

# **Strengthening Reliability Through the Energy Transformation - October 2024**

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 <u>Fiscal Responsibility Act of 2023</u>, 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 Third Quarter Update**

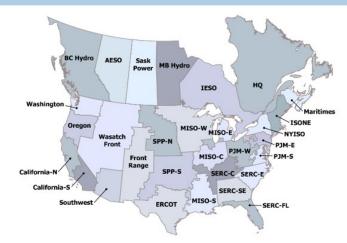
The transfer capability analysis that provides current transfer capability between pairs neighboring Transmission Planning Regions complete, and the Transfer Capability Analysis (Part 1) was published in August. The report — as well as an infographic and a video — were developed as part of NERC's ongoing efforts to keep industry: stakeholders; and federal, state, and provincial partners informed and engaged on the progress of the ITCS. Analysis on Parts 2-3 is being finalized, and work on the Canadian Analysis has started.

## **Key Activities**

## **Analysis**

The results of the transfer capability analysis will be factored into Part 2 of the ITCS. The energy margin analysis, which evaluates extreme weather conditions over 12 weather years, has been completed and finalization is underway on a list of prudent additions to transfer capability that would enhance reliability.

- Prudent Additions Recommendations (Part 2)
   Update: Hourly energy margin analysis is complete for both 2024 and 2033 cases, including sensitivity studies. Development of prudent additions criteria and process have been completed. The team is finalizing recommendations for prudent additions to transfer capability and is vetting those recommendations with stakeholders.
- Meet and Maintain Recommendations (Part 3)
   Update: The team has developed categories of recommendations and is working with industry to define specific recommendations. The team is beginning work on the Canadian Analysis, scheduled



for publication in the first quarter of 2025, which will evaluate transfer capability into and between Canadian provinces.

### Third Quarter Stakeholder Outreach

A comprehensive stakeholder outreach plan is being implemented to ensure that all North American transmitting utilities can provide input into the ITCS. Outreach in Q3 2024 included:

## July

- NERC Reliability Assessment Subcommittee project update
- WECC Reliability Assessment Committee project update
- SERC Board of Directors project update
- Policy Stakeholders project update
- SERC Summer Regional Conference project overview
- Advisory Group meeting

## August

Want More?
Visit the ITCS Web Page



- Policy Stakeholders project updates
- ERO EC meeting project update
- NERC Board of Directors quarterly technical update
- Advisory Group meeting
- Policy Stakeholder staff

   project update

## September

- ITCS Executive Group meeting
- Canadian Association of Members of Public Utility Tribunals – project update
- Americans for Clean Energy project overview
- ERO Executive Committee project update
- Reliability First, Reliability and Security Summit project overview
- NERC Reliability and Security Technical Committee project update
- Advisory Group meeting
- SERC Board of Directors project update

In addition, NERC and the Regional Entities continue collaboration with industry, state and provincial stakeholders, hosting several meetings and providing project updates.

#### Resources

More information about the study, including project timelines, updated <u>FAQs</u>, quarterly <u>updates</u>, scoping and framework documents, <u>project team</u> information, and upcoming meetings, is available on NERC's <u>ITCS web page</u>. Information can also be found on the following Regional Entity websites:

- MRO
- SERC
- NPCC
- <u>Texas RE</u>
- Reliability First
- WECC

# **Upcoming Meetings**

## **ITCS Key Meetings**

The Advisory Group met virtually June 25, July 30, August 27, and September 23. The next in-person meeting is scheduled for October 22 in Washington, D.C., and will provide more in-depth discussion on project topics, including analysis results. The <u>Advisory Group's meeting schedule</u> has been set throughout the lifecycle of the project and is posted on the <u>ITCS web page</u>.

## **Study and Report Schedule**

**The Overview of Study Need and Approach:** Educational document regarding the ITCS and details regarding transfer capability calculations. *Published on June 26, 2024* 

Transfer Capability Analysis (Part 1): Total Transfer Capability results between neighboring transmission planning regions, between Order 1000 regions, and simultaneously into a transmission planning region from all its neighbors.

Published on August 27, 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**

Phase 1 Analysis has been completed and the project is in the final stages, Part 2 Prudent Additions Recommendations, and Part 3 Meet and Maintain Recommendations.

### **Phase 0: Study Prep**

## Phase 1: Analysis

### Phase 2: Recommendations

- Define study scope, assumptions, senarios
- Stakeholder engagement
- Data requests
- Build study cases and scenarios for transfer capability analysis
- Leverage LTRA to identify generation deficient and surplus areas
- Perform transfer capability analysis
- Identify thermal, voltage and stability limits (Total Transfer Capability)
- Define metrics for identification of "prudent transmission additions" based on reliability
- Draft final recommendations

