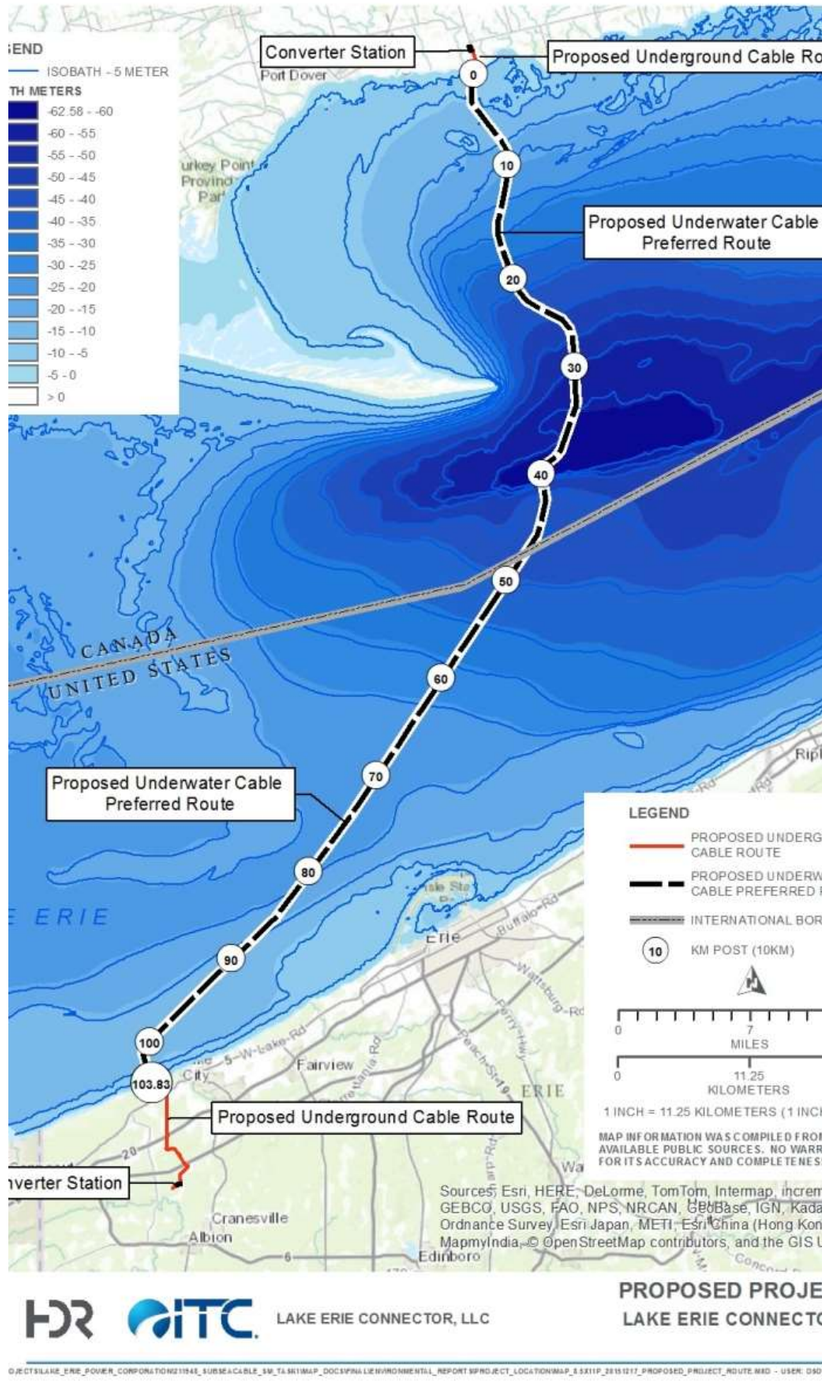


The ITC Lake Erie Connector:

A Great IA Process…A Little Known Project

OAIA 2022 (October 2022)

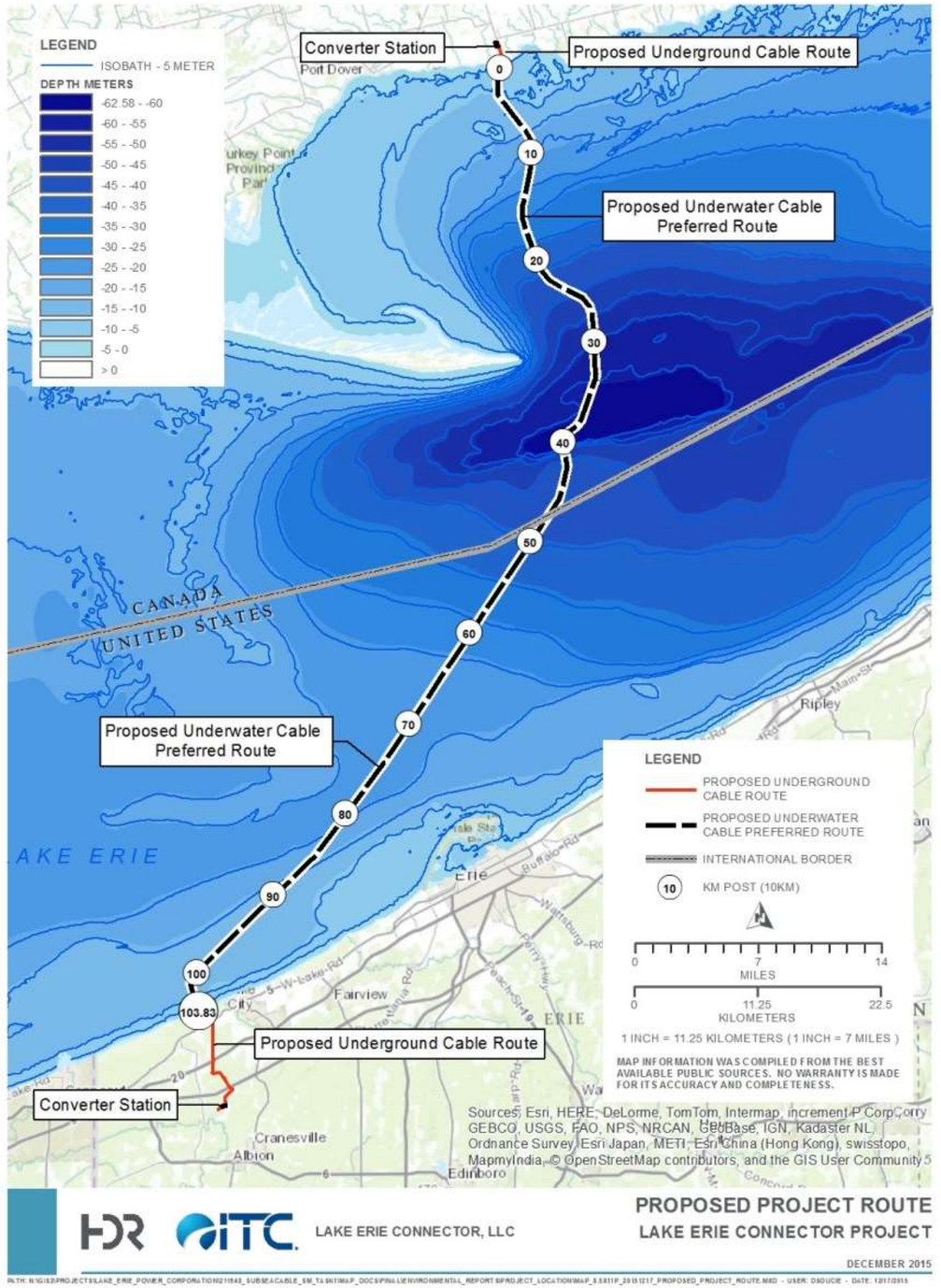
Who are we?

- Ryan Doyle (MCIP, RPP, EP) leads HDR's Environmental Sciences and Planning group for Eastern Canada. Ryan is a Senior Environmental Planner and EA practitioner with over 22 years industry experience leading environmental planning and impact assessments, permitting & compliance, and engagement programs for complex private and public projects for energy, waste, water, transit and transportation.

- Janine Ralph is HDR's Cross Sector Manager for Canada, managing Environmental Sciences and Planning, Strategic Communications, Sustainability and Resiliency and Data Acquisition and Analytics. Janine has been an EA practitioner for over 25 years, leading strategic planning, impact assessments, permitting/approvals and engagement processes for provincial and federally approved infrastructure projects.

ITC Lake Erie Connector Project Overview

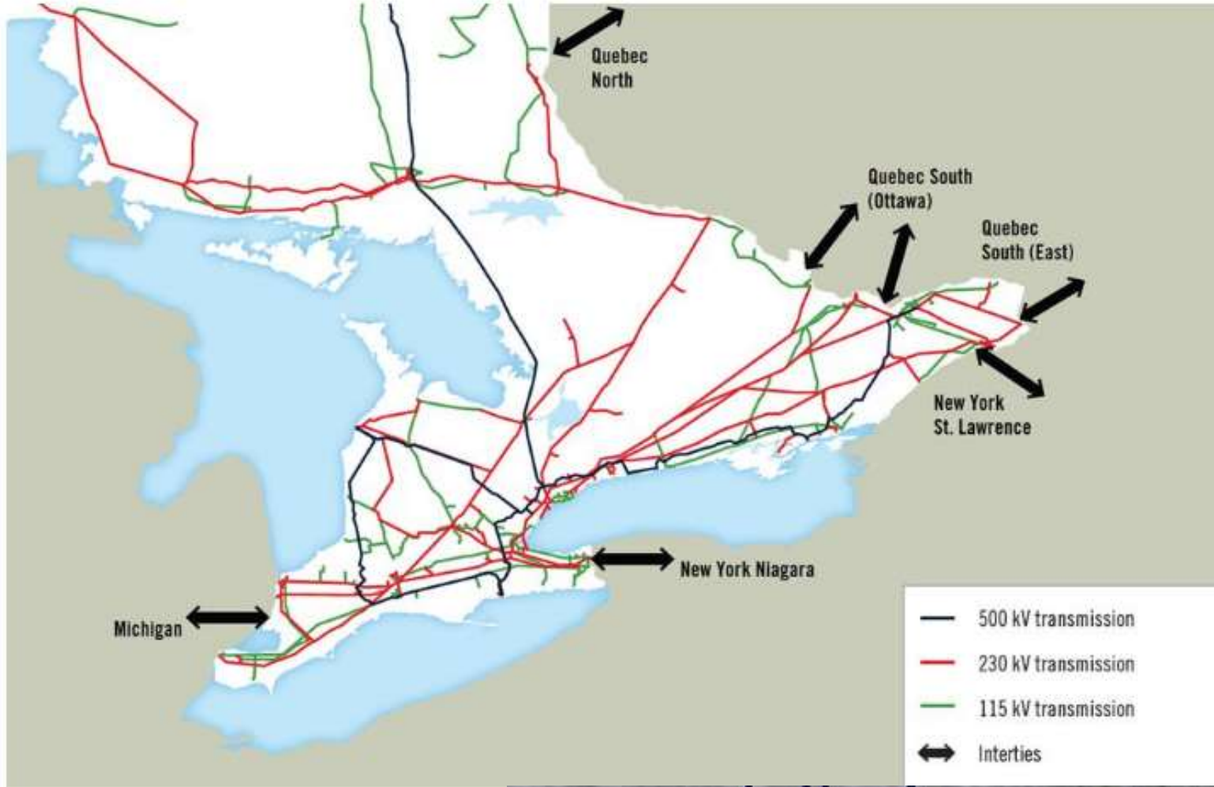
- 117km 1,000 MW, bi-directional, high-voltage direct current (HVDC) merchant international transmission line
- First direct link between the markets of the Ontario Independent Electricity System (IESO) Operator and PJM
- Enable transmission customers to more efficiently access energy, capacity, and renewable energy credit opportunities in both markets
- Cost-effective delivery of affordable electricity to customers while helping improve the reliability and security of the energy grid



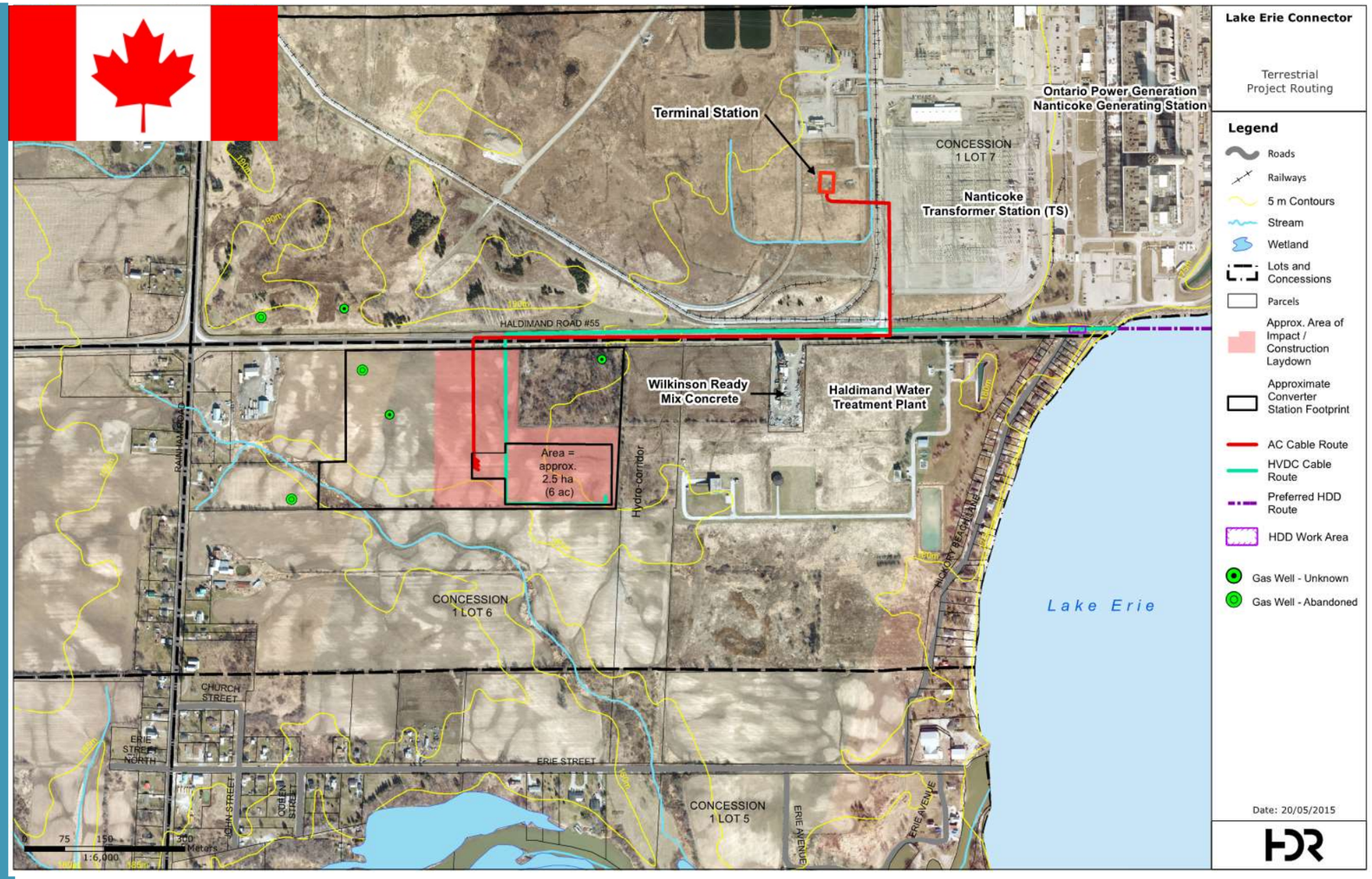
Project Overview (Cont'd)

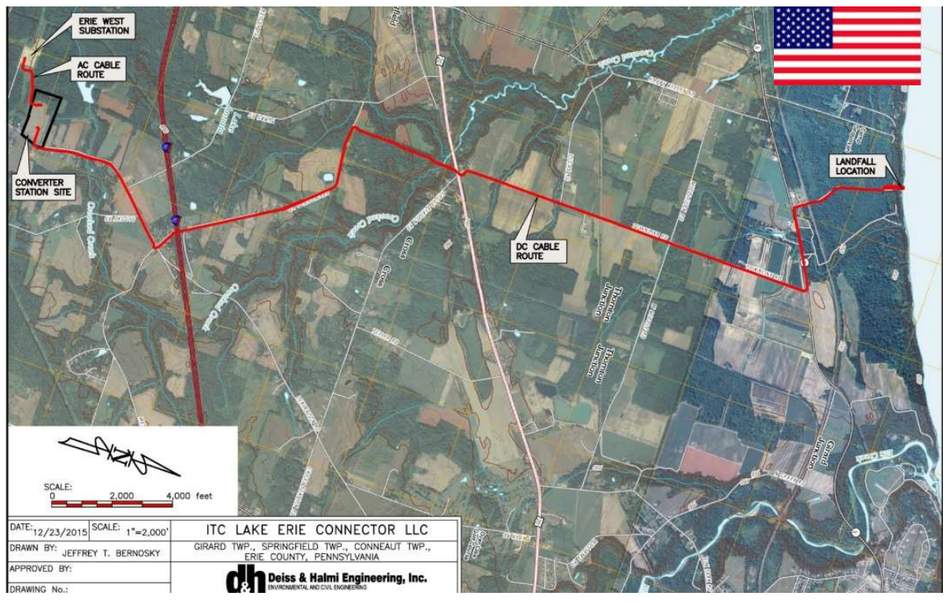
- Coordinated Canadian and U.S. permitting processes
- Canadian Energy Regulator (formerly the NEB) Election Certificate process
- Connection points in Canada and US
- Takes advantage of existing transmission infrastructure
- Consideration of various land and in-water siting and routing alternatives.
- Stakeholder and Indigenous engagement
- Several positive corporate, political and societal impacts

Note: Development activities and commercial negotiations on the Lake Erie Connector have been suspended at this time.



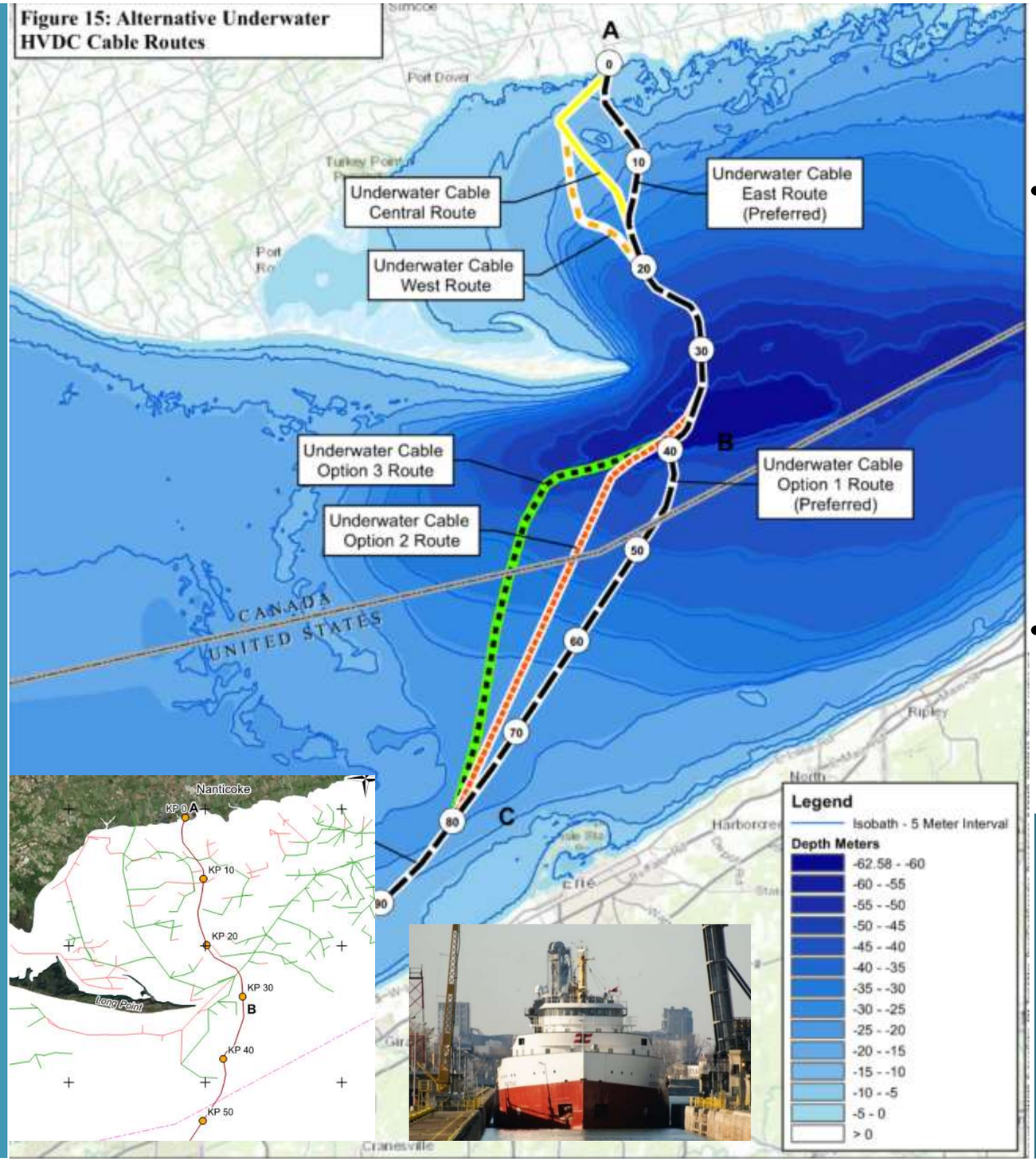
Canadian and U.S. Converter Stations





Summary of Permitting and Assessment Process

- Followed the federal Canadian Energy Regulator (formerly the NEB) Election Certificate process
- Consideration of various land and in-water siting and routing alternatives.
- Rigorous alternatives evaluation and assessment process (siting, routing and methods of construction)
- Stakeholder and Indigenous engagement was critical to enabling the project to meet public, agency, and Indigenous expectations while significantly limiting the footprint and negative impacts of the project
- Written hearing process (Information Requests), only one Intervenor, no participation or evidence submitted by any party
- Granted Election Certificate with various compliance requirements, but no impacts which required actions to address



Alternatives Assessment
(Cable Route and Construction Methods)

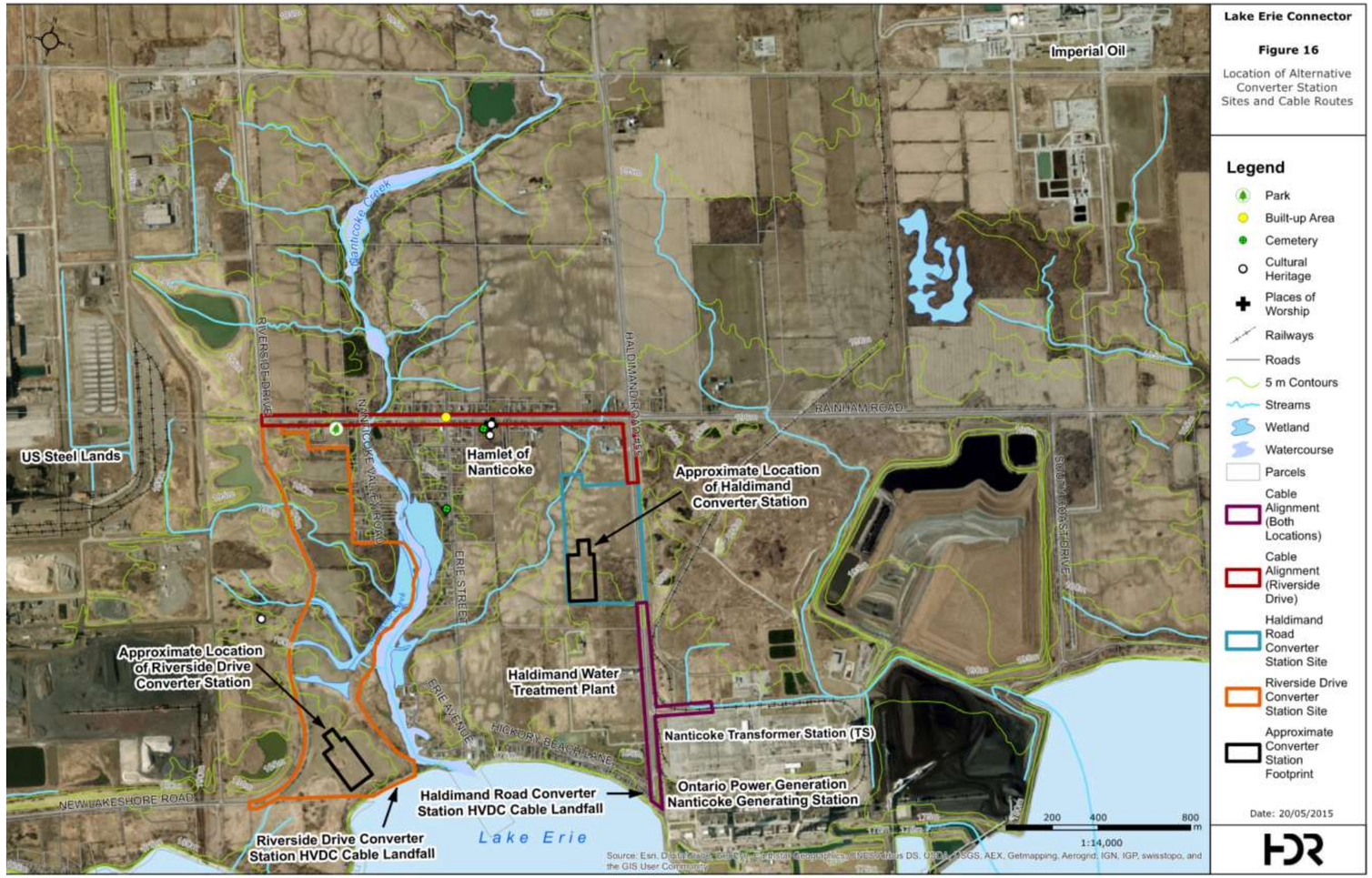
- In water alternative routes assessment considered:
  - Interconnection points and cable length
  - Geophysical features (e.g., Lake bottom geology, sediment, bathymetry)
  - Existing infrastructure (e.g., extensive natural gas collection pipelines)
  - Shipping
  - Constructability
  - Stakeholder input
- Construction methods assessment resulted in selecting HDD to avoid near-shore habitats and cable burial approaches to minimize potential for in-water effects

Benefits of IA

- **Rigorous alternatives assessment resulted in selection of an underwater route with minimal impacts and with the most feasible construction methods**
- **Fisheries Assessment not required based on project type and positioning of route**

Alternatives Assessment (Converter Stations and Terrestrial Cable Route)

- Alternative converter station stations sites considered:
  - Impacts to natural environment features
  - Impacts to built and cultural features
  - Connection to electricity grid (advantage of significant infrastructure from Nanticoke Generating Station)
  - Available land and willing sellers
  - Stakeholder input



Benefits of IA

- **Rigorous alternatives assessment resulted in selection of a land based cable route and converter station site with fewest impacts**
- **Stakeholder input and buy-in for selected site and cable position**

Engagement

- Stakeholder engagement
  - Adjacent and directly impacted landowners
  - Existing infrastructure owners (on land and in Lake Erie)
  - Affected businesses
- Indigenous communities engagement
  - Extensive engagement of supporting reports and IAs
  - Involvement in archaeology assessments and review of IA reports
  - Letters of support
- Agency engagement
  - Federal
  - Provincial
  - Municipal

Benefits of IA

- **Extensive engagement throughout EA and IA processes resulted in few issues during Elective Certificate review / Hearing**
- **Indigenous community involvement set foundation for engagement and participation through all project development stages**
- **Broad acceptance of the Project**

Impact Assessment Process and Outcomes

- Over 30 IA factor specific studies completed to address in-water and on-land project components and VECs during construction, O&M, and decommissioning
- Bio-physical and socio-economic elements assessed:
  - Physical and meteorological environment (geophysical marine survey
  - Soil and soil productivity, sediment quality
  - Vegetation
  - Water quality and quantity
  - Fish and fish habitat
  - Wildlife and wildlife habitat
  - Species at Risk or Species of Special Status and related habitat
  - Air quality
  - Acoustic environment
  - Electromagnetism and Corona Discharge
  - Human occupation and resource use
  - Heritage resources (including underwater archaeological resources)
  - Traditional land and resource use
  - Social and cultural well-being
  - Human health and aesthetics
  - Infrastructure and services
  - Employment and economy
  - Navigation and navigation safety
- Avoidance and mitigation methods applied through rigorous process resulted in low to minimal net and cumulative effects for all VECs

Benefits of IA

- **The vast majority of net effects and cumulative effects were found to be low to minimal**
- **Community and Indigenous review of study results led to broad community support**
- **Minimal to no requirements for further studies or investigations during project development**

Impact Assessment Process and Outcomes (Continued)

- Project estimated to generate significant direct economic benefits to Ontario (business revenue, GDP, salaries and wages) and broader economic benefits associated with providing a more competitive and efficient energy and capacity market in Ontario and PJM member states
- Improved Grid Resiliency, by providing another inter-tie with a direct connection to the PJM grid which currently does not exist, with the ability to move power in a bi-directional manner
- GHG Emission Reductions estimated to be in the order of 2 to 3 million tonnes annually

Benefits of IA

- **Potential for positive effects of broader societal benefit**
- **Community and Indigenous review of study results led to broad community support**

Challenges/Considerations

Advantages of IA to the LEC

- Thorough identification of potential issues and associated mitigation mitigated need for additional study during IA approval and the need for extensive field studies related to mitigation during construction/operation
- Provided substantial opportunities for early engagement on potential impacts and mitigation with affected stakeholders
- Due to there being few remaining impacts and issues the regulator was able to carry out a streamlined written Hearing process versus an in-person public Hearing
- Thorough IA process resulted in relatively quick approval of Election Certificate with minimal issues remaining to be addressed in the IA conditions of approval
- First Nations participation and support set the stage for future relationships regarding the project