

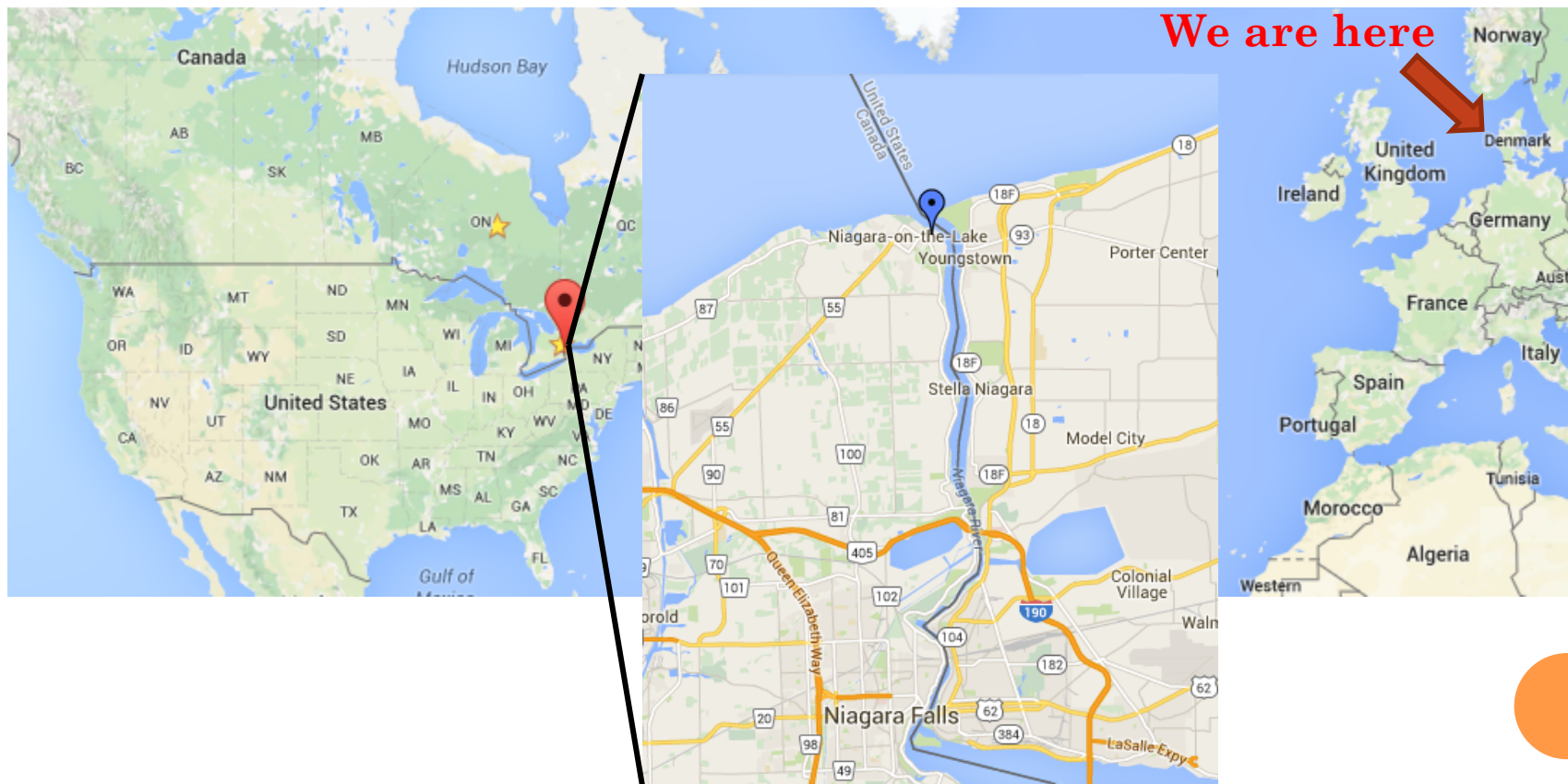


# NIAGARA 2016 SYMPOSIUM ON MICROGRIDS

20-21 Oct 2016

# NIAGARA ON THE LAKE

- About 1.5 hour drive from Toronto, Ontario – Canada
- Short drive from Buffalo, NY, USA
- Minutes from Niagara Falls



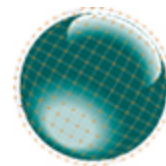
# WHY NIAGARA ON THE LAKE?

- **Amazing place to visit**
  - Unique Canadian experience
  - Art galleries and shopping



- **7th International Conference on Integration of Renewable and Distributed Energy Resources Conference (IRED), October 24-27, 2016, Niagara Falls Marriott Gateway**

- Last IRED conference (2014) was in Kyoto, Japan  
about 300 people attended
- Symposium hatched at 1st



IRED2014

<http://www.marriott.com/hotels/travel/iagmc-niagara-falls-marriott-gateway-on-the-falls/>



# POWER AND ENERGY

- Niagara was early European settlement (1760) area, and major power generation centers of the northeast
  - Multiple hydro power plants (total capacity of 5.1 GW)
  - Adam Beck #1 a **25 Hz system** designed by Tesla
  - A major Pumped-Hydro Storage facility (240 MW)



Adam Beck #1 - 1960



history

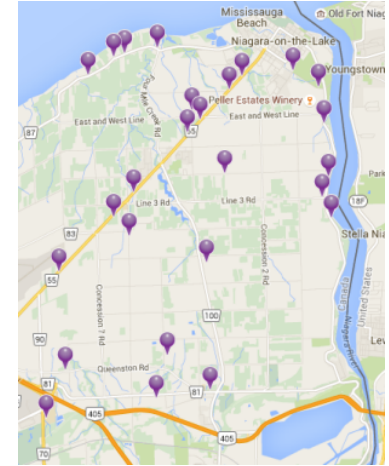
Thomas J. Blalock and Craig A. Woodworth

**25-Hz at Niagara Falls**  
*end of an era on the Niagara Frontier, part I*

<http://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=4412948>

# TOURIST ATTRACTIONS

- Canada's prettiest town!
- Heart of wine country:  
<http://wineriesofniagaraonthelake.com/>
- Shaw Festival of live theater  
<http://http://www.shawfest.com/>



- Official town site: <https://www.niagaraonthelake.com/>





# SYMPOSIUM VENUE

- Queen's Landing Conference Center:  
Grand Georgian Ballroom [www.vintage-hotels.com](http://www.vintage-hotels.com)



# SYMPOSIUM ORGANIZATION

## ○ **Local Organizing Committee (LOC):**

- Amir Yazdani – Symposium and LOC Chair
- Farid Katiraei – International Steering Committee (ISC) Chair
- Chris Marnay – ISC Lead for The Americas
- Dimitri Androutsos – Chair of ELE Dept., Ryerson University
- Reza Iravani – ISC Member for The Americas

## ○ **Confirmed Sponsors**

- Ryerson University
- Quanta Technology

## ○ **Potential Sponsors**

- Your company?

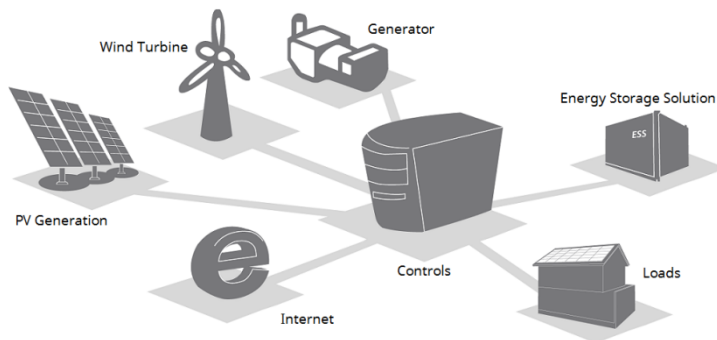
## ○ **Collaborators**

- NRCAN, Government of Ontario



# POTENTIAL TECHNICAL TOURS

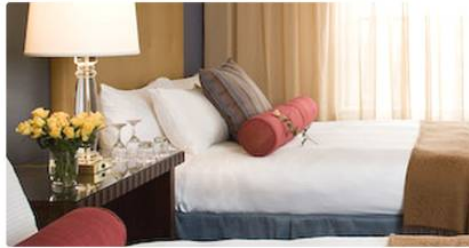
- Power Stream Microgrid System
- Hydro One Smart Zone
- NY Prize Microgrid projects: Cities of Syracuse and Buffalo
- Canadian Solar
- Lewiston Pumped-Hydro Storage Facility





# ACCOMMODATION OPTIONS

- Queen's Landing Hotel (also symposium venue)
  - CAD\$190 per night (single or double occupancy)



- Prince of Wales Hotel  
<http://www.vintage-hotels.com/>



- Many cute B&Bs
  - wide range of options

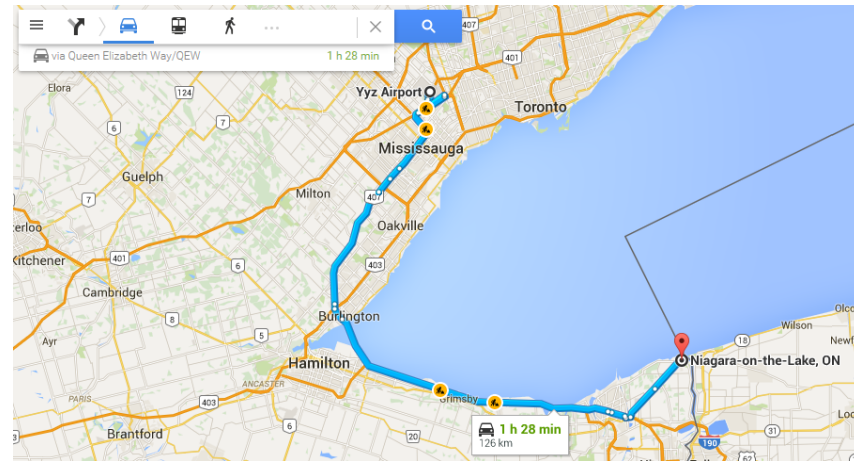
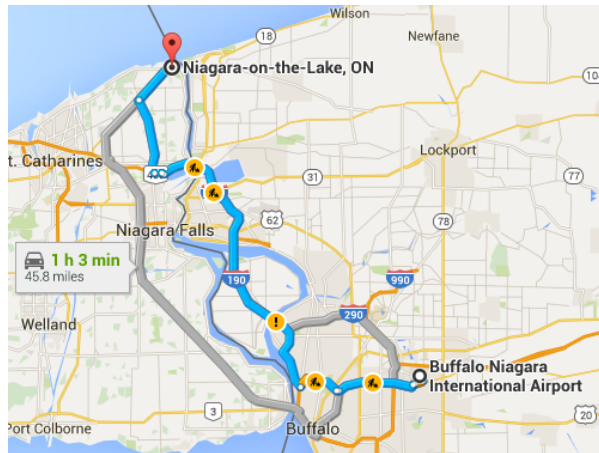


<https://www.niagaraonthelake.com/page/accommodations/>



# TRANSPORTATION

- Three major airports (in order of traffic volume):
  - Toronto Pearson International Airport (YYZ)
  - Buffalo International Airport (BUF)
  - Niagara Falls International Airport (IAG)
- Go Train from Toronto – Union Station
- Multiple buses and coaches



[https://www.niagaraonthelake.com/page/About\\_Niagara-on-the-Lake](https://www.niagaraonthelake.com/page/About_Niagara-on-the-Lake)

# SEE YOU AT NIAGARA ON THE LAKE



20-21 Oct 2016

