e) and (f) of the PJM Operating Agreement) are offer capped.

Units remain eligible to set LMP when offer-capped. Both pool-scheduled and self-scheduled units are eligible for offer capping.

Offer-capping is applied as follows:

• Units are offer-capped at lesser of their cost-based or price-based schedules, including startup, soak and no-load cost components. Specific details regarding determination of cost-based offers may be found in PJM Manual 15: Cost Development Guidelines and Section 6.4.2 of the PJM Operating Agreement.

• For units scheduled in the Day-Ahead Market, the offer caps are applied at the time of commitment and apply for the length of time the unit is scheduled in the Day-Ahead Market at the schedule that results in the lowest overall system production cost, in accordance with Section 6.4.1 (a) of the Operating Agreement. o If the incremental energy offer, no load cost, soak cost or startup cost for any portion of the offer capped hours is updated subsequent to the day-ahead commitment, the offer caps

are recalculated for each hour that was updated and apply at the schedule that results in the lowest dispatch cost for each updated hour, in accordance with section 6.4.1 (g) of the Operating Agreement; however, once the resource is dispatched on a cost-based offer, it remains on a cost-based offer regardless of the determination of the cheapest schedule.

• For units scheduled in the Real-time Market, the offer caps are applied at the time of commitment and apply at the schedule that results in the lowest dispatch cost, in accordance with Section 6.4.1 (g) of the Operating Agreement.

o If the incremental energy offer, no load cost, soak cost or startup cost for any portion of the offer capped hours are updated subsequent to the real-time commitment, the offer caps will be recalculated for each hour that is updated and will apply at the schedule that results in the lowest dispatch cost for each updated hour in accordance with Section 6.4.1 (g) of the Operating Agreement; however, once the resource is dispatched on a cost-based offer, it will remain on a cost-based offer regardless of the determination of the cheapest schedule.

• Non-CT units, as well as CTs that are committed in the Day-Ahead Market and expected to run in the Real-time Market without additional notification from PJM Dispatch, that are offer-capped in the Day-Ahead Market are offer-capped for those same hours in the Real-time market and at the same schedule.

• Pool-scheduled CTs that are committed in the Day-Ahead Market and not expected to run in Real-time unless notified by PJM Dispatch and are offer-capped in the Day-Ahead market are re-evaluated for market power at the time of commitment in the Real-time Market. Such units are offer-capped in accordance with the results of the TPS test that is conducted at the time of the real-time commitment.

• Pool-scheduled units brought on-line for economics prior to constrained conditions are not offer-capped at the time of commitment.

• Units whose owners passed the TPS test at the time of commitment remain uncapped and are not be subject to additional market power testing until the end of the initial capping determination period, which is defined as follows:

o For pool-scheduled or self-scheduled units committed in the Day-Ahead Market, the end of their day-ahead commitment

o For pool-scheduled units committed in the Real-time Market (and not in the Day-Ahead Market), the end of their soak time plus minimum run time

2.3.6.2 Resource Energy Offer Validation (for offers than $1,000/MWh)

Generation Resource Offer Screening Process

PJM uses a screening process to verify the reasonableness of each generation resource's cost-based Incremental Energy Offer segment in excess of $1,000/MWh before it is considered eligible to be used in dispatch or the calculation of LMPs. PJM uses a screening process to verify the reasonableness of each generation resource's cost-based soak cost in excess of $1,000/MWh.

• Cost-based Incremental Energy Offers with prices above $1,000/MWh and soak costs above $1,000/MWh are subject to the offer screening process at the time of submission.

• Day-Ahead Market Incremental Energy Offers and soak costs between $1,000/MWh and $2,000/MWh must be submitted prior to the close of the Day-Ahead Market bid period to be screened for eligibility to set LMP in the Day-Ahead Market.

• In Real-time, a resource's cost-based offer must be submitted at least 65 minutes prior to the start of the operating hour in order for the incremental energy offer segments and soak costs between $1,000/MWh and $2,000/MWh to be screened for eligibility to set LMP.

PJM uses cost inputs provided by the Market Seller to calculate the Maximum Allowable Incremental Cost and Maximum Allowable Soak Cost as outlined in Section 6.4.3 of Schedule 1 of the PJM Operating Agreement. Submission to MIRA, or other system(s) made available is considered submission to PJM and the MMU.

• The Market Seller shall provide heat inputs and performance factors in MIRA, or other system(s) made available for submission of such data. The heat inputs and performance factors should be provided at least one week prior to the Operating Day.

For each Incremental Energy Offer segment and Soak Cost greater than $1,000/MWh, PJM shall evaluate whether such offer segment exceeds the reasonably expected costs for that generation resource by determining the Maximum Allowable Incremental Cost for each segment in accordance with Section 6.4.3 of Schedule 1 of the PJM Operating Agreement.

• If the cost submitted for the offer segment is less than or equal to the Maximum Allowable Incremental Cost value, then that segment is deemed verified and is eligible to be used in dispatch and to set LMP.

• If the cost submitted for the offer segment is greater than the Maximum Allowable Incremental Cost value, then the cost-based offer for that segment and all segments at an equal or greater price are deemed not verified. Such segments are capped at the greater of $1,000 or the price on the most expensive verified segment for the purposes of dispatch and setting LMP.

• If the soak cost submitted is less than or equal to the Maximum Allowable Soak Cost value, then that soak cost is deemed verified and is eligible to be used in dispatch.

• PJM will notify the Market Seller of the verification status of each segment upon completion of the screen.

• Any subsequent update to a cost-based offer's incremental energy offer curve, soak cost or no-load cost subjects the offer to the screening process upon submission of the update and the offer is capped based on the result of the updated screen.

2.3.7 Mechanical/Technical Rules

A valid generator offer consists of the following elements:

• Use startup, soak and ~~&~~ no-load cost switch, with a default value of yes (1).

• Hourly startup, soak and no-load costs, with default values of zero.

o External resources can only submit startup, soak and no-load costs if the entire output of the unit is available for PJM dispatch.

• Condense available switch, with a default value of no (0).

• Hourly economic max/min and emergency max/min are the unit-level economic and emergency MW limits, respectively.

• Daily soak output profile, with the default values of zero.

• Daily minimum down time, soak times and start times, with default values of zero.

• Daily minimum run time and notification time for the Day-Ahead Market, with the ability to update the hourly values for use in real-time commitment and dispatch. The default values will be zero.

2.3.10 Operating Parameter Definitions

Cold/Warm/Hot Notification Time - The time interval between PJM notification and the beginning of the start sequence for a generating unit that is currently in its cold/warm/hot temperature state. Start sequence may include steps such as any valve operation, starting feed water pumps, startup of auxiliary equipment, etc.

Cold/Warm/Hot Start-up Time - The time interval, measured in hours, from the beginning of the start sequence to the point after generator breaker closure which is typically indicated by telemetered or aggregated state estimator MW~~s~~ greater than zero for a generating unit in its cold/warm/hot temperature state. For a Combined Cycle unit it is the time interval from the beginning of the start sequence to the point after first combustion turbine generator breaker closure which is typically indicated by telemetered or aggregated state estimator MWs greater than zero. Start sequence may include steps such as any valve operation, starting feed water pumps, startup of auxiliary equipment, etc.

Other more detailed actions that could signal the beginning of the start sequence could include but are not limited to the operation of pumps, condensers, fans, water chemistry evaluations, checklists, valves, fuel systems, combustion turbines, starting engines or systems, maintaining stable fuel/air ratios, and other auxiliary equipment necessary for startup.

Minimum Run Time (hour) - The minimum number of hours a unit must run, in real-time operations, from the time after generator breaker closure which is typically indicated by telemetered or aggregated state estimator MWs greater than zero to the time of generator breaker opening, as measured by PJM's state estimator. For Combined Cycle units this is the time period after the first combustion turbine

generator breaker closure which is typically indicated by telemetered or aggregated state estimator MWs greater than zero and the last generator breaker opening as measured by PJM's state estimator.

Turn Down Ratio – The ratio of a unit's economic maximum MW to its economic minimum MW.

Minimum Down Time (hour) - The minimum number of hours under normal operating conditions between unit shutdown and unit startup, calculated as the shortest time difference between the unit's generator breaker opening and after the unit's generator breaker closure, which is typically indicated by telemetered or aggregated state estimator MWs greater than zero. For Combined Cycles units this is the minimum number of hours between the last generator breaker opening and after first combustion turbine generator breaker closure which is typically indicated by telemetered or aggregated state estimator MWs greater than zero.

Maximum Daily Starts - The maximum number of times that a unit can be started in an operating day under normal operating conditions.

Maximum Weekly Starts - The maximum number of times that a unit can be started in one week under normal operating conditions (168 hour period starting Monday 0001 hour).

Maximum Run Time (hour) - The maximum number of hours a unit can run over the course of an operating day as measured by PJM's state estimator.

Cold/Warm/Hot Soak Time - The minimum number of hours a unit must run, in real-time operations, from the time after generator breaker closure which is typically indicated by telemetered or aggregated state estimator MWs greater than zero to the time the unit is dispatchable. For Combined Cycle units this is the minimum number of hours from the time just after the first combustion turbine generator breaker closure which is typically indicated by telemetered or aggregated state estimator MWs greater than zero and the time the unit is dispatchable.

Soak Time may include items such as the time necessary to alleviate temperature gradients across boiler or turbine components, the startup and stable operation of environmental equipment, water chemistry evaluations and holds, the maintaining of stable fuel/air ratios, the addition of incremental fuel related or other auxiliary equipment, the starting additional combustion turbines in a combined cycle, and the pressure matching of heat recovery steam generators.

2.14 Balancing Operating Reserve Cost Analysis

Accounting for Operating Reserve is performed on a daily basis. A pool-scheduled resource of a PJM Member is eligible to receive credits for providing Operating Reserve in the Day-ahead Market and, provided that the resource was available for the entire time specified in its offer data, in the balancing market. The total resource offer amount for generation, including startup, soak and no-load costs as applicable, is compared to its total energy market value for specified operating period segments during the day (including any amounts credited for Day-ahead Scheduling Reserve in excess of the Day-ahead Scheduling Reserve offer, any amounts credited for Synchronized Reserve in excess of the Synchronized Reserve offer plus opportunity cost, any amounts credited for Non-Synchronized Reserve in excess of

the Non-Synchronized Reserve opportunity cost and any amounts credited for resources providing Reactive Services). If the total value is less than the offer amount, the difference is credited to the PJM Member.

3.2.7.3 Regulation - Lost Opportunity Cost

PJM may call on resources not otherwise assigned in order to provide regulation, in accordance with PJM's obligation to minimize the total cost of energy, operating reserves, regulation, and other ancillary services. If a resource is called on by PJM for the purpose of providing regulation, the resource is eligible for recovery of Regulation lost opportunity costs as well as start-up, soak, no-load, and energy costs.

4.2.6 Synchronized Reserve Commitment

PJM may call on resources not otherwise scheduled to run in order to provide synchronized reserve, in accordance with PJM's obligation to minimize the total cost of energy, operating reserves, regulation, and other ancillary services. If a resource is called on by PJM for the purpose of providing synchronized reserve, the resource is guaranteed recovery of synchronized reserve lost opportunity costs as well as startup, soak, no-load and energy costs. Please refer to PJM Manual 28: Operating Agreement Accounting for additional settlements details.

9.1 Hourly Schedule Adjustments

At times Market Sellers may benefit from having the ability to differentiate and update their offers, and other associated parameters, on an hourly basis to more accurately reflect their true cost of generation or account for other operating conditions. This section discusses the timing, parameters, and process for updating schedules for use in the Real-time Energy Market.

Generation and Demand Resources may alter their offers for use in the Real-time Energy Market during the following periods (real-time update periods):

• During the Generation Rebidding Period which is defined from the time the Office of Interconnection posts the results of the Day-Ahead Energy Market until 1415.

• Starting at 1830 (typically after the Reliability Assessment and Commitment (RAC) Run is completed) and up to 65 minutes prior to the start of the operating hour (T-65 min).

The following generation offer parameters may be updated during the real-time update periods, with exceptions as noted below:

• Incremental Offer Price

o For Price-based offers, it may be increased or decreased for uncommitted hours, but may only be decreased for committed hours. When determining whether an update constitutes an increase or decrease, each segment of the updated offer curve will be compared to each segment of the incremental offer curve that existed for the schedule and hour at the time the resource most recently received a commitment for that hour.

o For Cost-based offers, they may be increased or decreased for both committed and uncommitted hours.

• Incremental Offer MW

o During the Generation Rebidding Period, Offer MW may only be updated for hours that did not receive a commitment in the Day-Ahead Market.

o Following the close of the Generation Rebidding Period, no updates to the Incremental Offer MW may be made, regardless of resource commitment status.

• Emergency Minimum and Maximum MW Limits

o These parameters are not subject to the T-65 min update deadline and may be updated through the end of the operating hour to which the updates apply.

• Economic Minimum and Maximum Limits

o These parameters are not subject to the T-65 min update deadline and may be updated through the end of the operating hour to which the updates apply.

• Startup Cost (Cold, Intermediate, Hot), Soak Cost (Cold, Intermediate, Hot) and No-Load Cost

o Cost-based Startup, Soak and No-Load Costs~~values~~ (on either a price-based or cost-based schedule) may be increased or decreased for both committed and uncommitted hours.

o Price-based Startup and No-Load Cost~~values~~ may not be updated outside of the open enrollment periods as specified in Section 2.3.3 of this Manual.

• Minimum Run Time

o Hourly differentiated Minimum Run Time values are only considered for use during real-time commitment and dispatch.

o Minimum Run Time may not be updated for any hour that has received a commitment in the Day-Ahead or Real-time Market.

• Notification Time

o Hourly differentiated Notification Time values are only considered for use during real-time commitment and dispatch.

• Schedule Availability

o During the Generation Rebidding Period, Schedule Availability may only be updated for schedules that did not receive a commitment in the Day-Ahead Market.

o No updates to Schedule Availability may be made following the close of the Generation Rebidding Period, regardless of schedule commitment status, except for dual fuel resources.

− Resources designated as "Dual Fuel Capable" in Markets Gateway may submit hourly differentiated schedule availability for cost-based schedules following the close of the Generation Rebidding Period, for uncommitted hours only, in order to communicate fuel availability.

• Switch to Cost Schedule Flag

o May not be updated during the Generation Rebidding Period.

• Any hourly updates made to the Offer Updates or Detail Updates pages of Markets Gateway supersede the daily values on the Offer and/or Detail pages. Hourly updates made on the Offer Updates or Detail Updates pages are not automatically carried over into the next operating day.

11.2.2 Day-Ahead Scheduling Reserve Market Eligibility

DASR can only be provided after soak time.

Attachment D - Eligibility

A generation resource with a cost-based offer greater than $1,000/MWh developed in accordance with PJM Manual 15: Cost Development Guidelines and the Market Seller's PJM approved Fuel Cost Policy is eligible when:

• A generation resource's cost-based offer did not pass the offer screen or a generation resource has a cost-based offer greater than $2,000/MWh.

• PJM and the MMU have received the Market Seller's submitted documentation that supports the payment of Operating Reserve credits.

• PJM, with timely input and advice from the MMU, has verified all costs, including startup, soak, no-load, and incremental energy, used to calculate the Operating Reserve credits using the exception process described in Section 2.3.6.2, and PJM has approved the credits.