

# ITCS

## Interregional Transfer Capability Study

A strong, flexible transmission system that is capable of coping with a wide variety of system conditions is key to the reliable supply and delivery of electricity. NERC is conducting the Interregional Transfer Capability Study (ITCS) to analyze the amount of power that can be moved or transferred reliably from one area to another area of the interconnected transmission system. As directed in the [Fiscal Responsibility Act of 2023](#), the ITCS will also make recommendations for prudent additions to this transfer capability. The ITCS report must be filed with the Federal Energy Regulatory Commission by December 2, 2024.

## 2024 Second Quarter Update

The transfer capability analysis simulations for the 2024 cases have been completed and a review of results is under way. The initial report, the [Overview of Study Need and Approach](#), was released on June 27 and provides a foundational context on the study details and explains the need for this crucial project. The report — as well as an [infographic](#) and [video](#) — were developed as part of NERC's ongoing efforts to keep industry; stakeholders; and federal, state, and provincial partners informed and engaged with the progress of the ITCS.

## Key Activities

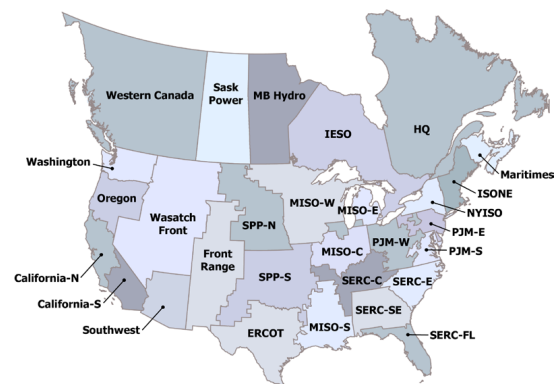
### Analysis

Analysis on transfer capability and energy margin is advancing. The scenarios, which represent extreme weather conditions over 12 weather years, have been developed, and reflect coordination with the Department of Energy on data inputs.

- **Transfer Capability Analysis (Part 1) Update:** Analysis of the 2024 base cases is complete, including simultaneous imports into each region. Review of 2024 base case results is ongoing.
- **Prudent Additions (Part 2) Update:** Energy margin analysis input setup and sample simulation runs have begun. Work on the development of prudent additions criteria and process is under way.

### Stakeholder Outreach

A comprehensive stakeholder outreach plan is



being implemented to ensure that all North American transmitting utilities have the opportunity to provide input into the ITCS. Outreach in Q2 2024 included:

- **April 9:** NERC Reliability Assessments Sub Committee, Austin – project update
- **April 10:** Eastern Interconnection Planning Collaborative – project overview
- **April 17:** FERC Office of Electric Reliability senior staff – project update
- **April 30:** ITCS Advisory Group meeting
- **May 2:** ITCS Executive Committee meeting
- **May 2:** ReliabilityFirst Board of Directors – project update
- **May 2:** SERC Planning Coordination Subcommittee – project update
- **May 8:** NERC Board of Directors – quarterly technical update
- **May 16:** MRO Reliability Advisory Council (RAC) –

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project update

- **May 20:** ReliabilityFirst Transmission Performance Committee – project update
- **May 28:** Canadian Energy Regulators – project overview and progress report
- **June 4:** ITCS Advisory Group in-person meeting, Salt Lake City, Utah
- **June 11:** NERC Reliability and Security Technical Committee meeting, Seattle – project update
- **June 12:** SERC Board Meeting – project update
- **June 25:** ITCS Advisory Group meeting

In addition, NERC and the Regional Entities continue collaborating with industry, hosting several stakeholder meetings and providing project updates.

## Next Steps

### ITCS Key Meetings

The Advisory Group met in-person on June 4 in Salt Lake City and continues to meet virtually every month. The next in-person meeting is scheduled for October 24 in Washington, D.C., and will provide more in-depth discussion on project topics including analysis results. The [Advisory Group's meeting schedule](#) has been set throughout the lifecycle of the project and is posted on the [ITCS web page](#).

## Study and Report Schedule

**The Overview of Study Need and Approach:** Educational document regarding the ITCS and details about transfer capability calculations.

*Published on June 27, 2024*

**Transfer Capability Analysis (Part 1):** Determine the total transfer capability between neighboring transmission planning regions.

*Expected publication in August 2024*

**Prudent Additions (Part 2) and Recommendations (Part 3):** Identification of “prudent additions” to transfer capability between neighboring areas and the recommendations to meet and maintain transfer capability.

*Expected publication in November 2024*

**Canadian Analysis:** Identify and make recommendations to transfer capabilities from the United States to Canada or between Canadian provinces.

*Expected publication in Q1 2025*

### Project Phases

The project is in the final stages of completing Phase 1, Analysis. In the next phase, Phase 2, Recommendations, metrics for identifying prudent additions will be determined, and a final recommendations draft will be developed.

#### Phase 0: Study Prep

- Define study scope, assumptions, scenarios
- Stakeholder engagement
- Data requests
- Build study cases and scenarios for transfer capability analysis

#### Phase 1: Analysis

- Leverage [LTRA](#) to identify generation deficient and surplus areas
- Perform transfer capability analysis
- Identify thermal, voltage and stability limits (Total Transfer Capability)

#### Phase 2: Recommendations

- Define metrics for identification of “prudent transmission additions” based on reliability
- Draft final recommendations