ERGIS Canada Working Group: April 17, 2013

The purpose of the phone call was to discuss how the ERGIS project will represent the Canadian portion of the Eastern Interconnect. The general discussion revolved around whether ERGIS should model the Canadian portions of the Eastern Interconnect (EI) with the same resolution as the US portions or model only the interchange flows.

The group acknowledged that modeling the Canadian portion of the EI would be preferable if the required data could be obtained and if the runtimes are not increased to unreasonable lengths. However a second option would be to model only the interchange flows using either scheduled flows or supply curves at the interchanges.

The Canadian portion of the EI is about 10% of the total EI system by number of generators, installed capacity, and annual demand. Therefore including the Canadian portion would likely increase runtimes incrementally rather than substantially.

The group discussed the availability of the necessary data for Canada. Data for Canadian wind generation for the years 2007 through 2009 are under development but these years do not overlap the years of US wind data that are available (2004 through 2006). NREL currently has a project to develop wind data for the years 2007 through 2009 but these data will not likely be available until the latter stages of the ERGIS project.

Ontario Stakeholders stated that Ontario had done studies and analysis for several locations so estimated hourly generation data likely exists. These individuals offered to inquire about the availability of the data. Ontario Stakeholders also stated that they have a good idea what their installed capacity will be in 2020 due to Ontario's recently-released Long-Term Energy Plan. They also stated that he could provide updated Canadian load data.

A hybrid option was suggested, in which the Manitoba Hydro and IESO (Ontario) systems would be modeled and Hydro Quebec and New Brunswick systems would be represented by scheduled flows. The justification for this strategy is that the Manitoba Hydro and IESO systems operate more dynamically with their US neighbors and the Hydro Quebec and New Brunswick systems are typically block-scheduled. The EIPC used this approach in its work.

The group discussed creating the model with as much detail as currently available in order to create a framework in which data could be used as soon as it becomes available.

A question was raised about the time-frame for interchange scheduling. Will the US-CA interchanges move to sub-hourly scheduling when the intra-US interchanges do the same?

The group discussed the fact that the data needed for to model the CA system would also be needed to develop the interface scheduled flows or supply curves, so the advantage of modeling only the interface flows is likely only the shorter computer runtime.

Summary of Conclusions:

- NREL will proceed with the use of block schedules for Hydro Quebec and New Brunswick and will include IESO and Manitoba Hydro in the model.
- NREL will work with Canadian organizations to obtain the necessary data to model the Canadian system.

Next Meeting:

The next working group will discuss generator retirements and capacity expansion and will be held on April 25, 2013.

Conference Call Attendees:

Jordan Bakke	MISO
Venkat Banunarayanan	DOE
John Black	ISO-NE
Aaron Bloom	NREL
Greg Brinkman	NREL
Charlton Clark	DOE
Kara Clark	NREL
Gary Jordan	NREL Contractor
Gary Moland	Garrad Hassan
Dan Rochester	IESO
Jason Schmidt	Ventyx
Akarsh Sheilendranath	ISO-NE
Robert Sinclair	Ontario Power Authority
Charlie Smith	UWIG