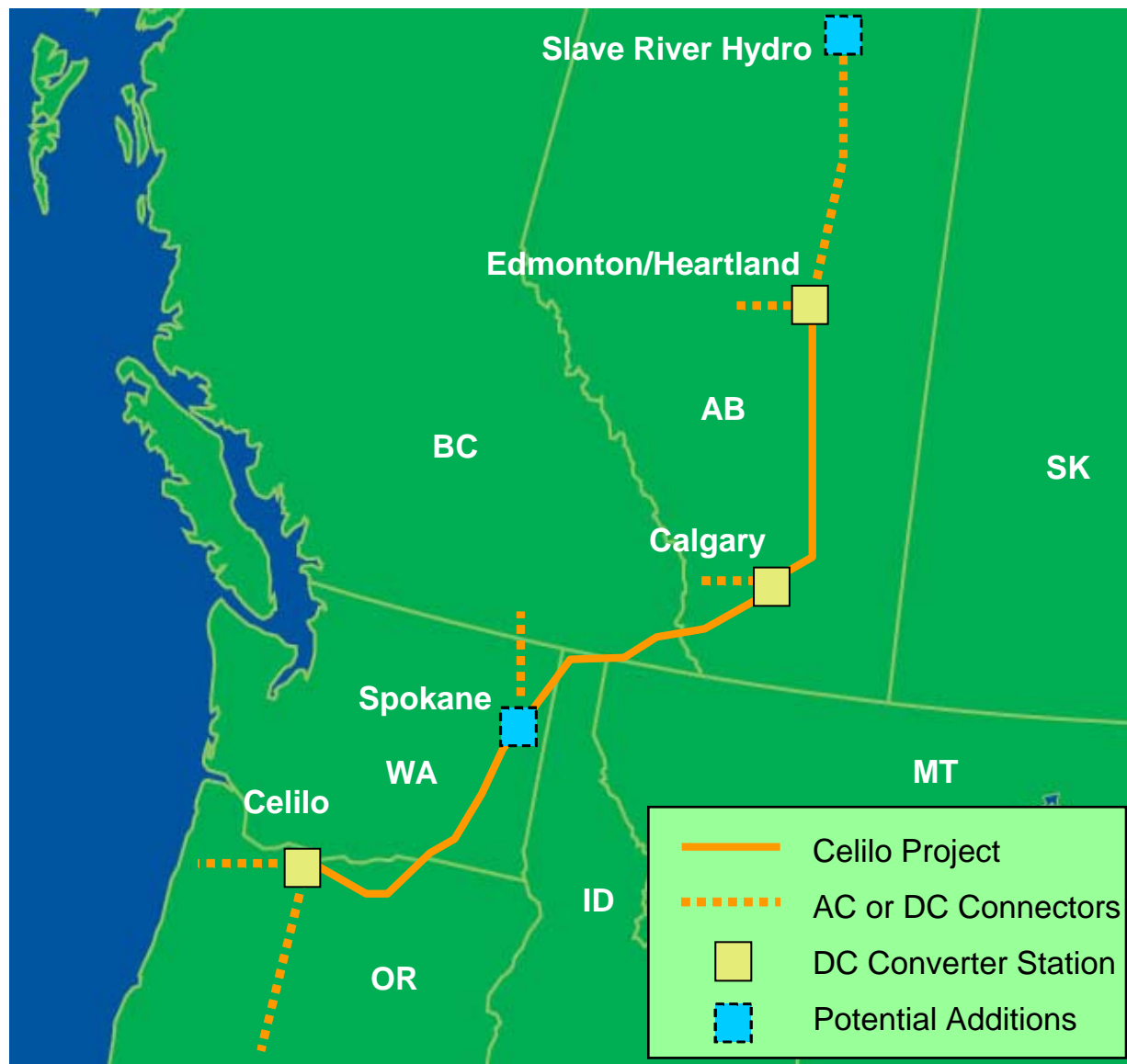
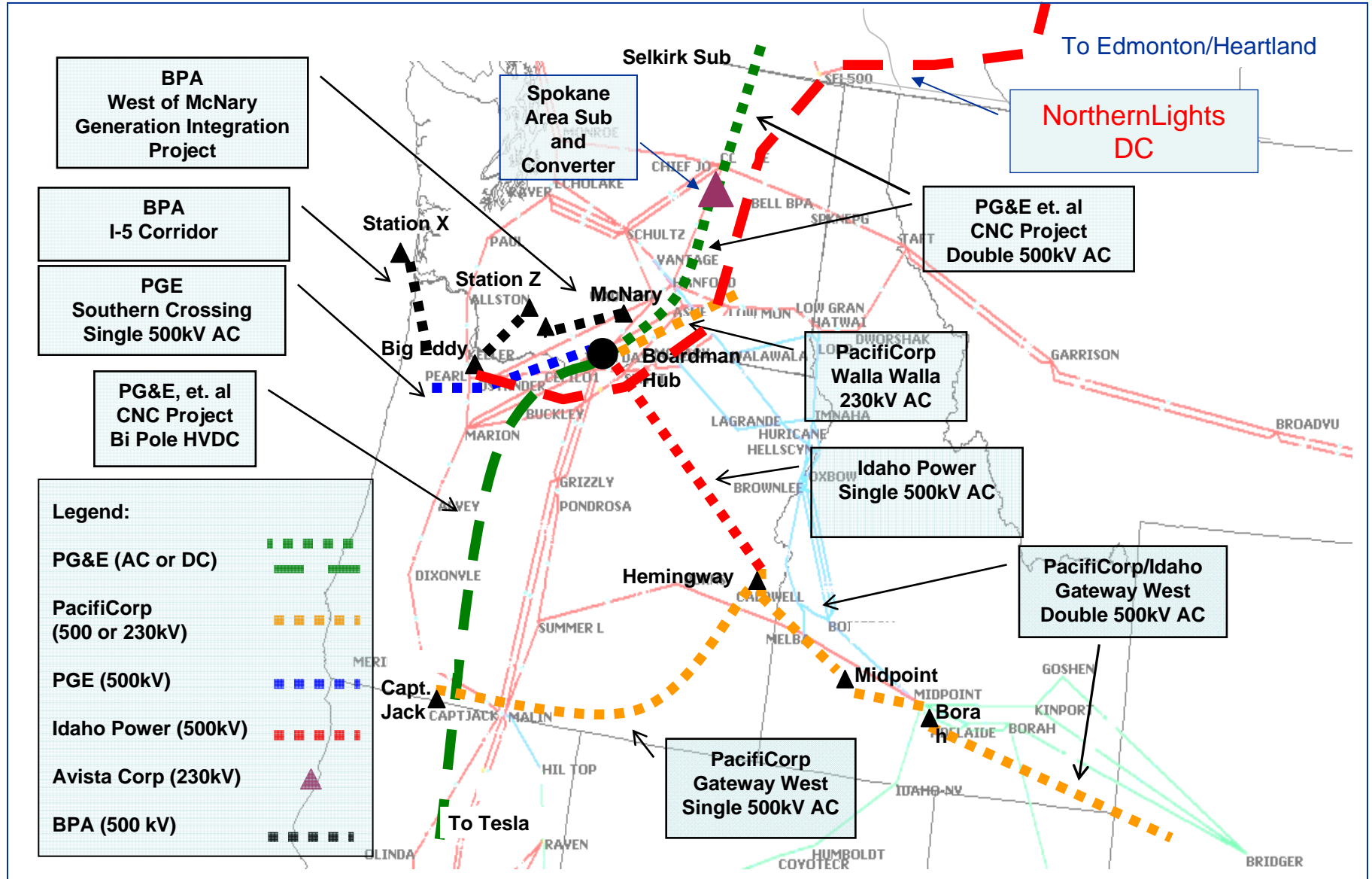


NorthernLights
Path Rating Meeting
February 12, 2008

NorthernLights



New Transmission Projects Converging in Lower Columbia Planned Operation: 2010 – 2015



Alberta Resources - Scenario 2 Selected



Scenario	1	2	3	4	5
Genesee 4	450	450	450	450	
Keephills 4	450	450	450		450
HR Milner Expansion	450				
ENMAX 1200 MW			600	1,200	1,200
Cogeneration	1,760	2,260	1,760	1,760	1,760
Simple Cycle	600	600	400	300	
Wind (Installed)	(1,600)	(1,600)	(1,600)	(1,600)	(3,400)
Effective	320	320	320	320	680
Major Additions	4,030	4,080	3,980	4,030	4,090
Common Additions	950	950	950	950	950
Total Additions	4,980	5,030	4,930	4,980	5,040

Study Cases

1. **Heavy Summer #1**: +/- 500 kV DCTL between Heartland, Milo and Celilo with HVDC converter station at Heartland, Milo and Celilo of 2000MW, 1000 MW and 2000 MW respectively. Alberta generation per AESO Scenario #2 with the 1800 MW Slave River Hydro project added. Scheduled flows to be studies include:
 - Heartland importing or exporting 2000 MW from Celilo with zero interchange at Milo
 - Heartland exporting 1000 MW and Milo exporting 1000 MW
 - Heartland exporting 2000 MW and Milo importing 1000 MW with 1000 MW delivered to Celilo

Study Cases - Continued

2. **Heavy Winter #1**: Same physical configuration, resources and flows as #1 above.
3. **Light Spring #1**: Same physical and resource configuration as #1 above coincident with high hydro generation in northern California. The flow of 2000 MW from Celilo to Alberta with 2000 MW imported at Heartland or 1000 MW each imported at Heartland and Milo.

Request to PG&E

- PG&E's plan examines systems with resources from BC, Wyoming/Idaho, eastern Washington/Oregon
- TransCanada requests PG&E consider a similar study including Alberta resources over NorthernLights in a similar case as above
- Heavy summer scenario with 2,000 MW from Alberta over NorthernLights into your project in the lower Columbia area?
- Taking this approach will demonstrate PG&E's commitment to a level playing field for the acquisition of renewable resources from BC and Alberta
- TransCanada will provide the resources if necessary.

Discussion

