

Boardman Hemingway 500 kV Transmission Line

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Project Overview

- Single 500 kV AC circuit from Hemingway, Idaho to Boardman, Oregon
- Potential ratings:
 - 800 MW NW-ID
 - 1500 MW ID-NW
- Project Operating Date: 2012
- Project Website:

http://www.idahopower.com/newsroom/projnews/hemingway_boardman/default.htm



Proposed Schedule

ID	Task Name	Start	End	2007		2008				2009				2010				2011				2012					
				Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
1	NEPA Process	7/2/2007	12/31/2009																								
2	WECC Rating Process	7/5/2007	12/31/2009																								
3	BLM Right of Way Grants	1/1/2008	12/30/2009																								
4	Right of Way Acquisition	1/1/2008	5/2/2011																								
5	Permitting	1/1/2008	12/31/2010																								
6	Engineering	1/1/2008	12/31/2010																								
7	Construction	1/3/2011	6/1/2012																								



Milestones

- NTTG Fast Track Process 1/1/2007 – 6/1/2007
- Initiated Regional Planning 7/5/2007
- Completed Regional Planning 5/30/2008
- Initiated Phase 1 Rating Process 2/19/2008
- Complete Phase 1 Comprehensive Planning Report 10/31/2008
- Oregon Energy Facility Siting Council Notice of Intent (OEFSC NOI) 8/27/2008
- BLM NOI 9/11/2008
 - Initiation of NEPA process



Comprehensive Progress Report

- Establish a path rating for the Boardman to Hemingway Line separate from the Idaho to Northwest path (path 14)
- Rating independent of other regional projects
- Rating with other regional projects
 - Gateway West
 - West of McNary Upgrade
 - Southern Crossing



Idaho to Northwest

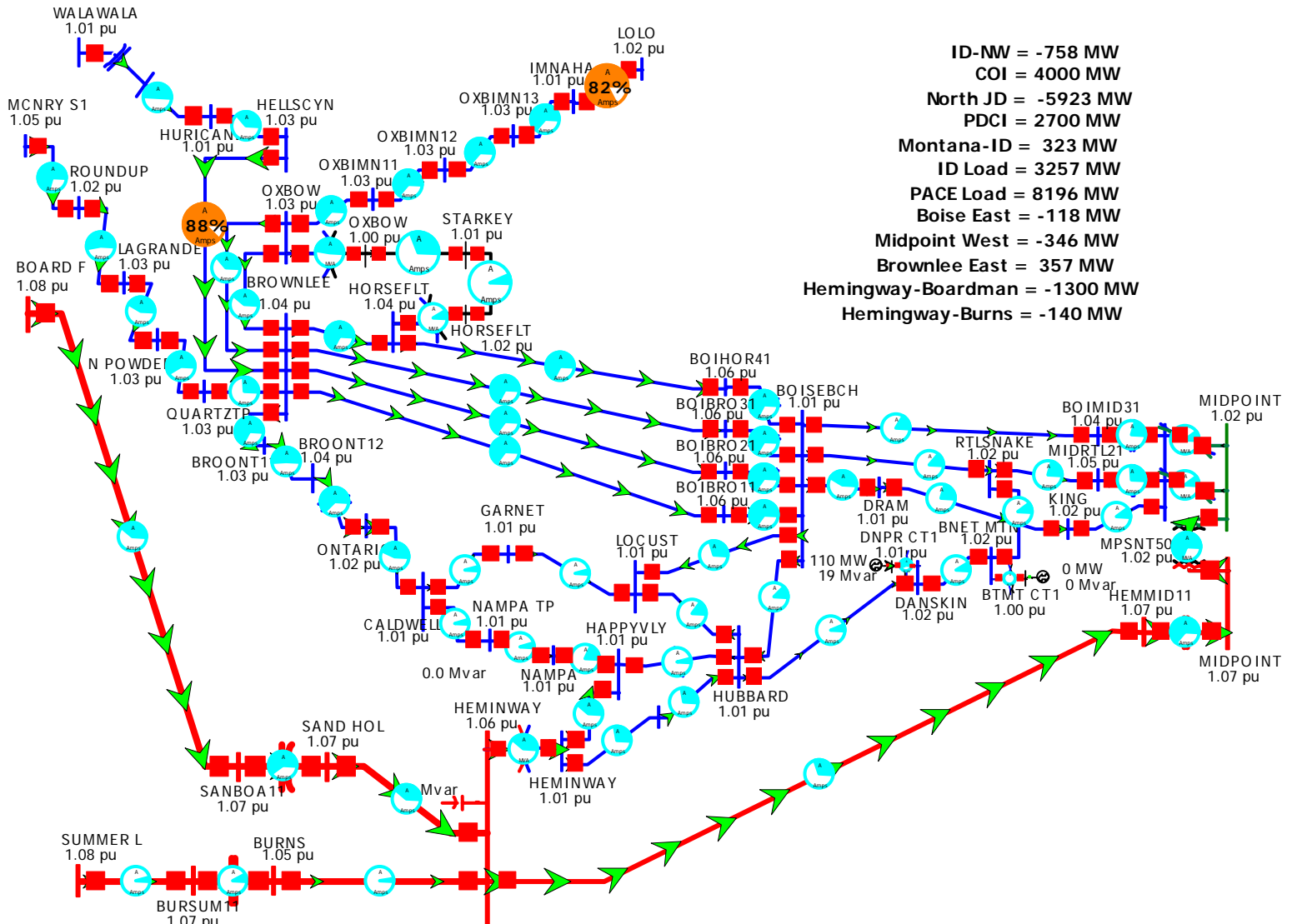
- Path Present Rating
 - Import 1200, 1090 summer OTC
 - Export 2400, 2304 OTC (removal of Copperfield Capacitor)



Power Flow Base Cases

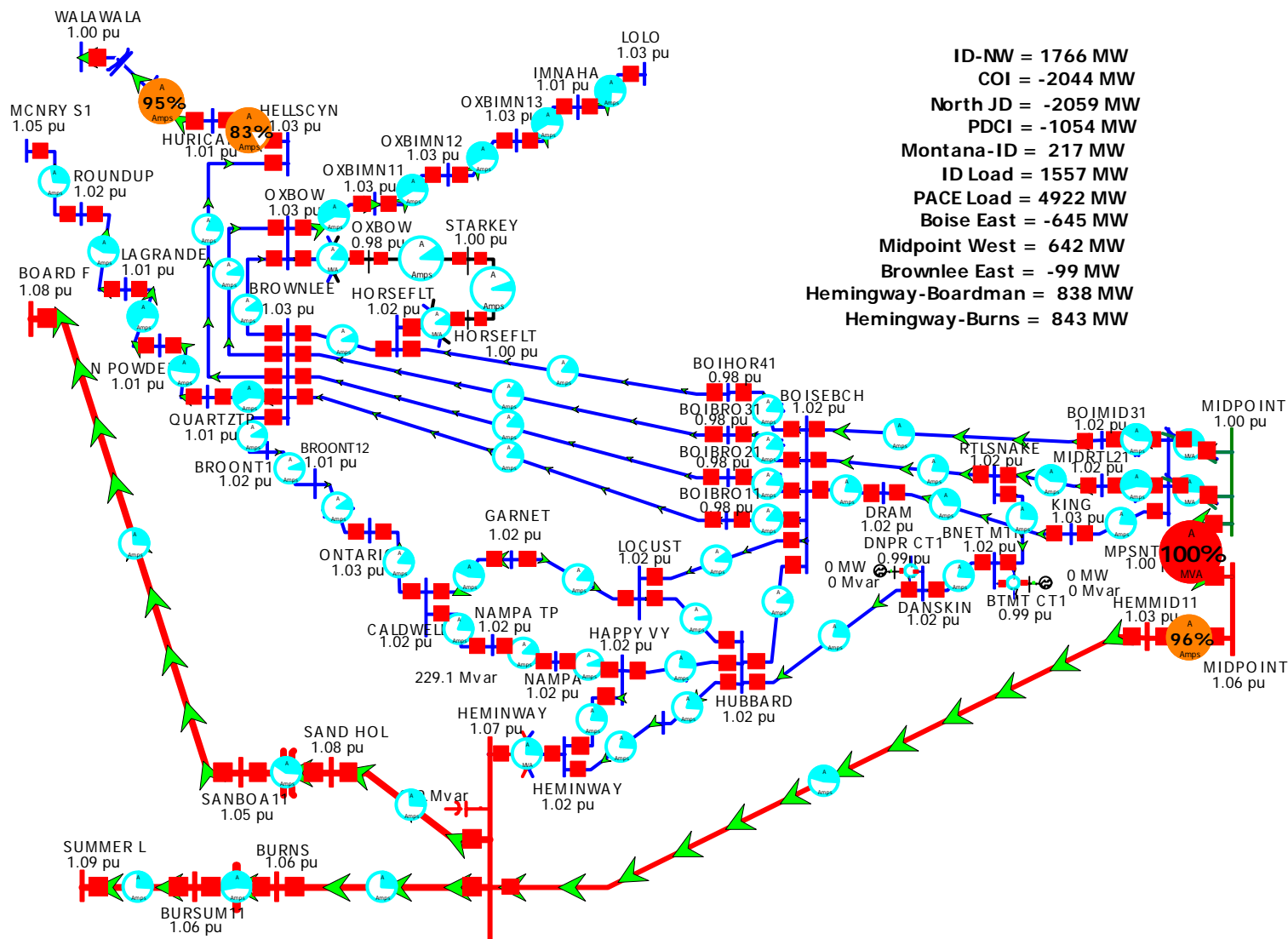
- Independent Rating
 - Import case - 12hs2a
 - Export case - 10la1sa
- Rating with Other Projects
 - Single 500 kV from Jim Bridger across southern Idaho with WOMGIP and Southern Crossing
 - Gateway West with WOMGIP and Southern Crossing

Import Diagram



ID-NW = -758 MW
COI = 4000 MW
North JD = -5923 MW
PDCI = 2700 MW
Montana-ID = 323 MW
ID Load = 3257 MW
PACE Load = 8196 MW
Boise East = -118 MW
Midpoint West = -346 MW
Brownlee East = 357 MW
Hemingway-Boardman = -1300 MW
Hemingway-Burns = -140 MW

Export Diagram



ID-NW = 1766 MW
COI = -2044 MW
North JD = -2059 MW
PDCI = -1054 MW
Montana-ID = 217 MW
ID Load = 1557 MW
PACE Load = 4922 MW
Boise East = -645 MW
Midpoint West = 642 MW
Brownlee East = -99 MW
Hemingway-Boardman = 838 MW
Hemingway-Burns = 843 MW



Power Flow Summary

- Import MW
 - Northwest to Idaho 758
 - Boardman to Hemingway 1300
 - Present Northwest to Idaho (Import) 1200 OTC 1090
 - Net increase above path rating 858 above 968 MW
- Export
 - Idaho to Northwest 1766
 - Hemingway to Boardman 838
 - Present Idaho to Northwest (Export) 2400 OTC 2304
 - Net increase above path rating 204 above 300 MW



N-1 Screen

- Independent Rating
 - Import
 - 31 Contingencies
 - No Violations
 - Export
 - In Process
- Dependent Rating
 - Import
 - Incomplete
 - Export
 - Incomplete



N-2 Screen

- Independent Rating
 - Import
 - In Process
 - Export
 - Incomplete
- Dependent Rating
 - Import
 - Incomplete
 - Export
 - Incomplete



Pending Studies

- Reactive Margin
- Stability