CHAMPLAIN HUDSON POWER EXPRESS (CHPE) PROJECT IMPACT ASSESSMENT:

- Third Party Transmission Line Application
- Project Location
- NEPA, Permitting, and Environmental Review Processes
  - National (Canada, U.S.)
  - State (New York)
- Challenges, Issues, and Solutions
  - Alternatives Analysis
  - Agency Consultation and T&E Species Analysis
  - Climate Change
  - Public Outreach
PROJECT LOCATION

- 1,000 MW HVDC buried transmission line in New York State
- Provides renewable energy from Canada to New York City
- 541-kilometer (km) route:
  - 162 km through Lake Champlain
  - 203 km overland via road and railroad rights-of-way (ROWs)
  - 171 km through Hudson, Harlem, and East rivers to Queens, New York City to a new HVDC converter station
  - 5 km overland in Queens to a substation interconnection.
HERTEL / NEW YORK INTERCONNECTION IN CANADA

- Connects Hydro-Québec TransÉnergie electric transmission system to the CHPE transmission line at Canada/U.S. border
- New converter station and transmission line in Québec
- Impacts in Canada not included in CHPE Project EIS
  - Executive Order 12114: U.S. federal agencies do not need to analyze impacts outside of U.S.
  - Hydro-Québec conducts environmental review in consultation with Québec Provincial Government and Canadian Government (National Energy Board)
FEDERAL / STATE ENVIRONMENTAL REVIEW PROCESS

**U.S.**
- Presidential Permit application to DOE
- EIS on hold
- State Joint Proposal becomes basis for the action analyzed in EIS
- Draft EIS released and hearings conducted
- Final EIS and Record of Decision
- USACE Clean Water Act Section 404 Permit
- Navigation Risk Assessment sent to USACE

**New York State**
- Article VII application to NYSPSC
- Article VII meetings and negotiations
- Joint Proposal filed with NYSPSC
- NYSPSC issues Certificate of Environmental Compatibility and Public Need
- Additional Upstate Converter Station Studies
- Construction start date (through 2021)
**ALTERNATIVES ANALYSIS**

- **Project Alternatives:**
  - Other transmission line routes (environmentally sensitive)
  - HVAC transmission line
  - Other location of HVDC converter station & interconnection
  - Energy conservation & demand management

- **Alternatives analyzed in EIS:**
  - Proposed Action (Preferred Alternative)
  - No Action Alternative

- DOE determined that given the issuance of the State Certificate, other alternatives were considered but dismissed.
Not considered at all due to EIS being prepared for Presidential permit application for transmission line, not for continued operation or development of other power sources.
THREATENED & ENDEANGERED SPECIES

- Water Jetting Installation
- Concrete Mats
- Terrestrial Construction
- Agency Consultation
Most electricity transported through the transmission line would be:

1) From renewable resources (primarily hydropower) reducing GHG emissions.
2) Of lower cost thereby displacing natural gas and oil-fueled sources of electricity.
PUBLIC OUTREACH

- Contentious Project:
  - Energy imported from Canadian hydropower ("international extension cord")
  - Use of existing mothballed infrastructure
  - Not in My Backyard (NIMBY)

- U.S. Department of Energy outreach plan and Applicant-proposed mitigation measures
CONCLUSIONS

- Applicable to long-distance linear projects & other projects within multiple jurisdictions.
- Engage all stakeholders – early & often
- Alignment of Federal, state, local processes
- Early identification of and consultation with agencies with jurisdiction
- Impact assessment framework and alternatives established early
ACKNOWLEDGEMENTS

- Brian Mills and Julie Smith, DOE Office of Electricity Delivery and Energy Reliability
- Transmission Developers, Inc.

QUESTIONS?
INTEGRATED SERVICES AND RELENTLESS FOCUS TO ADVANCE YOUR PROJECTS