

Interconnection Analysis Transition Study Approach

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Interconnection Process Subcommittee
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Current Schedule 2023 60-Day Readiness Requirements Due Expedited Process (Fast Lane) July 10 🙀 **Transition** Expedited Process vs. Transition Cycle #1 Sort Analysis Date Transition Cycle #1: Re-prioritized projects AE1, AE2, AF1, AF2 & AG1 Phase 1 Phase 3 **Decision Point** Transition Cycle #2: AG2 & AH1 **Application** Submission Review Phase 1 Phase 3 **Phase Decision Point** Deadline Announced Cycle #1: AH2 & Beyond (New Cycle) Submission Review Phase 1 Phase 2 Phase 3 **Application Phase Decision Point** Deadline www.p Announced



Analysis Timeline

Readiness Period

- Remaining active AE1-AG1 projects will post readiness requirements.
- No retools during this time.

Refreshed Fast-Lane Retool

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

Developers Notified

of Fast Lane Eligibility



Jul.-Aug. 2023

Sept.–Oct. 2023



Nov.-Dec. 2023

Jan.-Apr. 2024

Transition Start -July 10th

Expedited Processing Eligibility (Transition Sort Retool)

- AE1-AG1 projects that have met readiness requirements will receive "Expedited Processing Eligibility Analysis" to sort projects into Fast Lane 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: Transition Cycle #1 Model Building (LF, SC, Stability)

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Fast Lane Processing

Transition Sort Retool (Sep-Oct 2023)

- Serial Study Process & Cost Allocation Criteria
- The transition sort retool is only used to determine the disposition of the Fast Lane 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

Refreshed Fast Lane Retool (Nov-Dec 2023)

- Serial Study Process & Cost Allocation Criteria
- Once the Fast Lane & TC1 tracks are determined, the TC1 projects are lifted from the AE1-AG1 cases to run the Fast Lane analysis
- Load Flow, Short Circuit, and Stability will be completed for Fast Lane 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)

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Transition Cycle #1 (2024-2025)

- Contains AE1-AG1 projects that were not eligible for Fast Lane
- 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 <u>legacy</u> GenDeliv test

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 <u>new</u> GenDeliv test
- Stability analysis will be completed on SP/LL

• 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



Study Approach Reference Guide

Category	Study	Type of Analysis		RTEP Base Case Year		Study Approach	Generator Deliverability Method	Cost Allocation
Fast Lane	Transition Sort Retool ¹ Purpose: Determine Fast Lane vs. TC1	Load Flow ²		AE1/AE2	2022	Serial	Legacy GD	Serial
Processing				AF1/AF2	2023			
				AG1	2024			
	Refreshed Fast Lane	Load Flow ²		AE1/AE2	2022	Serial	Legacy GD	Serial
	Retool ³ Reason: Lift TC1 projects from model	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 2 ⁵	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 2-3	AH2 +	TBD	Cluster	New GD	Cluster
		Short Circuit	Phases 2-3					
		Stability	Phases 2-3					



Study Approach Reference Guide (Cont'd)

- ¹ The transition sort retool is only used to determine the disposition of the Fast Lane 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 Fast Lane Analysis.
 - Short Circuit/Stability Analysis: If a short circuit, stability analysis or a 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. 4.
 - 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. 5.
 - 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.



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