



GI BACKLOG AI, AUTOMATION, AND PROCESS REFORM

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GI MANAGER

*Working together to responsibly and economically
keep the lights on today and in the future.*



SouthwestPowerPool



SPPorg



southwest-power-pool



BACKLOG CLEARING PLAN

GI BACKLOG CLEARING PLAN STATUS

- All backlog clusters have posted their Phase 2 results
- All clusters through DISIS 2021 to have GIA by EOY 2025 (20GW)

SPP Generation Interconnection Queue Study Schedule*

Green shaded cells indicate milestone completion. *Actual Start and Completion dates may vary and are subject to change. **Restudy start dates may change pending the outcome of the previous restudy.

BCP

One-Time

Normal

Study	Projects	MW	*Projected Study Start	Phase 1 Posting	Projected DP1 Completion	Phase 2 Start	Phase 2 Posting	Projected DP2 Completion	**Projected Restudy Start	Projected Restudy Completion	Projected Facilities Studies Start (pending restudy)	Projected GIA Start	Current Status	Postings & Comments
DISIS-2017-002	50	9,914	6/21/2021	2/18/2022	3/14/2022	3/15/2022	8/29/2022	9/20/2022	1/5/2024	6/26/2024	6/27/2024	8/26/2024	GIA's in progress	Restudy posted
DISIS-2018-001	32	4,248	3/15/2022	7/19/2022	8/23/2022	9/21/2022	3/20/2023	4/24/2023	6/27/2024	9/23/2024	9/24/2024	11/25/2024	GIA's in progress	Restudy posted
DISIS-2018-002 & DISIS-2019-001	16	2,493	8/24/2022	10/25/2022	12/1/2022	4/25/2023	8/23/2023	10/13/2023	9/24/2024	12/10/2024	12/11/2024	2/10/2025	GIA's in progress	Restudy posted
DISIS-2020-001	37	8,473	12/2/2022	3/17/2023	4/7/2023	10/16/2023	2/16/2024	3/11/2024	1/3/2025	3/14/2025	3/17/2025	5/15/2025	GIA's in progress	Restudy posted
DISIS-2021-001	48	9,637	4/10/2023	6/8/2023	7/17/2023	3/12/2024	8/9/2024	9/16/2024	4/7/2025	6/23/2025	6/23/2025	8/22/2025	GIA's in progress	Restudy posted
DISIS-2022-001	43	7,978	7/18/2023	9/28/2023	11/3/2023	9/17/2024	1/28/2025	3/5/2025	7/16/2025	9/12/2025	9/16/2025	11/17/2025	FS in progress	Restudy posted
DISIS-2023-001	49	10,142	1/2/2024	3/1/2024	3/22/2024	3/6/2025	7/25/2025	8/18/2025	10/6/2025	12/5/2025	12/8/2025	2/9/2026	Pending Restudy	Phase 2 Final posted 7/25/25
ERAS-2025	TBD	TBD	10/17/2025	1/15/2026	N/A	N/A	N/A	N/A	TBD	TBD	1/16/2026	3/18/2026	Application window open	Application window is open from 9/2/2025 to 10/2/2025
DISIS-2024-001	345	90,220	12/8/2025	2/5/2026	2/27/2026	3/2/2026	6/29/2026	7/22/2026	8/12/2026	10/9/2026	10/12/2026	12/11/2026	Data Validation	Application window closed 3/1/2025
DISIS-2026-001	TBD	TBD	4/1/2027	6/1/2027	6/22/2027	6/23/2027	10/22/2027	11/12/2027	12/6/2027	2/3/2028	2/4/2028	3/6/2028	Planning	Application window is open from 4/1/2026 to 3/1/2027

STATS FOR BACKLOG CLEARING PLAN

24 cluster studies completed since 2022

1,678 projects evaluated through DISIS

340,000 MW of generation analyzed
(six times SPP's peak load)

190 new GIAs signed
(30+ GW under contract)

20-30 GW expected to be signed in the next 10 months

<12 months average study timeline going forward (6 months under ERAS, 7 months under CPP)

Billions in transmission upgrades vetted in collaboration with Transmission Owners

ANTICIPATED GIA TIMELINE

2025

2026

2027

Effective Date July 22
 Estimated 20GW
ERAS
 GIAs issued ~May

Estimated 20GW
DISIS 2020-2021
 GIAs issued ~Dec

Estimated 8 GW
DISIS 2022
 GIAs issued ~Feb

Estimated 10GW
DISIS 2023
 GIAs issued ~April

Phase 1 Start around Dec 8
 Estimated 10GW-30GW
DISIS 2024
 Last DISIS GIAs issued ~Dec 2026

Effective Date around Mar 1
 Estimated 10GW-30GW
 ICS Window Open ~April 1
CPP
 First CPP-GIAs issued ~Dec 15

- As of Sept 2025 30GW With Signed GIAs
- Estimate an additional 40+ GW of GIAs signed by May 2026

AI & AUTOMATION



GENERATION INTERCONNECTION AUTOMATION

Automation has been key in clearing GI backlog

- Positioning SPP for the grid of the future, transmission expansion & Consolidated Planning Process (CPP)

We are using innovative tools to

- Reduce errors
- Increase speed to market
- Improve quality control & reliability

Vendors

Grid Unity

Pearl Street

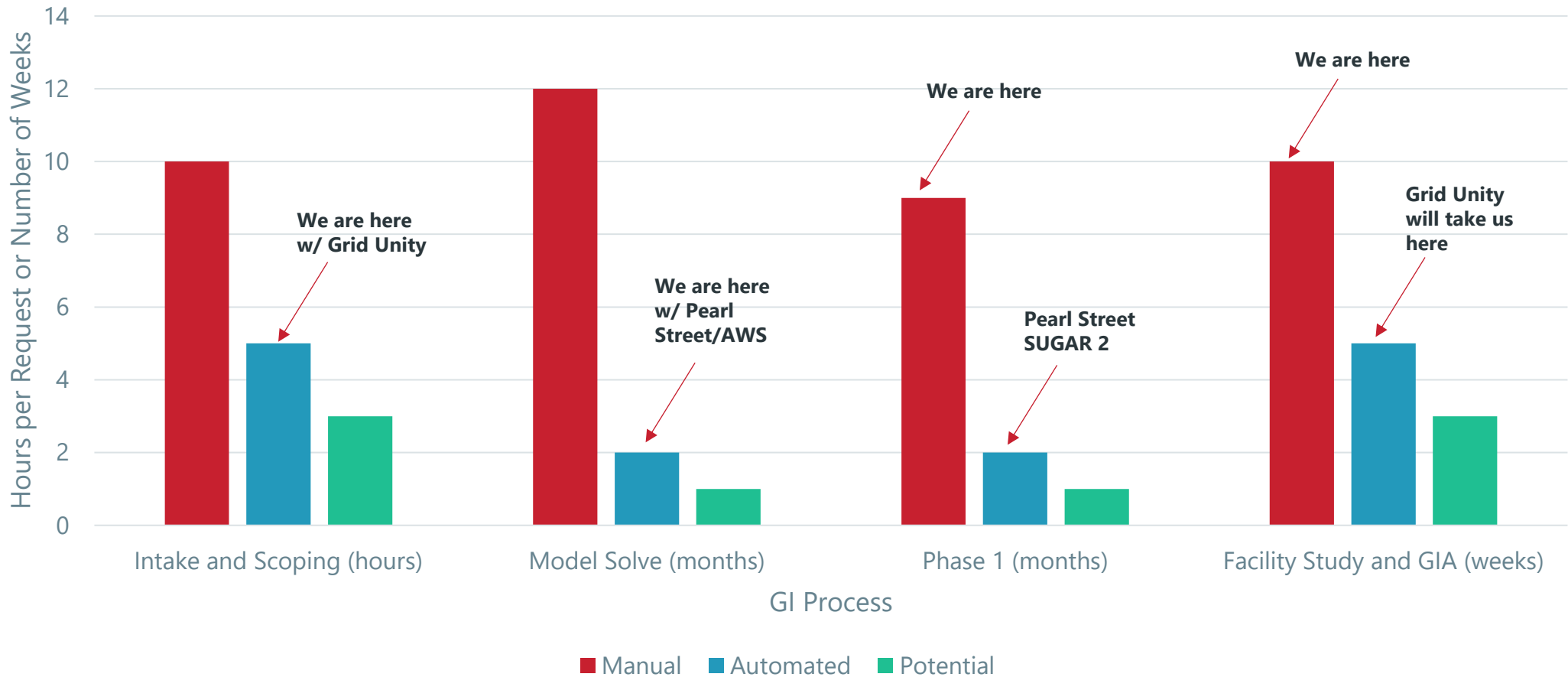
Amazon Web Services

GI PROCESS TIME AUTOMATED

Automation has cut intake 50% & model solve over 80%

We expect automation to provide similar savings in Phase 1 & Facility Studies

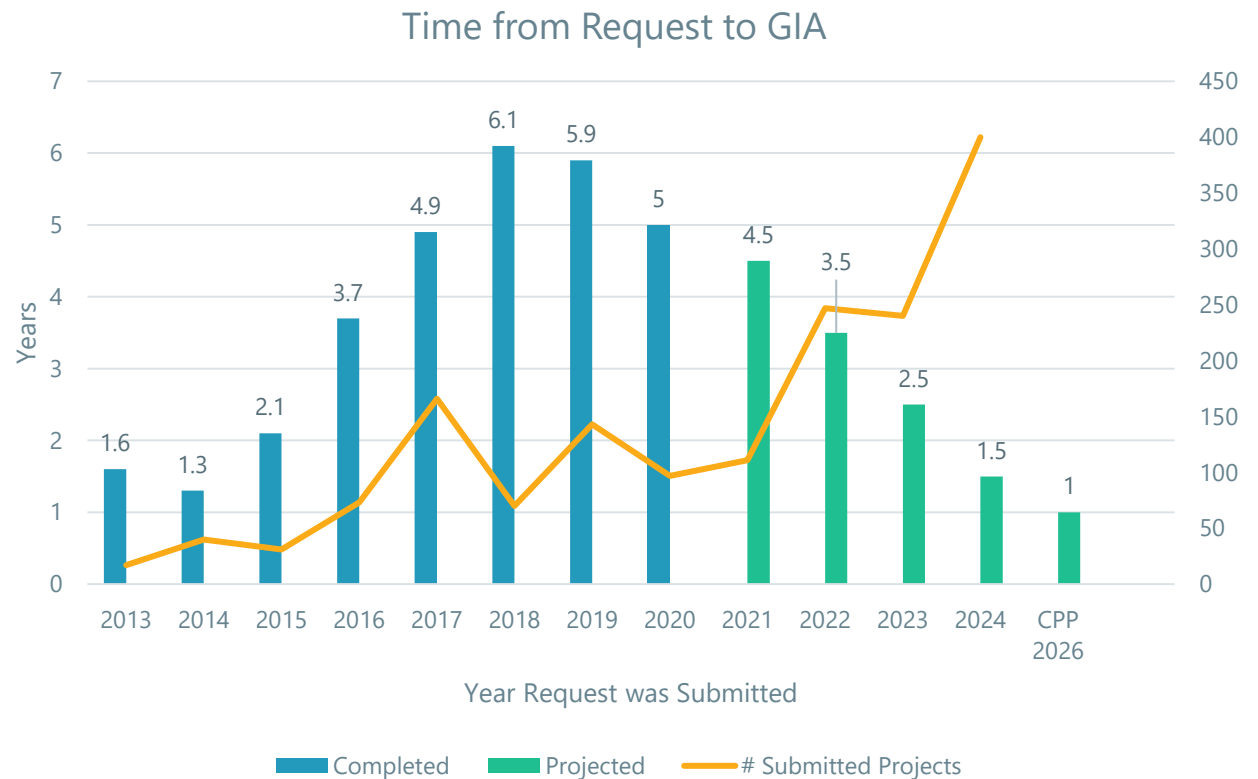
GI Automation



GENERATION INTERCONNECTION AGREEMENTS (GIA)

- Improved policies, processes, and automation handling larger volume while reducing time to GIA
- Processing record levels of GIA as it clears the backlog of projects
- Important all projects are under GIA for CPP

Time from request to GIA is quickly dropping even as volume of requests increases



HITACHI AI INITIATIVE

Intake & Validation

Initiatives

- 1** *Unified Submission Portal*
Clickable prototypes driven by stakeholder research
- 2** *Single Source of Truth for Study Data*
Foundational centralization of data, focused on GI, scalable to other datasets
- 3** *AI Data Validation at Submission*
Surface feedback from power flow model data validation to engineers

Model Build & Simulation

Initiatives

- 4** *Hardware for Network Storage*
Effort already in flight - solutions on site by December
- 5** *Software to Accelerate Simulation*
PoC for power flow model with stretch goal of one additional model (MEM or Dynamics)
- 6** *Identify Model Errors*
One model set - to be identified

Analysis & Reporting

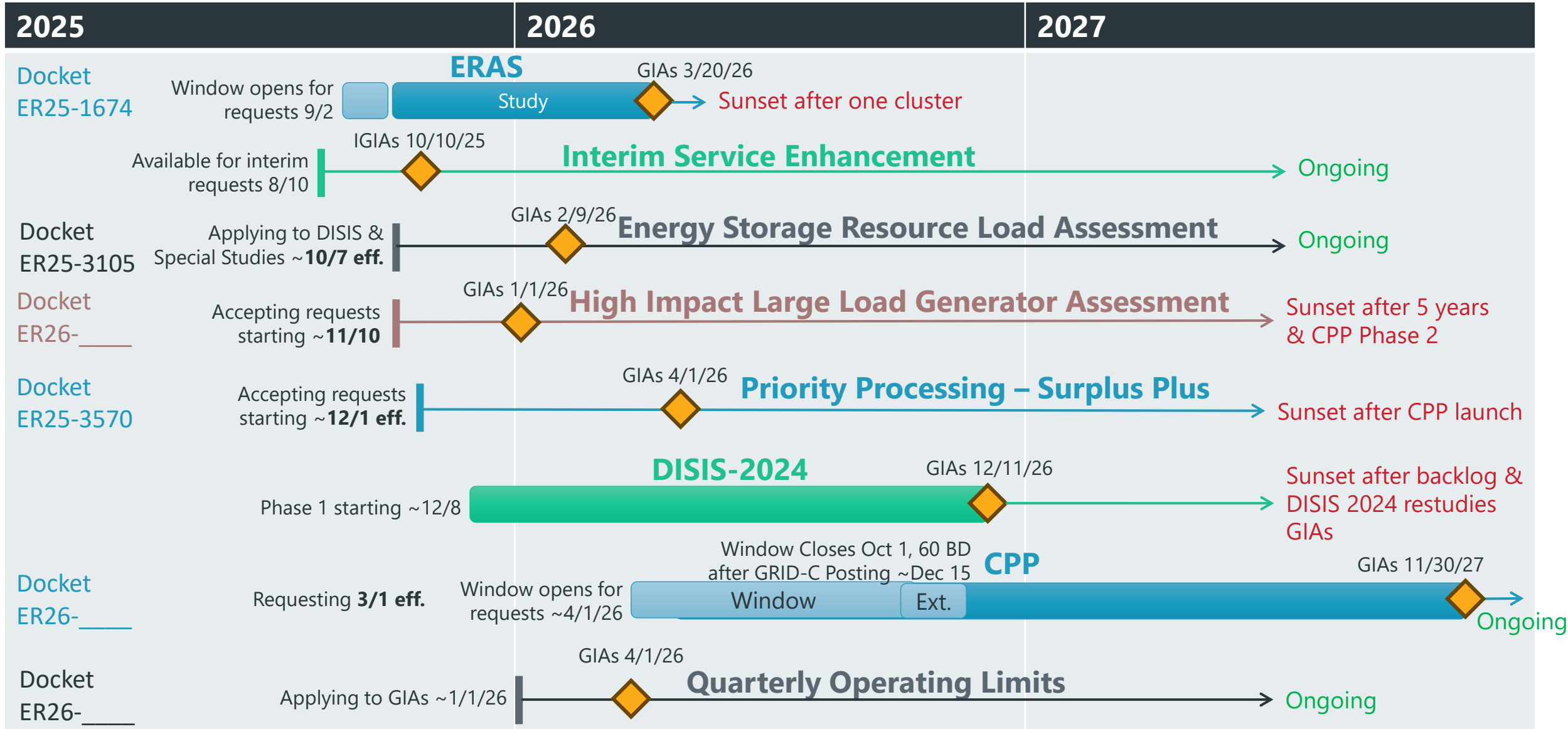
Initiatives

- 7** *Automate Analysis and Report Creation*
One GI use case - to be identified

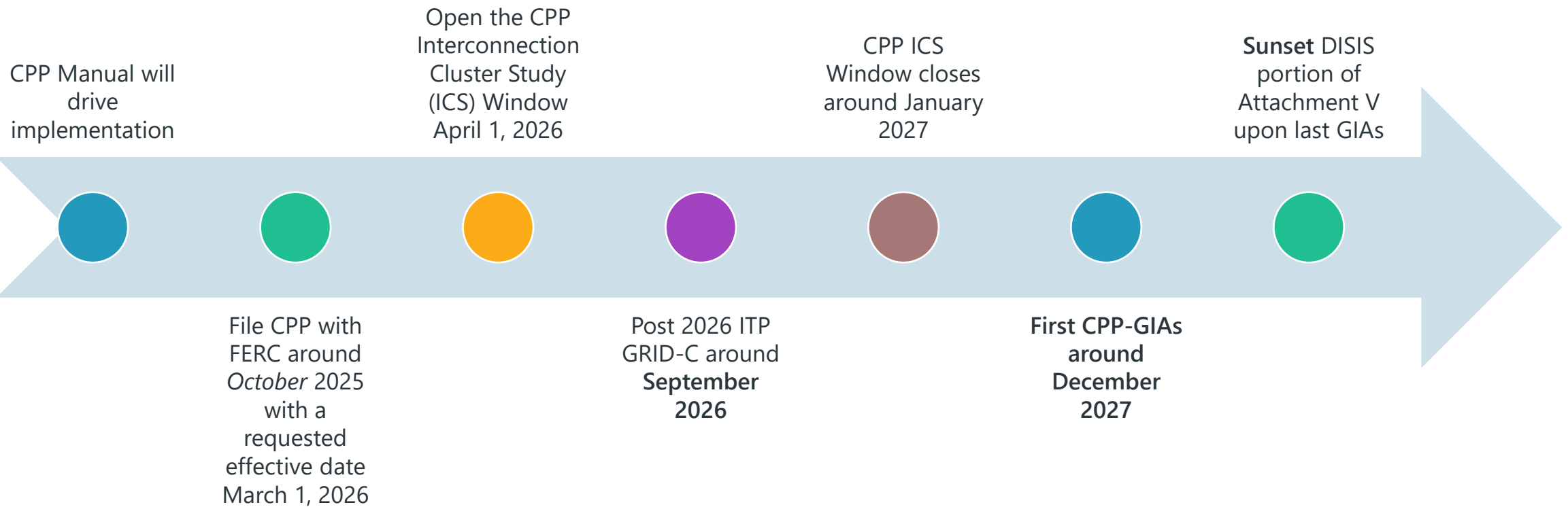
POLICY



PRIORITY PROCESSING SCHEDULE



ONWARDS TO CPP



RTO EXPANSION



NRIS DA's Tariff Revisions Due January 2026



GI Queue Transition Doc 100% Apr 4 - Mar 24

AFS/Seams Files 25% Aug 1 - Apr 1

Queue Dataset 100 Nov 18 - Dec 13

1:1 Meetings with 7 Entities 100 Feb 3 - Feb 14

West Gen List Build - Draft 100% Feb 5 - Mar 28

Ad-hoc advisory team meetings 100% Mar 21 - Jun 6

Deliverability Areas (EPE) 40% Jun 4 - **Oct 14**

Education/Training Sessions [] Jan 2 - Jan 3

Expansion Member Testing [] Feb 15 - Apr 1

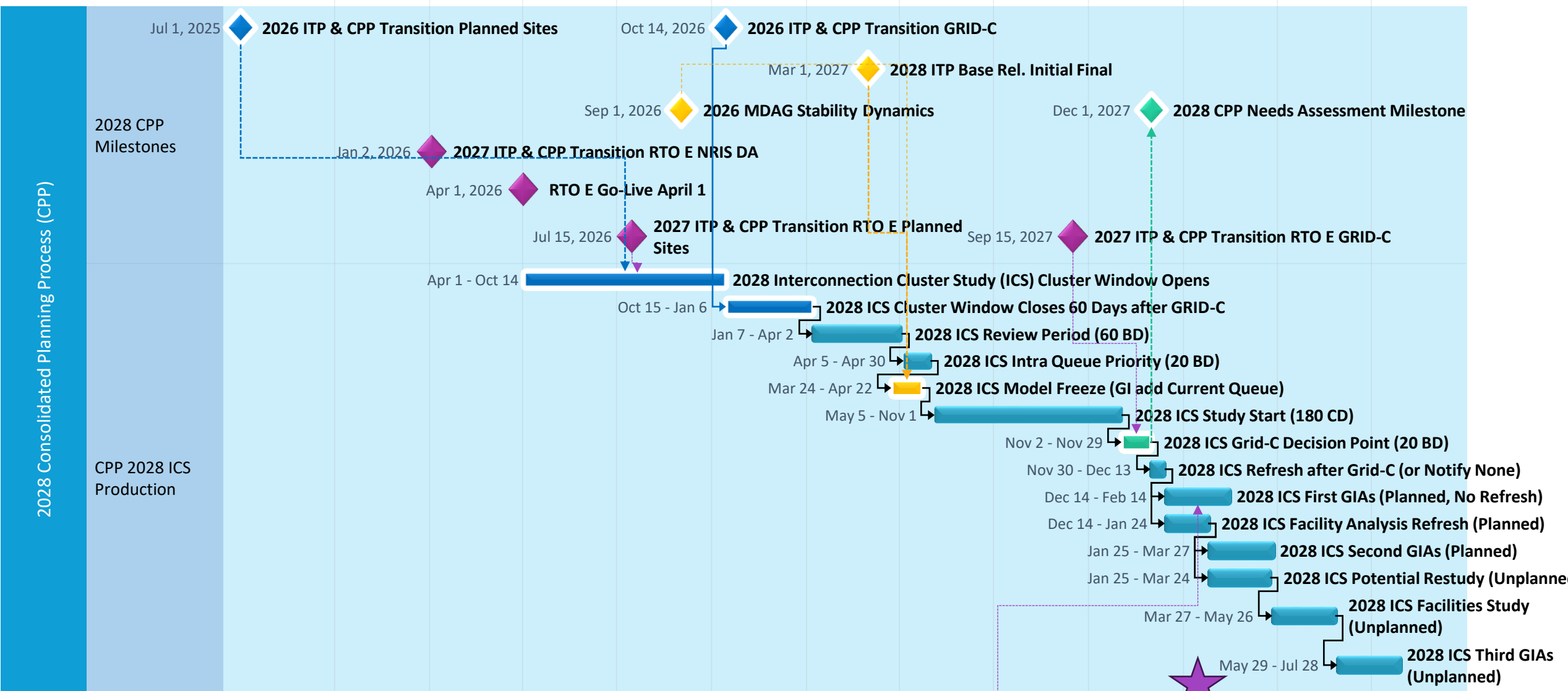
West Gen List Build - Final [] Apr 1 - Oct 1

Initial results of the NRIS Deliverability Areas study are under review.

Completion of Deliverability Areas will also include NRIS Transition results.



Today



2027 ITP & E Transition

First GIAs around December 14, 2027



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