



EXPEDITING TRANSMISSION DEVELOPMENT

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



SouthwestPowerPool



SPOrg



southwest-power-pool

SPP FOCUS AREAS

ACCELERATE TRANSMISSION DEVELOPMENT

Coordinated Planning & Policy (CPP) Initiative

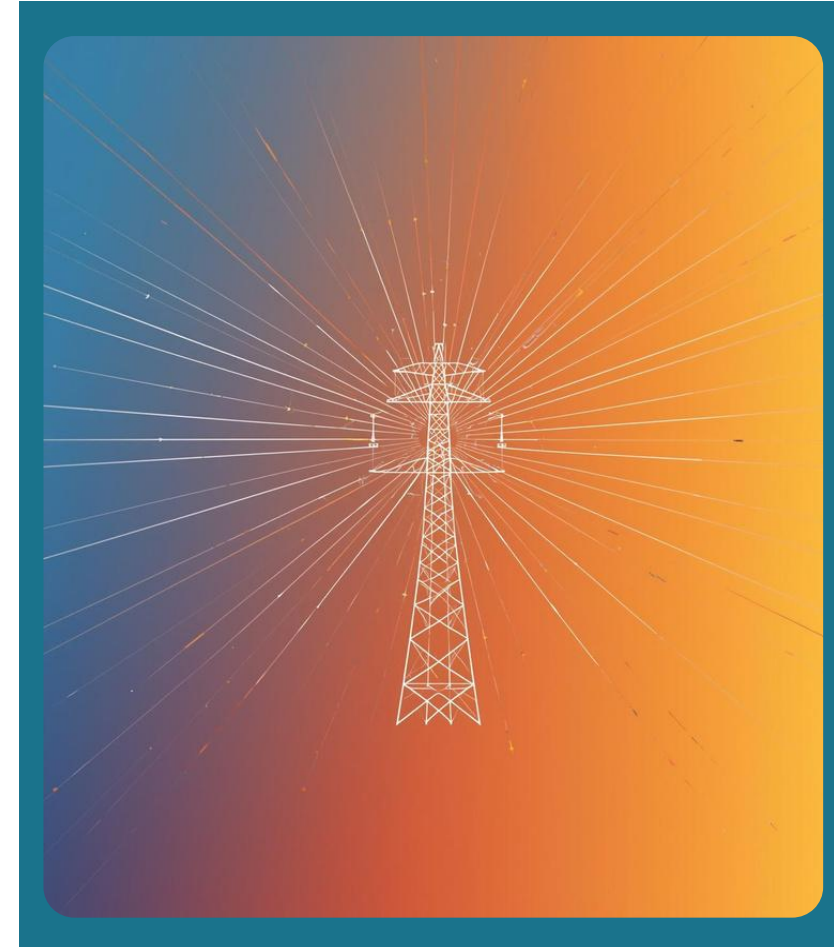
- **Purpose:** Integrate GI and regional planning (Integrated Transmission Plan & 20-Year Assessment).
- **Accelerating Effect:** Streamlines studies, aligns cost allocation early, and introduces forward-looking upgrade concepts.

RTO Policies for Accelerating Pre-Construction Decisions

- **Purpose:** Strengthen RTO decision-making to move projects from approval to construction faster.
- **Accelerating Effect:** Enables re-evaluation of delayed projects, streamlines bidding, and aligns planning with operations

Process Modernization & Automation

- **Purpose:** Enhance efficiency through standardized data, automated model building, and improved workflow tools.
- **Accelerating Effect:** Reduces manual effort, improves consistency, and simulation and study speed improvements



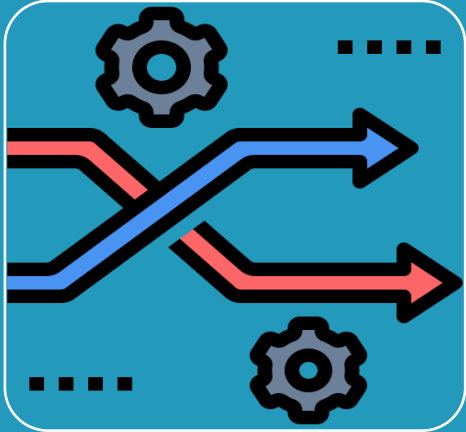
CONSOLIDATED PLANNING PROCESS



CPP OVERVIEW – WHY DOES IT MATTER?

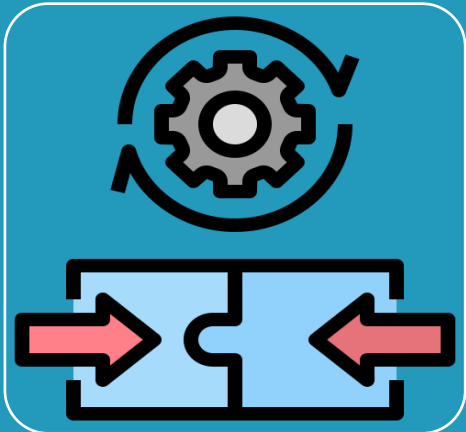
CPP Phase 1
Assessment
Includes:

- 20 Year Assessment
- Integrated Transmission Plan (ITP)
- Generator Interconnection Impact Study (DISIS)



Today, **generation interconnection (GI)** and regional **integrated transmission planning (ITP)** are handled in separate processes.

- This disjointed approach can **lead to delays, redundancies, and missed opportunities** to align with future holistic transmission needs.

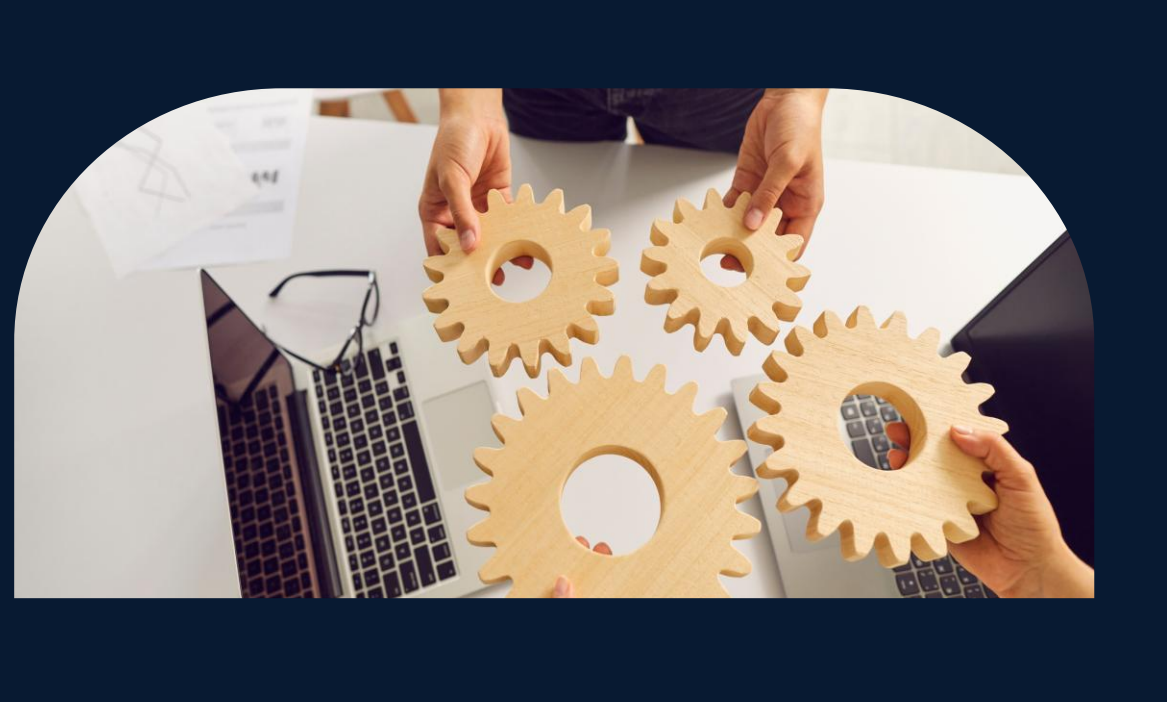


CPP brings GI and ITP together—helping ensure the **right transmission upgrades are built at the right time and costs are shared based on benefits.**

CPP REVISION REQUEST

OVERVIEW

- ✓ Enabling faster resource integration
- ✓ Shared costs based on benefits
- ✓ More efficient and reliable grid development



Solution Drivers



Benefit-Based Cost Allocation



Unified and Forward-Looking
Planning Framework

GRID CONTRIBUTION FRAMEWORK

Transforms interconnection cost allocation from a direct assignment cost to a beneficiary-based cost contribution

The **GRID Contribution Framework** provides transmission solutions for load and generation requirements.

- Transforms the generator cost assignment from project-centric to support (general contribution) for regional transmission portfolios.

The **GRID Contribution** serves as an upfront and certain cost commitment for network improvements required due to expected load and generation demands identified through the CPP-20.

- All generator interconnection customers are subject to GRID-C.
- Provides a high degree of cost certainty known upfront, in return, requires a high degree of commitment from GI customers.

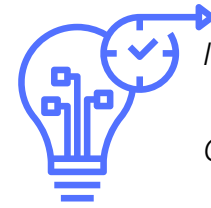
GRID CONTRIBUTION FRAMEWORK

Transforming the generator cost assignment from project-centric to support (general contribution) for regional transmission portfolios.

GRID-C Key Points

- The initial GRID-C is based on the **CPP-20** (portfolio, future generator MWs)
- **GRID-C cost assigned** (\$/MW) to **actual GI customers** within the **CPP-10** and **paid to load**
- GRID-C is used to **fund more holistic transmission solutions** in the **CPP-10**

CPP-20 Assessment



Initial GRID-C

CPP-20 Portfolio

prospective gen locations

Actual GI Interconnection Requests Submission



Commercial Operation Date

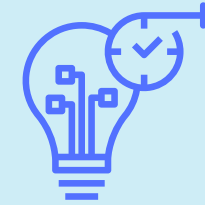


GI Agreements

Transmission construction recommendation



CPP-10 Assessment



CPP-10 Assessment Inputs



GI Customer Study



GRID Contribution
(Commitment milestone for GI customer)

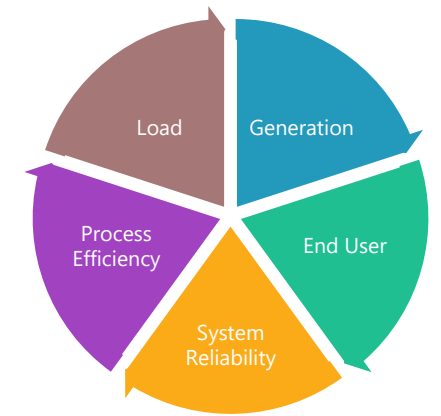


ITP/CPP Assessments

*Addresses load and generation needs
Considers CPP-20 transmission solutions*

CPP APPROACH BENEFITS

CPP can benefit multiple
aspects of transmission
planning



Load Serving Entity

- Provides **cost certainty** and **contributions through a new revenue stream** for supporting cost efficient upgrade transmission solutions
- Allows **proactive inclusion of supply and demand**

Generation Developer

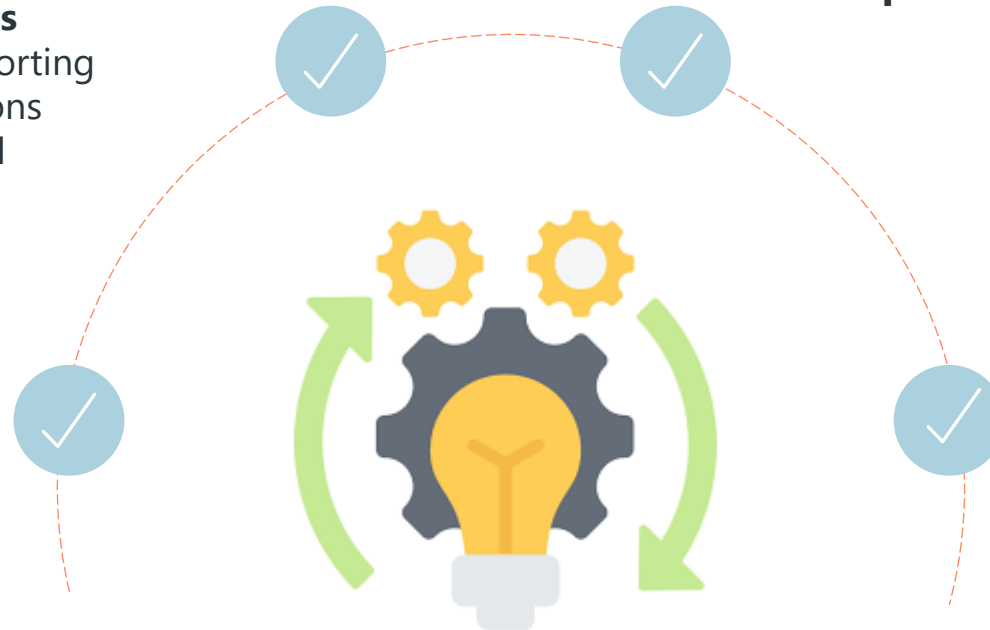
- Significant **reduction or elimination of interconnection restudies**
- Provides **cost certainty for system upgrades** that benefit multiple drivers
- Provides **costs related to benefits**

Regional

- **Increases system reliability**
- Identifies **multi-driver transmission needs and transmission solutions**
- Increases **process efficiencies** and delivery of results

End User

- Optimizes transmission solutions to **prevent the compounding effect on transmission rates** from a **piecemeal build-out** approach.



RTO POLICIES FOR ACCELERATING PRE- CONSTRUCTION DECISIONS



RTO Policies for Accelerating Pre-Construction Decisions

Driving Faster Project Delivery

Planned Project Re-evaluation

Automatic re-evaluation of delayed projects allows for quicker decisions and ensures that resources are effectively utilized to meet urgent transmission needs.

Pre-Construction Policies

Leading to shorter lead times from project approval to actual construction and streamline competitive bids process under FERC Order 1000.

Intermediate Planning

Planning for the timeframe between operational planning and long term planning



INTERMEDIATE PLANNING PROCESS

"Planning the Middle Ground for Maximum Reliability and Affordable Outcomes"

1. Scenario-Based Risk Analysis

Conduct targeted ITP scenario studies focused on near-term (Years 0–2) seasonal risks
Analyze recurring operational constraints to better inform long-term planning



2. Limited Operation Modernization

Recommend quarterly adjustments to enhance generation and load limited operating points
Identify limited operating point improvements beyond assumptions used in long-term analysis



3. Rapid Deployment Supplement Solutions

Evaluate and recommend quicker-to-install technologies (e.g., GETs) as supplementary solution while long-term transmission planning solutions are constructed.

PROCESS MODERNIZATION & AUTOMATION



AUTOMATION

Purpose

Harness Artificial Intelligence (AI) and advanced computing to improve modeling accuracy, streamline study processes, and enable faster generation interconnection and regional planning.

Key Focus Areas

- **Automated Studies:** Apply machine learning and automation to optimize interconnection and regional planning analysis.
- **Data Integration:** Merge and coordinate data sets for faster insights.
- **Scalable Infrastructure:** Use GPU computing for large-scale simulations to enable additional scenario-based planning



Accelerating Effect

- Cuts study timelines
- Boosts accuracy and consistency
- Speeds new generation interconnection and regional planning functions