

PURPOSE

The purpose of the prospective resource milestones is to permit PJM and the IMM to assess the progress of cleared prospective capacity resources toward achieving the capability to produce or curtail energy (as appropriate for the resource class) when called by PJM. For those resources failing to progress toward such state, these provisions also provide PJM and IMM the means to remove the resource from the capacity market.

Transition: All cleared resources that have yet to achieve the capability to produce or curtail energy when called by PJM shall submit the required documentation below, consistent with the resource's class, until the resource successfully tests.

PRE-AUCTION REQUIREMENTS

Planned Internal Generation Critical Path Schedule

- 1) For all Internal Planned Generation resources the Project Sponsor must, in addition to meeting the requirements set forth in PJM Manual 18, Sec. 4.2.3, provide a critical path schedule for the project for PJM's review and approval [60] days prior to the RPM auction in which it will be initially offered. The critical path schedule shall provide sufficient detail to allow PJM to evaluate the feasibility of resource development, the feasibility and likelihood that the resource will achieve Commercial Operation no later than the start of the relevant Delivery Year, and a timeline of expected milestone achievements, including those milestones set forth below.

The critical path schedule shall include the following milestones including the dates on which the following milestones have or are expected to occur:

- a) **Major Permits** - A list of all major permits required for the project, and for each major permit, the Project Sponsor must list the agency requiring the permit, the date on which application for the permit is expected to be made, and the expected date of approval. Major permits shall include, but are not limited to: (i) all federal and state permits; and (ii) local, regional, and town permits. The permitting and installation process associated with any major ancillary infrastructure (such as new gas pipelines, new water supply systems, or large storage tanks) should be included.
- b) **Project Financing Closing** - The Project Sponsor shall provide (i) the estimated dollar amount of required project financing; (ii) the expected sources of that financing; and (iii) the expected closing date(s) for the project financing.
- c) **Major Equipment Orders** - The Project Sponsor must provide a list of all of the major components necessary for the project, and the date or dates on which all major components necessary for the project have been or are expected to be ordered. Although the specific technology will determine the list of major components to be included, the list shall include, to the extent applicable: (i) electric generators which may include equipment such as fuel cells or solar photovoltaic equipment; (ii) turbines; (iii) step-up transformers; (iv) relay panels (v) distributed control systems; and (vi) any other single piece of equipment or system such as a cooling water system, steam generation, steam handling system, water treatment system, fuel handling system or emissions control

system that is not included as a sub-component of other equipment listed, and that accounts for more than five percent of the total project cost.

- d) **Substantial Site Construction** - The Project Sponsor must provide the approximate date on which the amount of money expended on construction activities occurring on the project site is expected to exceed 20 percent of construction financing costs.
- e) **Major Equipment Delivery** - The Project Sponsor must provide the dates on which the major equipment described in subsection (d) above has been or is scheduled to be delivered to the project site.
- f) **Major Equipment Testing** - The Project Sponsor must provide the date or dates on which each piece of major equipment described in subsection (d) above is scheduled to undergo testing, including major systems testing, as appropriate for the specific technology to establish its suitability to allow, in conjunction with other major equipment, subsequent Commercial Operation of the project in accordance with the design capacity of the resource and in accordance with Good Utility Practice. The test(s) shall include those conducted at the point at which the operation of the major equipment will be determined to be in compliance with the requirements of the engineering or purchase specifications.
- g) **Commissioning** - The Project Sponsor must provide the date on which the project is expected to have demonstrated the level of performance specified.
- h) **Commercial Operation** - The Project Sponsor must provide the date by which the project is expected to achieve Commercial Operation. This date must be no later than the start of the Capacity Delivery Year associated with the relevant Base Residual Auction.

Imported Existing Generation Critical Path Schedule

- 2) For all Imported Existing Generation resources the Project Sponsor must, in addition to meeting the requirements set forth in PJM Manual 18, Sec. 4.2.2, provide a critical path schedule for the project for PJM's review and approval [60] days prior to the RPM auction in which it will be initially offered. The critical path schedule shall provide sufficient detail to allow PJM to evaluate the feasibility of resource development, the feasibility and likelihood that the resource will achieve Commercial Operation no later than the start of the relevant Delivery Year, and a timeline of expected milestone achievements, including those milestones set forth below.
 - a) The critical path schedule shall also include a letter of non-recallability executed by the Project Sponsor and countersigned by the host Balancing Authority assuring PJM that the energy and capacity from the unit is not recallable to the host control area or any other control area.

Imported Planned Generation Critical Path Schedule

- 3) For all Imported Existing Generation resources the Project Sponsor must, in addition to meeting the requirements set forth in PJM Manual 18, Sec. 4.2.4, provide a critical path schedule for the project for PJM's review and approval [60] days prior to the RPM auction

in which it will be initially offered. The critical path schedule shall provide sufficient detail to allow PJM to evaluate the feasibility of resource development, the feasibility and likelihood that the resource will achieve Commercial Operation no later than the start of the relevant Delivery Year, and a timeline of expected milestone achievements, including those milestones set forth below.

- a) The critical path schedule shall include all milestones set forth for Planned Internal Generation.
- b) The critical path schedule shall also include a letter of non-recallability executed by the Project Sponsor and countersigned by the host Balancing Authority assuring PJM that the energy and capacity from the unit is not recallable to the host control area or any other control area.

Demand Response Critical Path Schedule

- 4) For all Load Management resources (Demand Response and Energy Efficiency) the Project Sponsor must, in addition to meeting the requirements set forth in PJM Manual 18, Sec. 4.3.1, provide a critical path schedule for the project for PJM's review and approval [60] days prior to the RPM auction in which it will be initially offered. The critical path schedule shall provide sufficient detail to allow PJM to evaluate the feasibility of resource development, the feasibility and likelihood that the resource will achieve Commercial Operation no later than the start of the relevant Delivery Year, and a timeline of expected milestone achievements, including those milestones set forth below.

- a) Program Registrations
Consider impact of DR Enhancements reforms.

Energy Efficiency Critical Path Schedule

- 5) For all Load Management resources (Demand Response and Energy Efficiency) the Project Sponsor must, in addition to meeting the requirements set forth in PJM Manual 18, Sec. 4.3.1, provide a critical path schedule for the project for PJM's review and approval [60] days prior to the RPM auction in which it will be initially offered. The critical path schedule shall provide sufficient detail to allow PJM to evaluate the feasibility of resource development, the feasibility and likelihood that the resource will achieve Commercial Operation no later than the start of the relevant Delivery Year, and a timeline of expected milestone achievements, including those milestones set forth below.

- a) EE Program Registrations
- b) Installation of EE measures
- c) M&V plan development

Qualifying Transmission Upgrades

- 6) For all Qualifying Transmission Upgrades the Project Sponsor must, in addition to meeting the requirements set forth in PJM Manual 18, Sec. 4.5, provide a critical path schedule for the project for PJM's review and approval [60] days prior to the RPM auction in which it will be initially offered. The critical path schedule shall provide sufficient detail to allow PJM to evaluate the feasibility of resource development, the feasibility and likelihood that the resource will achieve Commercial Operation no later than the start of the relevant Delivery

Year, and a timeline of expected milestone achievements, including those milestones set forth below.

- a) Consider applicable milestones linked to the construction of the QTU transmission project

POST AUCTION:

Quarterly Critical Path Schedule Reports

For each resource that is being monitored for compliance with a Critical Path Schedule, the project sponsor shall provide to PJM a Quarterly Critical Path Schedule Report no later than five Business Days after the end of each calendar quarter sufficient to allow PJM to monitor compliance with the critical path schedule. If the Project Sponsor does not provide a written critical path schedule report to PJM by the fifth Business Day after the end of the calendar quarter, then PJM shall issue a deficiency notice to the Project Sponsor. If the Project Sponsor fails to provide the critical path schedule report within five Business Days of issuance of the deficiency notice, then the resource will be subject to the termination provisions as defined below.

Updated Critical Path Schedule

The critical path schedule report must include a complete updated version of the critical path schedule as described above. The updated critical path schedule should clearly set forth whether the Project Sponsor proposes to change any of the milestones or dates from the previously submitted version of the critical path schedule and must include an explanation of any such proposed changes. In the updated critical path schedule report, the Project Sponsor should also explain in detail any proposed changes to the project design and the potential impact of such changes on the amount of capacity the resource will be able to provide.

Documentation of Milestones Achieved

For each resource that is being monitored for compliance with a Critical Path Schedule, the Project Sponsor must include in the critical path schedule report documentation demonstrating that the milestone has been achieved by the date indicated and as otherwise described in the critical path schedule, as follows:

Planned Internal Generation

(i) **Major Permits** For each major permit described in the critical path schedule, the Project Sponsor shall provide documentation showing application for and acquisition of the permit as described in the critical path schedule. For permit applications, this documentation could include a dated copy of the permit application or cover letter requesting the permit. For approved permits, this documentation could include a dated copy of the approved permit or letter granting the permit from the permitting authority.

(ii) **Project Financing Closing** The Project Sponsor shall provide documentation showing that the sources of financing identified in the critical path schedule have committed to provide the amount of financing described in the critical path schedule.

This documentation could include copies of commitment letters from the sources of financing.

(iii) **Major Equipment Orders** For each major component described in the critical path schedule, the Project Sponsor shall provide documentation showing that the equipment was ordered as described in the critical path schedule. This documentation should include a copy of a dated confirmation of the order from the manufacturer or supplier. This documentation should confirm scheduled delivery dates consistent with milestone.

(iv) **Substantial Site Construction** The Project Sponsor shall provide documentation showing that the amount of money expended on construction activities occurring on the project site has exceeded 20 percent of the construction financing costs.

(v) **Major Equipment Delivery** For each major component described in the critical path schedule, the Project Sponsor shall provide documentation showing that the equipment was delivered to the project site and received as preliminarily acceptable as described in the critical path schedule. This documentation should include a copy of a dated confirmation of delivery to the project site.

(vi) **Major Equipment Testing** For each major component described in the critical path schedule, the Project Sponsor shall provide documentation showing that the component was tested, including major systems testing as appropriate for the specific technology as described in the critical path schedule, and that the test results demonstrate the equipment's suitability to allow, in conjunction with other major component, subsequent Commercial Operation of the project in accordance with the amount of capacity obligated from the resource in the Capacity Delivery Year in accordance with Good Utility Practice. This documentation could include a dated copy of the satisfactory test results.

(vii) **Commissioning** The Project Sponsor shall provide documentation showing that the resource has demonstrated a level of performance equal to or greater than the amount of capacity obligated from the resource in the Capacity Delivery Year. This documentation should include a copy of a dated letter of confirmation from the applicable manufacturer, contractor, or installer.

(viii) **Commercial Operation** The Project Sponsor is not required to provide documentation of Commercial Operation to PJM as part of the critical path schedule monitoring. PJM shall confirm that the resource has achieved Commercial Operation as described in the critical path schedule through the resource's compliance with the other relevant requirements of PJM's Tariff and Operating Agreement.

(ix) **Transmission Upgrades.** If during the qualification process it was determined that, because of overlapping interconnection impacts, transmission upgrades are needed for the new resource to complete its interconnection, then the Project Sponsor shall provide documentation showing that the transmission upgrades have been completed.

Imported Existing Generation

[List documentation necessary to achieve milestones]

Imported Planned Generation

[List documentation necessary to achieve milestones]

Demand Response

[List documentation necessary to achieve milestones]

Energy Efficiency

[List documentation necessary to achieve milestones]

Qualifying Transmission Upgrades

[List documentation necessary to achieve milestones]

Additional Relevant Information

The Project Sponsor must include in the critical path schedule report any other information regarding the status or progress of the project or any of the project milestones that might be relevant to PJM's evaluation of the feasibility of the project being built in accordance with the critical path schedule or the feasibility that the project will meet the requirement that the project achieve Commercial Operation no later than the start of the relevant Capacity Delivery Year; including the disclosure of any material matters that may impact the progress of the project, such as any pending state utility commission approval or pending litigation that may impede timely project completion.

MILESTONE DEFAULT

Failure to Meet Critical Path Schedule

If PJM determines that any critical path schedule milestone date has been missed, or if the Project Sponsor proposes a change to any milestone date in a quarterly critical path schedule report, then PJM shall consult with the Project Sponsor to determine the impact of the missed milestone or proposed revision, and shall determine a revised date for the milestone and for any other milestones affected by the change including Commercial Operation of the project. If a milestone date is revised for any reason, then PJM may require the Project Sponsor to submit a written report to PJM on the fifth Business Day of each month until the revised milestone is achieved detailing the progress toward meeting the revised milestone. If the Project Sponsor does not provide a written critical path schedule report to PJM on the fifth Business Day of a month, PJM shall then issue a deficiency notice to the Project Sponsor. If the Project Sponsor fails to provide the critical path schedule report within five Business Days of issuance of that notice, then the resource will be subject to termination provisions as defined below. Such a monthly reporting requirement, if imposed, shall be in addition to the quarterly critical path schedule reports.

Any resource for which milestones have been modified or for which milestones are unmet shall not be eligible to be offered into subsequent Delivery Auctions until such time that the modified milestones are completed and all other milestones are on schedule.

Covering Capacity Supply Obligation where Resource will Not Achieve Commercial Operation by the Start of the Capacity Delivery Year

If as a result of milestone date revisions, the Commercial Operation is scheduled to occur after the start of any Capacity Delivery Year in which the resource has a Capacity Supply Obligation, then the Project Sponsor must take actions to cover the entire Capacity Supply Obligation for the portion of the Capacity Delivery Year for which the project will not have achieved Commercial Operation, as follows:

(a) The Project Sponsor may cover its Capacity Supply Obligation through Incremental Auctions, or one or more Bilateral contracts.

(b) If, by the time demand bids are due for the [third] Incremental Auction for the Capacity Delivery Year in which the resource has a Capacity Supply Obligation, the Project Sponsor has not covered its full Capacity Supply Obligation for the portion of the Capacity Delivery Year for which the project will not have achieved Commercial Operation, then PJM shall submit a demand bid at the Base Residual Auction Clearing Price in the Incremental Auction on the Project Sponsor's behalf for a quantity equal to the Capacity Supply Obligation for the Delivery Year that has not been covered, with all payments, charges, rights, obligations, and other results associated with such demand bid applying to the Project Sponsor as if the Project Sponsor itself had submitted the demand bid.

TERMINATION

Termination of Capacity Supply Obligation: If the resource is terminated due to the Project Sponsor's failure to comply with the above requirements, if the Capacity Supply Obligation is not replaced, or if the Project Sponsor replaces the Capacity Supply Obligation for any Delivery Year, then the PJM, after consultation with the Project Sponsor, and FERC approval shall:

- terminate the resource from offering in any future auctions;
- terminate delivery payments owed to the resource for the terminated capacity commitment (to be distributed pro rata to LSEs in the affected LDA); and
- retain any collateral posted in support of the capacity commitment (to be distributed pro rata to delivered capacity resources in affected LDAs)

Termination of Interconnection Agreement: PJM may also terminate the Interconnection Agreement of any resource with a terminated Capacity Supply Obligation, upon FERC approval. However, the Project Sponsor shall retain its interconnection queue position pending FERC's decision; subject to the Project Sponsor providing replacement capacity for terminated project during the pendency of litigation.