

#### Interconnection Process Reform

Jack Thomas
Knowledge Management Center
March 23, 2022
Markets and Reliability Committee



- Interconnection Process Reform Task Force
  - Approved to start work at April 6, 2021 Planning Committee
  - Address issues identified as a result of the Interconnection Process
     Workshops that occurred in 2020.
- First IPRTF meeting April 23, 2021
- IPRTF has had 18 meetings to date



- Interconnection studies
- Cost concerns
  - Project cost estimates
  - Cost responsibility for network upgrades
- Interim operation and agreements
- New Service Request requirements, requirements to proceed through the process and rules around project modifications
- Opportunities that can reduce the current and future interconnection queue backlog



## New Interconnection Process

#### New Interconnection Process – 1.11.2022 PC

- PJM Package (Only Package Voted)
  - Yes (275) / No (1) / Abstain (0)
  - Preferred Over Status Quo
    - Yes (275) / No (1) / Abstain (0)



#### New Interconnection Process Overview

- First Ready First Serve
  - Priority defined by cycle
  - Subsequent cycles "gated" by completion of phases in prior cycles
- Progress through process in 3 phases
  - Customer decision point at end of each phase
- Study deposit based on size of project (10% non-refundable)
- Readiness Deposit
  - Phase 1 = \$4000/MW (50% at risk)
  - Phase 2 = 10% of Network Upgrade Costs (100% of Phase 1 RD at Risk)
  - Phase 3 = 20% of Network Upgrade Costs (100% of Phase 3 RD at Risk)



#### New Interconnection Process Overview Cont.

- Single Point of Interconnection (POI)
  - Multiple projects behind same POI treated as one project
- No inter-cycle cost allocations
- Ability to exit study process early
  - Projects that do not contribute to the need for network upgrades and/or do not need Facilities studies may proceed to final agreement early
- Study window = 710 days
- Technology Changes allowed at Decision Point 1 or 2 Only



#### New Interconnection Process Overview Cont.

- Prior to proceeding to final agreement:
  - All security deposit amounts submitted
  - 100% site control needed
    - Or requirement added to produce evidence within 6 months
  - Necessary state, county & local permits attained
    - Or milestone added to final agreement
  - State jurisdictional interconnections requirements
    - Demonstrates executed a two party interconnection agreement with Transmission Owner/Distribution Provider
- Rename Interim Interconnection Service Agreement to Engineering and Procurement Agreement
  - Can only be requested in Phase 3 of process



# **Transition Proposal**

#### Transition Proposal – 2.8.2022 PC

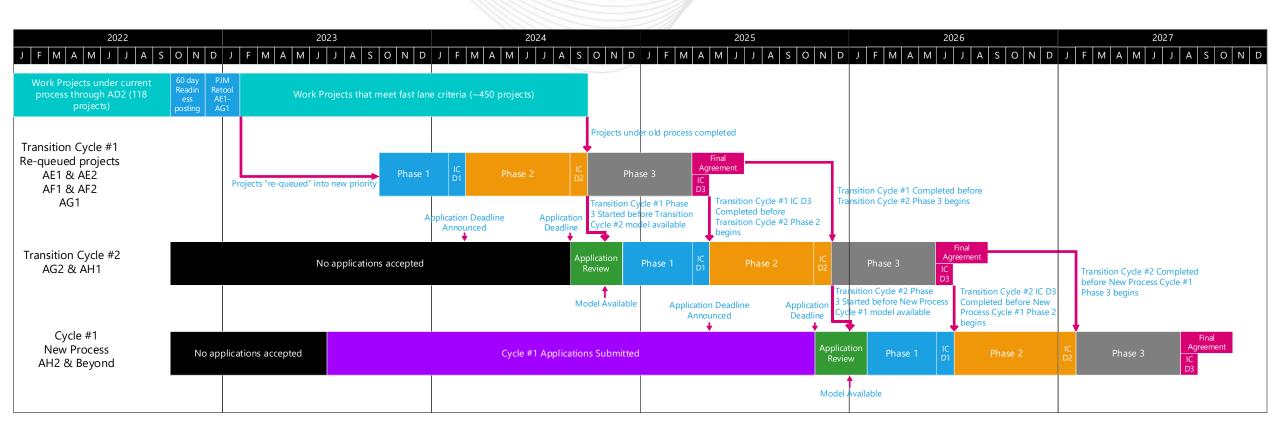
- PJM:
  - Yes (218) / No (22) / Abstain (14)
    - Endorsed
- National Grid Renewables:
  - Yes (6) / No (200) / Abstain (48)
- IC Coalition:
  - Yes (69) / No (134) / Abstain (51)



- Queues up through AD2 will continue in current process
- Fast Lane Process
  - Queues AE1 through AG1
  - Upgrade cost allocation <= \$5 million</li>
  - ~ 450 Projects
  - ~ 18 months to complete
- Transition Cycle 1 Re-queued projects from AE1 through AG1
- Transition Cycle 2 Queues AG2 and AH1
- New Process AH2 and beyond



#### PJM Transition Option





#### Proposed Tariff Structure Overview

- The PJM team has made modifications to the existing Tariff Parts II, III, IV and VI language, as well as adding new Parts VII, VIII and IX to the Tariff
  - Parts II and III Deleted penalty provisions; reporting requirements carried forward
  - Parts IV and VI sunset language and Tariff metadata cleanup (for web Tariff)
  - New Tariff Part VII Transition rules to Cycle approach
  - New Tariff Part VIII New Cycle rules
  - New Tariff Part IX All interconnection related agreements

 New rules are a mix of new and existing rules with tweaks to meet the Cycle process concepts. Some legacy clean-up issues have also been addressed (e.g., the bulk of agreements in new Part IX)



- March 23 MRC
  - First Read Process and Transition Packages
- March 31 IPRTF
  - Review OATT Language
- April 27 MRC/MC
  - Same Day Vote for Process and Transition Packages
- May FERC Filing



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SME: Jason Connell [Jason.Connell@pjm.com]

**Interconnection Process Reform** 



#### Member Hotline

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# Appendix

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- New Interconnection Process 1.11.2022
  - PJM Package (Only Package Voted)
    - Yes (275) / No (1) / Abstain (0)
    - Preferred Over Status Quo
      - Yes (275) / No (1) / Abstain (0)
- *Transition Proposal* 2.8.2022
  - PJM: Yes (218) / No (22) / Abstain (14)
    - Endorsed
  - National Grid Renewables: Yes (6) / No (200) / Abstain (48)
    - Failed
  - IC Coalition: Yes (69) / No (134) / Abstain (51)
    - Failed



# Interconnection Reform Task Force PJM Solution Proposal Framework



 Framework was created by PJM staff and management over several sessions

The framework borrows heavily from interconnection processes in other RTOs

Full solution details in the PJM Solution proposal matrix.



### Guiding Principles for PJM's Proposed Solution

- Ideal timing not to exceed 2 years
- Cost and study construct should be cluster/cycle based and convert from first in/first out processing to first ready/first out processing
  - Readiness demonstrated by site control and financial milestones
- Subsequent cycle management should be assessed based on completion of a certain point in the prior cycle to minimize backlog
- Provide customers with more actionable information, earlier in the process
- Attempt to merge all other application types into new process
- State jurisdictional projects should have appropriate milestones to enter into an interconnection agreement from the Transmission Owner / Distribution Provider prior to receiving a Wholesale Market Participation Agreement



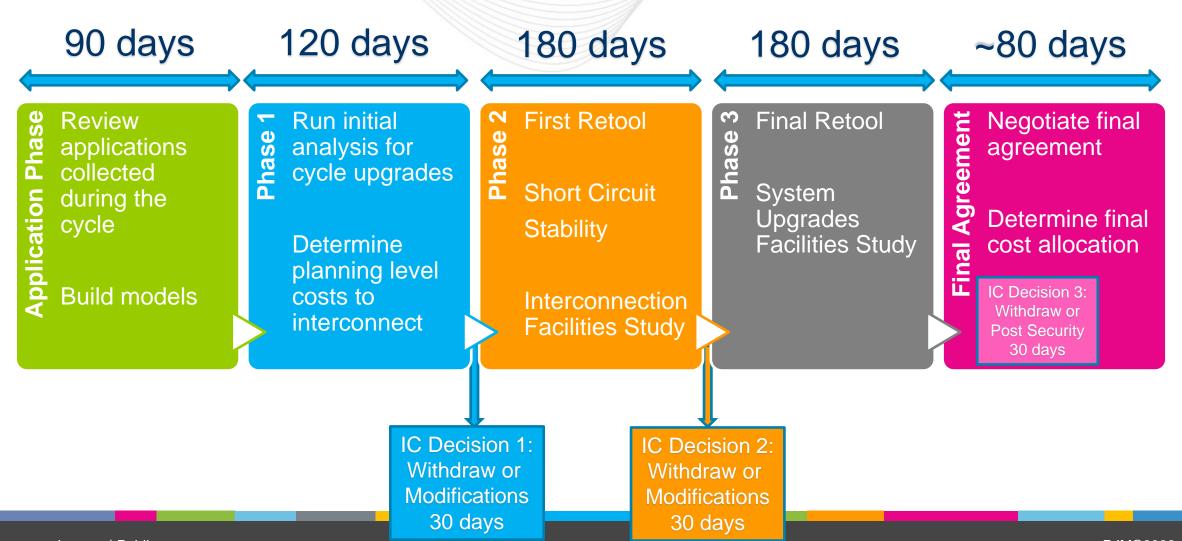
#### Guiding Principles for PJM's Proposed Solution

- Remove incremental financial rights for generators for simplification and due to removal of first-to-cause construct. Add a parallel process for generators seeking to receive these rights
- Remove other generation interconnection request forms (Attachments Y & BB) for simplification
- Remove or reduce scope of pre-application process
- Make project changes predictable from a process viewpoint and automatic to provide certainty to customers
- Allow off-ramps for generators proceeding through the process at various decision points
- Remove Optional Interconnection Study process



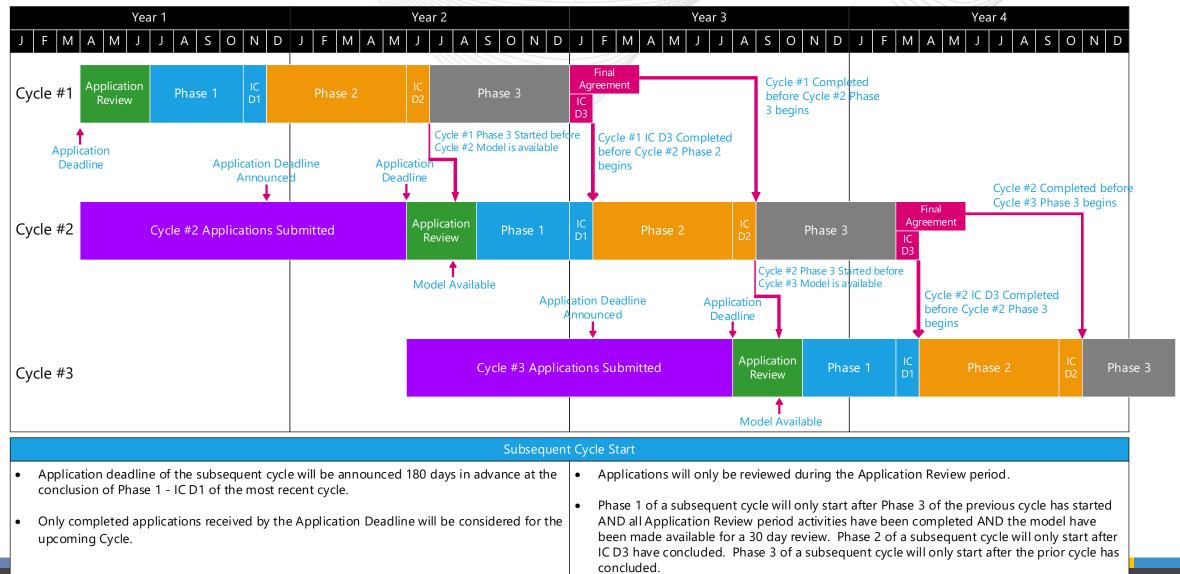
#### **New Framework Overview**

Total time per cycle – 710 days





#### New Framework Timeline Example





#### **Application Review Phase**

- Single closing period for kicking off a cycle
- Allow a defined window to review all active applications from the open cycle
  - Do not review applications "mid-stream"
- Single application agreement with a unified study deposit and milestone payments
  - Typical data required + dynamic data up front
  - Shared facilities agreement required if connecting behind another POI
- Site control for generating site required and will be revisited throughout the process
- Single Point of Interconnection only
- Study Deposit (see table) + Readiness payment (\$4,000 / MW)
- Load Flow study model provided at least 30 days prior to the start of Phase 1



- Analysis Provided
  - Summer Peak load flow
  - Light load season load flow
  - This analysis will be the equivalent of an Impact study analysis at full commercial probability and DC & AC
- Interconnection Facilities
  - Scope, cost, schedule planning desk-side estimate
- System Upgrades
  - Scope, cost, schedule planning desk-side estimate
  - Cost allocation
- Results provided as a single cycle format (e.g. spreadsheet)



- Changes permitted:
  - Reduce the output of the request (both MFO & CIR)
    - Up to 100% of requested MFO and/or CIR value
  - Point of Interconnection finalized
    - Location along transmission line or
    - Substation breaker position
  - Equipment changes
  - Withdraw project
- Customer Requirements:
  - Provide 100% generation facility site control again
  - Provide 50% of site control for customer interconnection facilities (gen-tie) to the Point of Interconnection & new interconnection switchyard (if applicable)
  - Provide evidence of air & water permits if applicable
  - State jurisdictional interconnections to provide evidence of entering the state's interconnection process (if applicable)
  - Readiness Payment #2 (10% of network upgrade costs)
- Off ramp for projects that do not require a Facilities Study and do not contribute to the need for network upgrades



- Analysis Provided
  - Retool load flow results
  - Short circuit study
  - Initial affected system study results (if needed)
  - PJM to notify developer of requirement to enter into an Affected System Study Agreement (if needed)
  - Stability analysis
- Interconnection Facilities
  - Transmission Owner to perform Facilities study
- System Upgrades
  - Scope, cost, schedule, & cost allocation



- Changes Permitted:
  - Reduce the output of the request (both MFO & CIR)
    - 10% of the amount studied for Phase 2
  - Equipment changes under permissible technology changes
  - Withdraw project
- Customer Requirements:
  - Decide whether direct connection network upgrades will be subject to Option to Build
  - Readiness Payment #3 (20% of network upgrade costs)
  - Enter into Affected System Study Agreement if applicable
- Off-ramp for projects that only have interconnection facilities and do not contribute to the need for network upgrades. They can proceed directly to a final agreement



- Analysis Provided
  - Final retool of all Phase 2 analyses
  - Final affected system study (if needed)
- Interconnection Facilities
  - Target back-feed dates
- System Upgrades
  - Final cost allocation
  - Transmission Owner Facilities study
- Agreement Related
  - Draft ISA/CSA
  - Security calculation



- Changes Permitted:
  - Withdraw project
- Customer Requirements:
  - Post security for upgrade cost allocation and indicate the project will proceed to a final agreement.
  - Developer to provide 100% site control within 6 months of final agreement execution for the following:
    - generation site
    - interconnection switchyard
    - customer interconnection facilities to the POI
  - Provide evidence of necessary state, county, & local permits or a milestone will be created for the final agreement



#### Final Agreement Phase Details

- Negotiate final agreement details including milestones, construction schedule, site control review, and Transmission Owner input
- True-up final security as required for projects that may have withdrawn during IC Decision 3
- Perform any remaining retool necessary to ensure system upgrades are still needed
- No ability to suspend a project
  - Construction delays can be handled with milestone extensions for issues outside of the developer's control
  - Developers able to extend milestones for up to 12 months
- 15 business days to execute once tendered



#### Application Type Comparison

- Generation Interconnection
  - Attachment N, Y, BB
- Transmission Interconnection
  - Attachment S

Long Term Firm Transmission Service

Attachment PP

- Upgrade Request
  - Attachment EE
- Surplus Service Request
  - Attachment RR



**Parallel Process** 

Status Quo



#### Attachment EE



- Attachment EE Upgrade Requests to upgrade existing PJM transmission facilities
  - Examples: Relieve congestion, request IARRs, request ICTRs
  - Presently come through the PJM New Services Queue
- Attachment EE propose a separate process from the interconnection process with goal to complete processing of these requests in ~ 1 year
  - No Attachment EE window, these requests can be submitted at any time
  - The requested upgrade scope cannot be part of an already executed ISA or UCSA



#### Upgrade Requests (Att. EE) – Transition to Proposed Interconnection Process

Total time - ~15 months

60 days

120 days

180 days

30 days

Submit Att EE & \$150K refundable deposit

> PJM assigns Upgrade Request # upon receipt

PJM performs **Application Pha** deficiency review

PJM holds kickoff call with customer and TO as necessary

Study TO determines upgrade scope/cost estimates

mpact

PJM runs applicable analyses

Impact Study includes: Upgrade scope & cost estimates as well as any IARRs/ICTRs requested.

TO provides Facilities Study level upgrade scope and cost estimates

PJM issues Facilities Study

Final Agreement PJM prepares & issues UCSA to customer

15 business days to execute

IC Decision 1: Withdraw or Post Readiness Deposit (20% NU costs) 30 days

IC Decision 2: Withdraw or Post 100% Security 30 days



# Study and Readiness Deposits Details



#### Study and Readiness Deposit Proposal

- Proposal adjustments and further clarifications
  - Change to the study deposit to have 10% be non-refundable
  - Separate treatment of Readiness Deposits and Security
  - Readiness Deposit refund timing
  - Proposed forfeited Readiness Deposit disposition

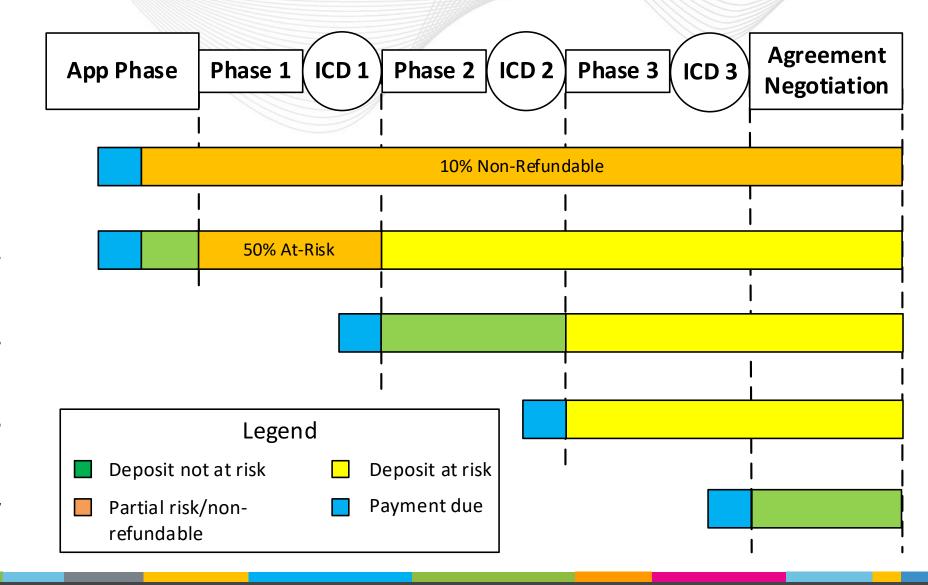


#### Study Deposit: Non-Refundable Portion

- Update to hold 10% of the study deposit as non-refundable
  - Mirrors the current deposit process
  - Refundable upon reaching commercial operation
  - To be used to fund restudies



### Readiness and Study Deposit Timing Diagram



**Study Deposit** 

**Readiness Deposit 1** 

**Readiness Deposit 2** 

**Readiness Deposit 3** 

**ISA Security** 



- Study Deposit
  - Covers the study costs
  - 10% non-refundable
  - Due one time at the beginning of the study process
- Readiness Deposit (RD)
  - Funds committed based upon project size and study results
  - Not used to fund studies
  - Refunds subject to study phase and adverse study results test
  - RDs determined at the time they are due; not to be refunded or reduced based upon later project reductions or cost allocation changes
  - Maximum of three RDs due at the project decision points



#### Study Deposit

Project Size	Study Deposit
0 - 20MW	\$75,000
> 20 - 50MW	\$200,000
> 50 - 100MW	\$250,000
> 100 – 250MW	\$300,000
> 250 – 750MW	\$350,000
> 750MW	\$400,000

#### Readiness Deposit Calculations

- RD1 = \$4,000 per MW
- RD2 = (10% of cost allocation towards required Network Upgrades) RD1
- RD3 = (20% of cost allocation towards required Network Upgrades) RD1 RD2



- RD1 and Study Deposit proposed to be based upon the higher of requested Maximum Facility Output or Capacity Interconnection Rights
- RDs 2 and 3 can be zero, but not negative
  - At IC Decision Point 1, total RDs will be the greater of 10% of the cost allocation of required Network Upgrades or RD1
  - At IC Decision Point 2, total RDs will be the greater of 20% of the cost allocation of required Network Upgrades or RD2 or RD1



# Treatment of Readiness Payments due to Adverse Study Results

#### At IC Decision 2

Increase in Network Upgrade costs allocated to the project of 25% or greater and more than \$10,000 per MW from Phase 1 study results

#### At IC Decision 3

Increase in Network Upgrade costs allocated to the project of 35% or greater and more than \$25,000 per MW from Phase 2 study results

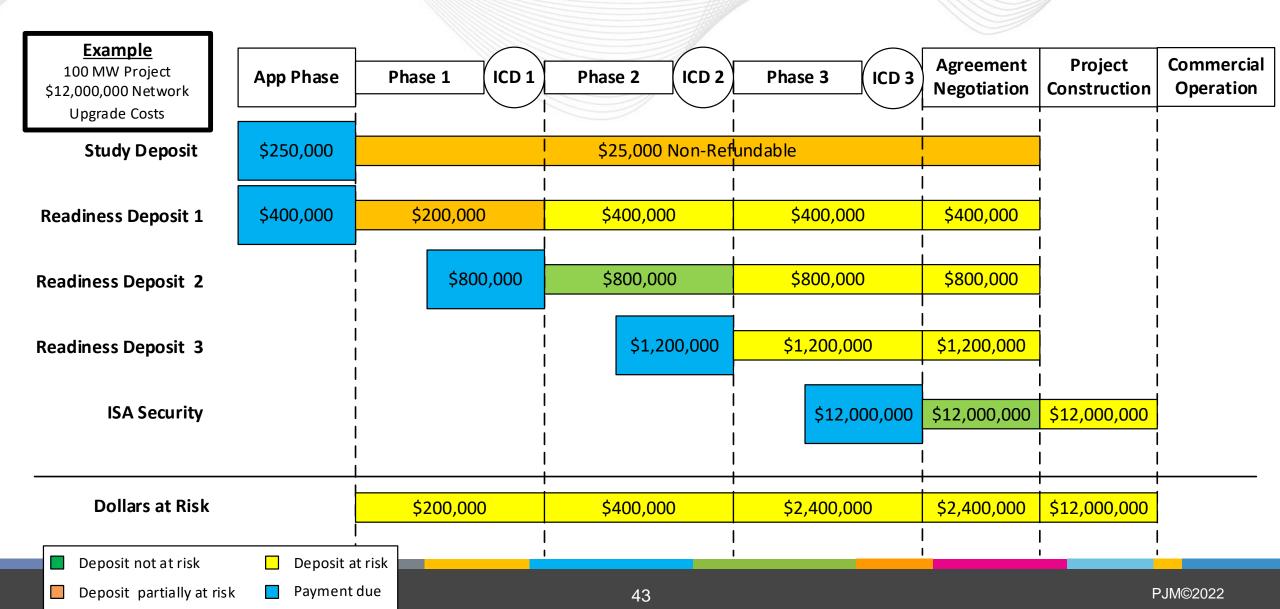


# Separate Treatment for Readiness Deposits and Security

- Previously proposed that the Readiness Deposit would be rolled into Security at Agreement Negotiation
- Creates concerns by mixing funds held for different purposes
- Proposal updated to separate Security funds from Readiness Deposits
  - Security to be collected in full prior to entering the Agreement Negotiation phase
  - Readiness Deposits to be treated separately and available for refund once all IC Decision Point 3 site control requirements have been met and the final is agreement executed



### Separate Treatment of Readiness Deposits and Security





# Proposed Forfeited Readiness Deposit Disposition

- Readiness Deposits from withdrawn projects (those that have not triggered the Adverse Study Results Test) will be pooled throughout the Cycle to be used to mitigate late-stage withdraws
- Late-stage withdraws defined as those that occur after Phase 3
   Studies are complete
  - Withdraws at the end of the study process provide a small window for those remaining to adjust
  - Significant costs shifts may make remaining projects less viable



# Proposed Forfeited Readiness Deposit Disposition

- Once all projects in the Cycle have made their decisions, PJM will retool incorporating all withdraws to determine what system Network Upgrades remain necessary
- Underfunded Network Upgrades will be identified
  - Forfeited RDs will be used to backfill
  - Possible that there will not be enough funds in the forfeited RD pool to mitigate all underfunding or there could be a surplus
    - Surplus forfeited RDs will be refunded to developers (pro-rata basis)
  - If after the retool no underfunded Network Upgrades are required, all forfeited RDs will be refunded



# Site Control Details



#### **Site Control: Submission Timing**

#### **Application Final** Phase 1 Phase 2 Phase 3 Phase **Agreement** 0 0 First Retool **Final Retool** Review Run initial Negotiate final applications analysis for agreement System Upgrades Complex collected during cluster upgrades **Facilities Study Determine final Analyses** the cycle Determine cost allocation Interconnection **Build models** planning level **Facilities Study** costs to interconnect **Submission 3: Submission 1: Submission 2:** At Decision Point 3, prior to At Decision Point 1 90 days prior to Phase 1 execution of final ISA in Final Agreement Phase.



#### **Site Control: Form of Evidence**

#### Form of Evidence

SUBMISSION #1 – APPLICATION PHASE				
Full Site Control:	Site Plan Showing:			
100% Generating Facility: deed/lease/option <sup>1</sup>	<ul> <li>Generating site</li> <li>Interconnection Facilities</li> <li>Interconnection Switchyard (if required)</li> </ul>			
SUBMISSION #2 – DECISION POINT 1				
Partial Site Control:	Site Plan Showing:			
100% Generating facility: deed/lease/option	Generating site			
50% Interconnection Facilities:	Interconnection Facilities			
deed/lease/option/ROW	Interconnection Switchyard (if required)			
50% Interconnection Switchyard: deed/lease/option				
SUBMISSION #3 – DECISION POINT 3				
Full Site Control:	Site Plan Showing:			
100% Generating facility: deed/lease/option	Generating site			
100% Interconnection Facilities:	Interconnection Facilities			
deed/lease/option/ROW	Interconnection Switchyard (if required)			
<ul> <li>100% Interconnection Switchyard: deed/lease/option<sup>2</sup> (See 'NOTE' below)</li> </ul>				

NOTE: If 100% of site control is <u>not obtained</u> by <u>Decision Point 3</u>, then Developer must show concrete evidence acceptable to PJM they are in negotiations to achieve 100% of all site control for a period of at least 3 years from the last day of Phase 3. PJM will add a condition precedent in the ISA tariff template requiring that within 180 days of the effective date of the ISA, 100% site control be acquired for at least 3 years from the last day of Phase 3. If 100% of site control is not obtained within 180 days of the effective date of the ISA, then the project will automatically be deemed terminated and will be withdrawn from the cycle.

<sup>&</sup>lt;sup>1</sup> For Merchant Transmission, need site control for 100% Transmission Substation Facilities (e.g. for PAR, VFT) up front at the Application Phase. For transmission line facilities, full site control will be required at DP3. If not by DP3, then will need to be acquired within 180 days of the effective date of the ISA.

<sup>&</sup>lt;sup>2</sup> Project Developer will need to be in compliance with Interconnection Transmission Owner's ultimate ownership requirements for the Interconnection Switchyard.



#### **Site Control: Term**

#### **Site Control Term**

SUBMISSION #1 – A	PPLICATION PHASE	
Full Site Control:	Term Requirement:  • 1 Year from Application Deadline	
<ul> <li>100% Generating facility: deed/lease/option</li> </ul>		
SUBMISSION #2 –	DECISION POINT 1	
Partial Site Control:	Term Requirement:	
100% Generating facility: deed/lease/option	Additional 1 Year from last day of Phase 1	
50% Interconnection Facilities: deed/lease/option/ROW	1 Year from last day of Phase 1	
50% Interconnection Switchyard: deed/lease/option	1 Year from last day of Phase 1	
SUBMISSION #3 –	DECISION POINT 3	
Full Site Control <sup>3</sup> :	Term Requirement:	
100% Generating facility: deed/lease/option	<ul> <li>Additional 3 Years from last day of Phase 3</li> </ul>	
• 100% Interconnection Facilities: deed/lease/option/ROW	Additional 3 Years from last day of Phase 3	
100% Interconnection Switchyard: deed/lease/option	Additional 3 Years from last day of Phase 3	

<sup>&</sup>lt;sup>3</sup> NOTE: If 100% of site control is <u>not obtained</u> by Decision Point 3, then Developer must show concrete evidence acceptable to PJM they are in negotiations to achieve 100% of all site control for a period of at least 3 years from the last day of Phase 3. PJM will add a condition precedent in the ISA tariff template requiring that within 180 days of the effective date of the ISA, 100% site control be acquired for at least 3 years from the last day of Phase 3. If 100% of site control is not obtained within 180 days of the effective date of the ISA, then the project will automatically be deemed terminated and will be withdrawn from the cycle.



# Officer/Authorized Representative Certifications

#### Officer/Authorized Representative Certifications

SUBMISSION #1 – APPLICATION PHASE				
Facility	Officer/Authorized	Landowner	Duration of Control	
	Representative	Attestation		
	Certification <sup>4</sup>	(or County Recording)		
Generating Facility	Yes	At PJM's discretion if	Extends for at least a one year period past the	
		deemed necessary.	first day of PJM Cycle X relative to	
			Interconnection Request.	
SUBMISSION #2 – DECISION POINT 1				
Facility	Officer/Authorized	Landowner	Duration of Control	
	Representative	Attestation		
	Certification	(or County Recording)		
Generating facility,	Yes	At PJM's discretion if	Extends at least one year past the last day of PJM	
Interconnection Facilities &		deemed necessary.	Cycle X, Phase 1 relative to Interconnection	
Interconnection Switchyard			Request.	
SUBMISSION #3 – DECISION POINT 3				
Facility	Officer/Authorized	Landowner	Duration of Control	
	Representative	Attestation		
	Certification	(or County Recording)		
Generating facility,	Yes	At PJM's discretion if	Extends at least 3 years past the last day of PJM	
Interconnection Facilities &		deemed necessary.	Cycle X, Phase 3 relative to Interconnection	
Interconnection Switchyard			Request.	

Note: Officer/Authorized Representative Certifications (and Landowner Attestations if PJM deems necessary) are in addition to site control!

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<sup>&</sup>lt;sup>4</sup> Authorized Officer or Authorized Representative can sign.



#### **More on Site Control**

Site Control	PJM Proposed Reform	
Exclusivity	Exclusivity evidence required in deed/lease/option	
Acreage requirements	Solar: 5 Acres per MW Wind: 30 acres per MW Battery Storage 0.1 acres per MW Synchronous Generator: 10 acres per facility *PE Stamped Site Plan will be accepted	
Site Sharing	<ul> <li>Identification of other projects sharing site (same owner)</li> <li>Proposed space utilization by all projects (same owner)</li> </ul>	
Officer/Authorized Representative Certifications	Site control + Officer/Authorized Representative Certification +  Landowner Attestation (or County Record)  (if deemed necessary by PJM)	
Changes to site	No significant changes permitted (By DP1 need to solidify POI)	



# PJM Transition Proposal Update

Jason Connell
Director
Infrastructure Planning



- Goals of the transition proposal
- Review issues with previously proposed transition options

 Establish assumptions upon which the new option is based and walkthrough the new transition option



- Timely move to the newly proposed process
- Get backlogged generation through the queue and into the construction phase
- Eliminate speculation from the queue
- Reduce the time for closing the queue to as little as possible
- Balances projects that would have proceeded under existing rules but are delayed due to timing/other projects



- Time to move to new process vs. Flexibility under old process
  - Options either preserved flexibility and took too long to enter into the new process or cut over to the new process quickly potentially at the expense of existing projects
  - Balanced options between new process and transition timing still could endanger existing projects
  - PJM's Option #4 potentially not strict enough in moving projects towards the new cycle-based approach leaving the bulk of projects under the existing cost allocation rules continuing backlog delays



- The effective date of the transition is October 1, 2022 based on the current work plan
- PJM expects to complete queues through the end of AD2 under the existing process by the transition date. Projects will be worked under the current process until the effective date of the transition ("business as usual").
- After the transition date, based on historical throughput and recent reprioritization, PJM expects to be able to complete approximately 300 projects per year that remain in the existing process. Complete indicates entering into a final agreement or withdrawal.
- Projects that have received a final ISA/WMPA for execution or have a signed final agreement will not be subject to the transition
  - Executed Interim ISAs do not fall into the above category

- PJM will limit the amount of projects that can remain under the existing cost allocation structure by developing a fast lane.
  - As of the transition date in the filing, all AE1-AG1 projects will have 60 days to post \$4K / MW as a readiness deposit and demonstrate the site control again for their generation facility for one year. Deposit is not at-risk.
  - Projects that have met this requirement will be retooled to determine shared network upgrade impacts
    - Network upgrade impacts includes the project meeting any cost allocation thresholds for shared network upgrades or a project being the first to cause the need for a network upgrade
    - Projects that have approved baselines and/or supplemental projects that obviate the need for a network upgrade will not be counted as a network upgrade impact but as contingent facilities
    - Affected system studies will not be evaluated during this retool



- Projects that are the first to cause a network upgrade or have cost allocation eligibility to a network upgrade for load flow and short circuit violations that are less than or equal to \$5 million ONLY will be allowed to enter the fast lane:
  - Facilities needed to interconnect the project will not be considered
  - PJM estimates approximately 450 projects will meet this criteria
  - No additional readiness requirements for fast lane projects
  - If a project is an uprate whose base project does not qualify for the fast lane, the uprate will also not qualify regardless of the analysis results.
  - If stability analysis or a sag study is completed during the fast lane and it is determined that a project has a network upgrade > \$5 million, it will be removed from the fast lane and shifted to Transition Cycle #1
  - If it is determined, during the Facilities study, that the scope of the project has changed such that the
    estimate of the upgrade is now > \$5 million, the project will be removed from the fast lane and shifted to
    Transition Cycle #1
- Projects that enter the fast lane will have their Facilities Study completed and their ISA/ICSA tendered under the existing cost allocation rules.

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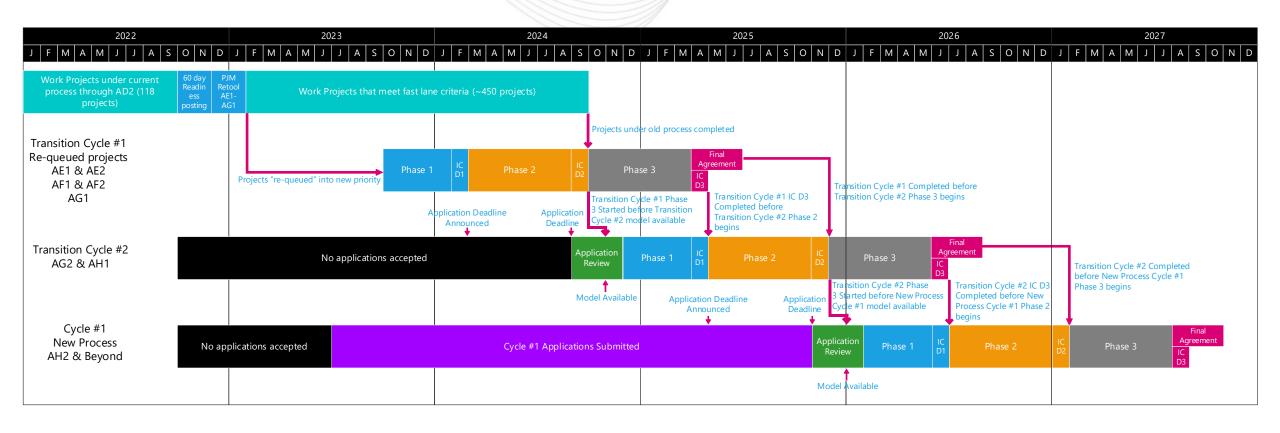
- Why use \$5 million or less?
  - PJM's current tariff has different treatment for upgrades that are \$5 million or less
    - No inter-queue cost allocation with only the driver project and those who contribute in the same queue being eligible.
  - This amount should cover the bulk of substation and terminal equipment upgrades and, as a result, shorten durations for Facilities study work
  - PJM will use existing cost estimates from on-going Facilities studies and retooled analysis to determine eligibility without having to reassess all project's detailed cost allocation

- Projects that have a cost allocation eligibility for a shared network upgrade greater than \$5 million will be processed in Transition Cycle #1.
  - Remaining projects re-queued into a single transition cycle to speed up the transition to the new process
  - Transition Cycle #1 will start within one year of the transition while the fast lane project are ongoing. Phase #3 of Transition Cycle #1 will not begin until all fast lane projects are completed.
  - Retooled results and the new case will be provided in advance of IC Decision #1.
    - Rules applied will be consistent with the new process including readiness requirements such as deposits and site control with one exception:
      - Site control requirement at IC D3 will be reduced from 3 years to 1 year.
    - RD2 will be required by the end of IC Decision #1 and the original \$4K / MW provided at the initial 60 day period will be at risk



- AG2 and AH1 queues will be processed as Transition Cycle #2
  - Projects will be permitted to submit revised technical data and configuration
  - Increases to the MFO requested will not be permitted. Developers may choose between the primary and secondary POIs identified during the scoping meeting prior to the start of application review.
  - Rules applied will be consistent with the new process including readiness requirements such as deposits and site control with one exception:
    - Site control requirement at IC D3 will be reduced from 3 years to 1 year.
- All projects that have not been studied (AH2 and beyond) will be maintained and asked to submit changes to their application under the new process
  - Allows PJM to reduce the time to start accepting new applications to only 8 months
  - These projects would likely have to submit significant changes from their applications to PJM as a result of the delay
  - Projects submitted that claimed deactivating CIRs will be preserved by maintaining their queue position
  - Projects accepted in this cycle will be fully under the new rules and processed as New Cycle #1.







#### Advantages

- Consolidates the transition into two distinct parts fast lane and two transition cycles
  - Fast lane bound by projects that can proceed upon completion of Facilities study which limits those under the serial cost allocation rules
- Preserves the ability for backlogged projects who would have received an ISA under the existing process if not for queue delays
- Reduces the time that the queue is closed for the transition and gets to the new process the quickest of all previously proposed PJM options.
- Move projects with the least amount of network upgrades forward to an ISA to begin construction
  - Minimizes construction on the transmission system from a shared network upgrade viewpoint
  - Allows projects that could be used to meet state RPS goals to move quickly

#### Disadvantages

- Some projects may be pushed to Transition Cycle #1 due to small allocations of greater than \$5 million network upgrades
- Longer fast lane transition process
- Transition Cycle #1 will have a mix of projects from AE1-AG1 which may disadvantage some projects



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