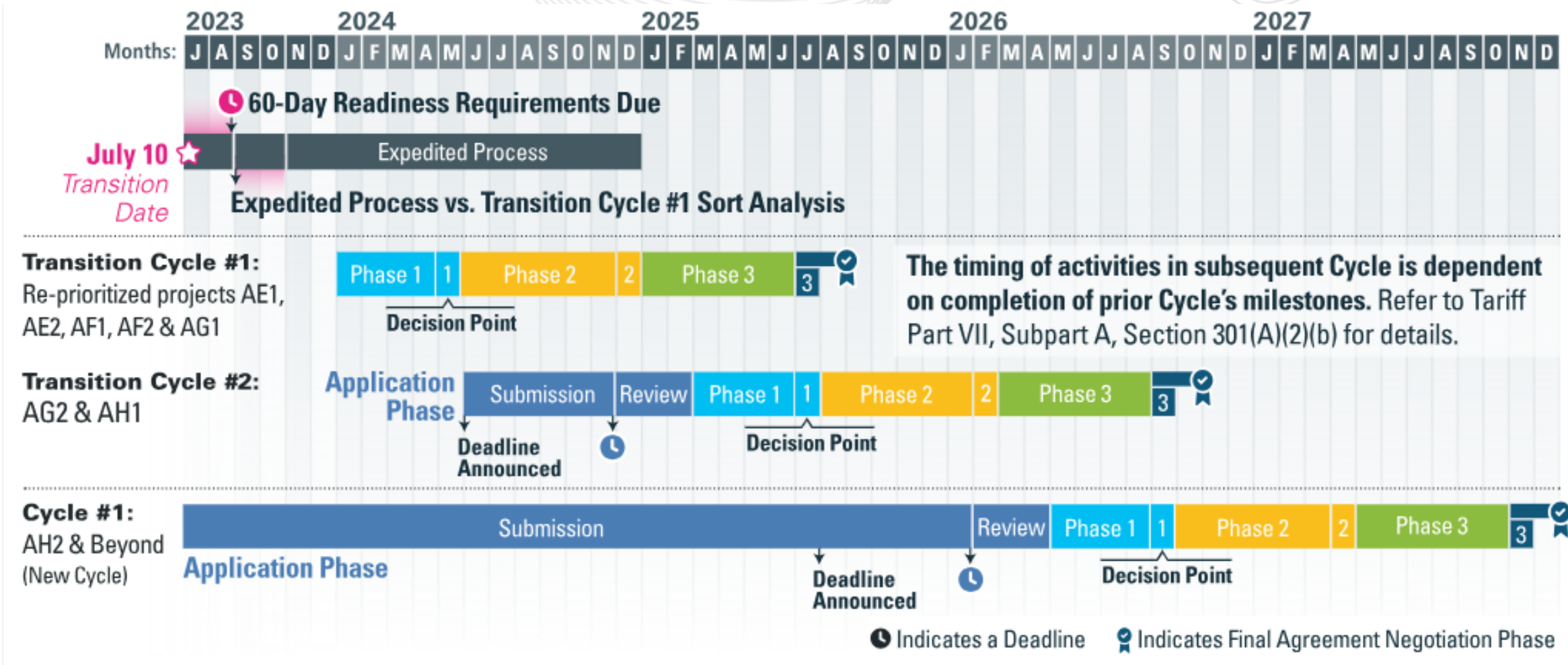




Interconnection Analysis Transition Sort Retool & Model Availability

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Readiness Review Period

- Review of active AE1-AG1 projects for readiness requirements
- AE1-AG1 projects will address outstanding questions to fulfill readiness requirements

Refreshed Expedited Process Retool

- TC1 projects will be lifted from Expedited Process study cases (AE1-AG1)
- Expedited Process projects will be retooled w/o TC1 projects

**Developers
Notified
of Expedited
Process Eligibility**

Sept. 2023

Oct. 2023

Nov. 2023

Dec. 2023

Jan. – Apr. 2024

Expedited Processing Eligibility (Transition Sort Retool)

- AE1-AG1 projects that have met readiness requirements will receive "Expedited Processing Eligibility Analysis" to sort projects into Expedited Process or TC1.
- Each queue will be analyzed on their own SIS study case

Transition Cycle #1 Analysis

Phase I analysis begins for final cohort of TC1 projects coming out of Transition Sort Retool

July–December 2023: Transition Cycle #1 Model Building (LF, SC, Stability)

- **Transition Sort Retool (Oct-Nov-Dec 2023)**
 - Serial Study Process
 - AE1-AG1 'Case Freeze' as of 10/2/23 for projects not subject to readiness review.
 - AE1-AG1 projects that have not meet readiness requirements will be removed from the cases.
 - The transition sort retool is only used to determine the disposition of the Expedited Process vs. TC1 study track for projects in the AE1-AG1 queues that have met readiness eligibility requirements
 - Only Load Flow analysis is completed for the transition sort retools (SP/LL)
 - A project is not eligible for the expedited process if it has cost allocation or is first-to-cause for a network upgrade that has a total estimated cost > \$5 mil
 - Transition Sort Retool Reports will all be simultaneously posted on [pjm.com](http://www.pjm.com)
 - Report serves to identify classification of projects as either Expedited Process or TC1
 - <https://www.pjm.com/planning/service-requests/fast-lane-tc1-classification>

- **Refreshed Expedited Process Retool (Dec 2023 start – parallel with TC1)**
 - Serial Study Process & Cost Allocation Criteria
 - AE1-AG1 cases updated with any withdrawals to date.
 - Once the Expedited Process & TC1 tracks are determined, the TC1 projects are lifted from the AE1-AG1 cases to run the Expedited Process analysis
 - Load Flow, Short Circuit, and Stability will be completed for Expedited Process eligible projects during retool
 - If Stability is already complete, it is not expected to be re-run (unless violation previously identified)
 - Based on final analysis results (LF/SC/Stability) and Facility studies, any projects that do receive cost allocation for network upgrades > \$ 5mil will shift to TC1 (Includes TO analysis results)
 - Expedited Process projects will receive SIS report after all analysis is completed, followed by Facilities Study Report (if required) and final GIA/WMPA.

- **Transition Cycle #1 (2024-2025) –**
 - Contains AE1-AG1 projects that were not eligible for the Expedited Process
 - No project priority → studied as a cluster under new study process
 - Studied on 2027 RTEP base case
 - Load Flow analysis will be completed for SP/LL using legacy GenDeliv test
 - Short Circuit and Stability analyses will be completed using cluster study methodology
- **Transition Cycle #2 (2024-2026)**
 - Contains final cohort of valid AG2-AH1 projects → AG2-AH1 projects need to re-apply under the new rules to be eligible for TC2
 - No project priority → studied as a cluster under new study process
 - Anticipated to be studied on 2028 RTEP base case
 - Load Flow analysis will be completed for SP/WP/LL using new GenDeliv test
 - Short Circuit and Stability analyses will be completed using cluster study methodology
- **Cycle #1 (2025-2027)**
 - Contains valid AH2 projects and beyond → AH2 and beyond projects need to apply under the new rules to be eligible for Cycle 1
 - RTEP base case year is TBD
 - Same study approach as TC2



Load Flow Model Details & Target Availability

- Transition Sort Retool Models (Post #1) -
 - Models will be built on SIS Impact Models and consist of active AE1-AG1 projects before sorting
 - AE1/AE2 – End of October
 - AF1/AF2 – November
 - AG1 – December
- Refreshed Expedited Process Models (Post #2) - December/January
 - Models will be built on SIS Impact Models and only consist of AE1-AG1 Expedited Process projects only, all TC#1 projects are removed from these models
- Transition Cycle #1 Model Post - January 2024
 - Model will be built on 2027 RTEP Model and consist of active AE1-AG1 projects

Availability:

- **AE1/AE2/AF1/AF2/AG1 cases and files will be posted to PJM website – Cell Access Required**
- **TC1 case and files will be posted to the PJM Website – Cell Access Required**

Category	Study	Type of Analysis		RTEP Base Case Year		Study Approach	Generator Deliverability Method	Cost Allocation		
Expedited Process	Transition Sort Retool¹ <u>Purpose:</u> Determine Expedited Process vs. TC1	Load Flow ²		AE1/AE2	2022	Serial	Legacy GD	Serial		
				AF1/AF2	2023					
				AG1	2024					
	Refreshed Expedited Process Retool³ <u>Reason:</u> Lift TC1 projects from model	Load Flow ²		AE1/AE2	2022	Serial	Legacy GD	Serial		
				Short Circuit					AF1/AF2	2023
				Stability ⁴					AG1	2024
Transition Cycles	Transition Cycle 1	Load Flow	Phases 1-3	New AE1-AG1	2027	Cluster	Legacy GD	Cluster		
		Short Circuit	Phases 2-3							
		Stability	Phases 2-3							
	Transition Cycle 2⁵	Load Flow	Phases 1-3	New AG2-AH1	2028 (anticipated)	Cluster	New GD ⁶	Cluster		
		Short Circuit	Phases 2-3							
		Stability	Phases 2-3							
New Cycle	Cycle 1	Load Flow	Phases 1-3	AH2 +	TBD	Cluster	New GD ⁶	Cluster		
		Short Circuit	Phases 2-3							
		Stability	Phases 2-3							

¹ The transition sort retool is only used to determine the disposition of the Expedited Process vs. TC1 study track for projects in the AE1-AG1 queues

² Load Flow studies will be run on both summer peak and light load model conditions

³ PJM M14H, Appendix I.3.4, **Expedited Process Rules** will apply for the Refreshed Expedited Process Analysis

- **Short Circuit / Stability Analysis:** If a short circuit, stability analysis, or sag study is completed during the expedited process, and it is determined that a reinforcement project is required that has an estimated Network Upgrade cost greater than \$5,000,000, the project will be removed from the Expedited Process and shifted to Transition Cycle #1
- **Facilities Study Estimates:** If it is determined during the Facilities Study that the cost of a Network Upgrade is now estimated to be greater than \$5,000,000, the project will be removed from the Expedited Process and shifted to Transition Cycle #1
- **Until the Project Developer receives a draft GIA, they are subject to being shifted to TC1 for any of the reasons above**
- **GIA:** Projects in the Expedited Process will have their Facilities Studies completed, and will be tendered an interconnection-related service agreement pursuant to Tariff, Part IX

⁴ PJM will apply updated model conditions to stability studies not yet performed at this stage. Stability will not be re-run if a project already received results

⁵ Load Flow studies are projected to be run on Summer Peak, Winter Peak, and Light Load models starting with Transition Cycle 2 and beyond

⁶ The new Generator Deliverability procedure was endorsed at the January 2023 MRC and is outlined in M14B

- **AE1-AG1 projects will need to respond to any dynamic data deficiencies identified in Queue Point no later than 10/31/23**
- This target date for clearing data deficiencies is necessary to meet the Expedited Process and Transition Cycle study schedules
- PJM will reach out to Project Developers directly to coordinate resolution of deficiencies
- PJM has published dynamic modeling guidelines (<https://www.pjm.com/-/media/planning/services-requests/pjm-dynamic-model-development-guidelines.ashx>) as of 9/20/23.
 - The PJM dynamic modeling guidelines will be implemented for any model changes/updates for projects in Transition Cycle 1 and beyond
 - All Necessary Study Requests and As Built submissions will be required to follow the PJM dynamic modeling guidelines
 - All new submissions (AG2 and later) will be required to follow the PJM dynamic modeling guidelines

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