

# System Condition Update

## Spring Operations Review Forum Regional Conference Call

July 1, 2011

1:00 – 2:00 p.m.

To participate in the call please dial: **(877) 322-9654**

When prompted, enter access code: 328457



# Hydro Operations Update

The Federal Columbia River Power System is being operated for refill and flood control objectives.

- Grand Coulee, Dworshak, and Hungry Horse are all expected to achieve refill objectives in the second week of July.
- Albeni Falls is drafting into its summer operating range on free flow.
- Libby will transition to the greater of the flow required for Bull Trout operations or the flow required to achieve an end of September draft target.
- Northwest River Forecast Center July Early Bird forecast came out at 142 million acre feet January – July at The Dalles.
- Regulated flows on the lower Columbia River are in the 400-500 KCFS range.

# Hydro Operations Update

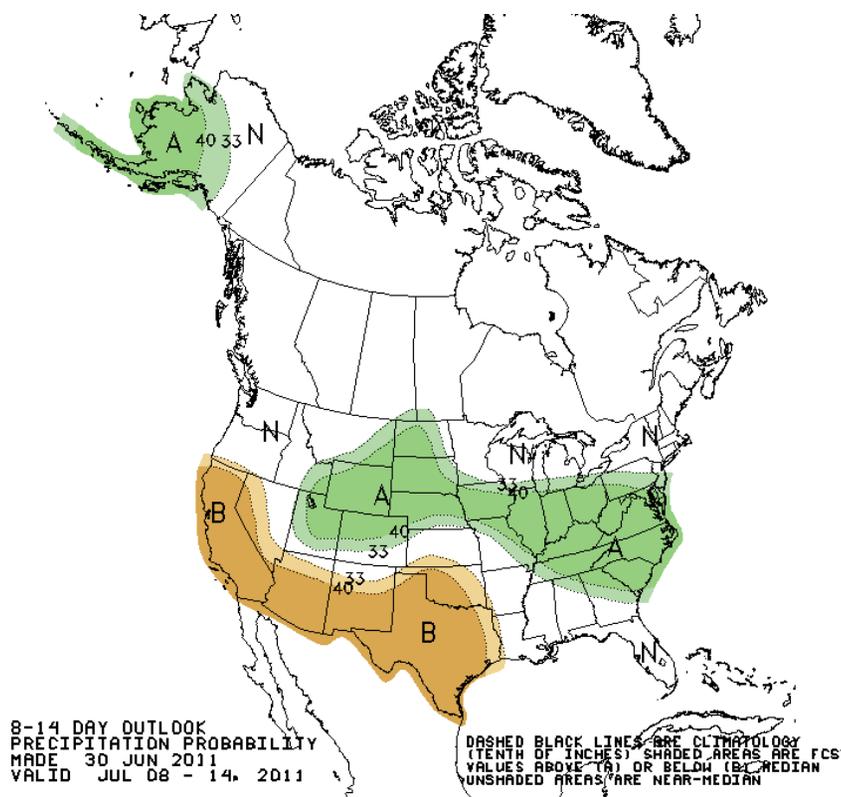
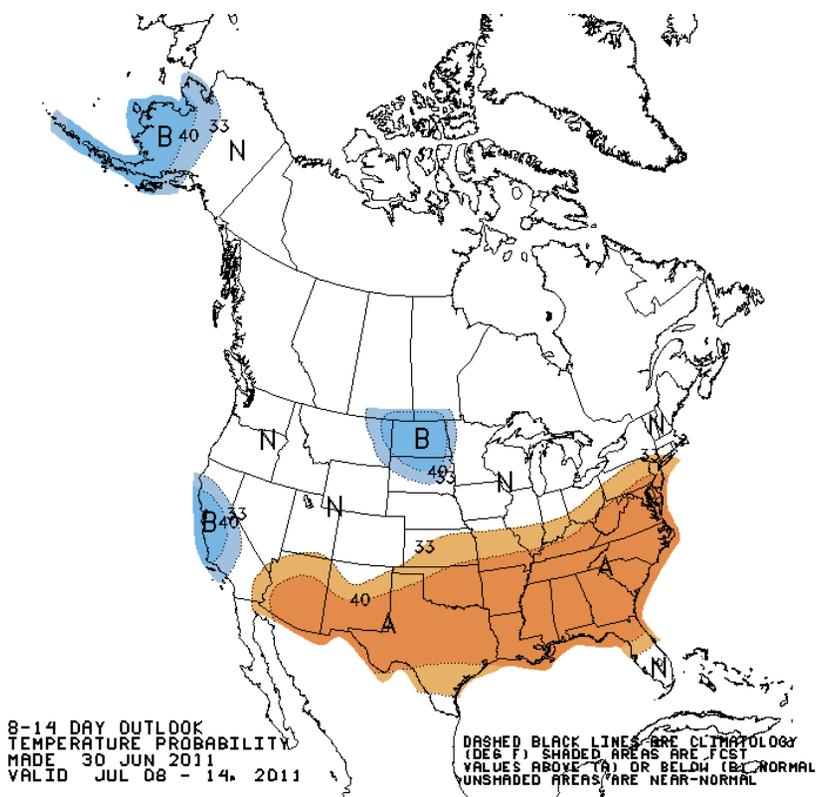
## Overgeneration conditions in the Northwest

- When there was insufficient demand for generation in light load hours offered at zero cost, the following steps were implemented to meet the flow objective:
  - DSO 216 INC reserves reduced to 400 MW and DEC reserves reduced to 300 MW
  - Spill up to Level 1 Spill (120% TDG system-wide)
  - Implement Environmental Displacement/Redispatch
  - Continue to spill up to higher Spill Levels
- Environmental Displacement/Redispatch
  - All thermal generation within BPA's balancing authority was displaced to their minimum generation first.
  - ER implementation has displaced total 86,062 MW-hrs of wind generation since 5/18/11. ER has been infrequently implemented in the past week on a limited number of graveyard hours.
- 12-hour average TDG levels are 120% or higher across the FCRPS as measured in the tailrace
  - Use of Environmental Displacement/Redispatch was effective in minimizing the amount of TDG in the system
  - Links to TDG data can be found on BPA's Overgeneration webpage or the TMT website

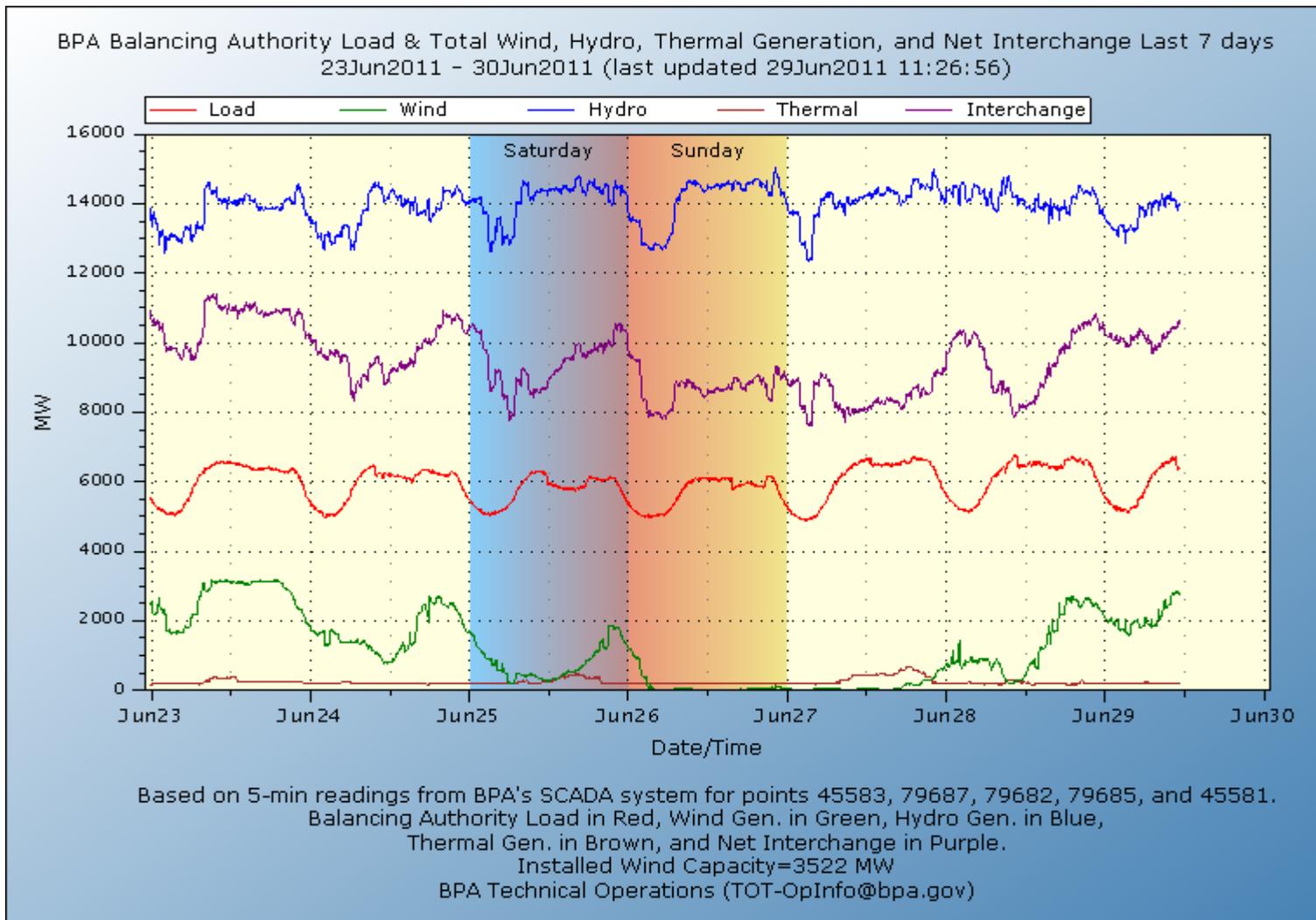
# Actions to manage overgeneration

- Since Sat (5/21) we have successfully acquired 13,191 MWh of load under the Mid-C Spill Exchange agreement.
- Positioned Banks Lake to have the maximum amount of pump load available during May and June.
- Moved non-essential generator and transmission maintenance outages out of May, June, and July.
- Environmental Redispatch has been used since May 18th.
- Coordinated LLH spill on Willamette projects

# Weather and Streamflow



# Balancing Authority Load and Total Wind, Hydro, and Thermal Generation



# Transmission Updates

## ■ COI N>S

- 6/28 to 6/30: 4250 MW due to CISO – Round Mountain-Table Mountain #1 500kv Line Series Capacitor Bank #3
- 7/5: 3650 MW due to CISO - Malin-Round Mountain 2 500kV Line
- 7/6: 3200 MW due to CISO - Malin-Round Mountain 1 500kV Line
- 7/5 to 7/24: 4500 MW due to BPA - Buckley-Marion 1 500kV Line
- 7/11: 4225 MW due to CISO - Round Mountain-Cottonwood 1 230kV Line (HE 13 only)

## ■ PDCI N>S

- 2990 MW: Studied at rated capacity for various outages through next seven days.

## ■ NI S>N

- 7/1 to 7/4: Prescheduled forecast as low a 1250 MW due to light load hour system conditions in BC Hydro BA.

# Transmission Updates

- **COI + PDCI (N to S) Capacity Utilization (05/31– 06/29)**

  - All Hours: 80.3%

  - Heavy Load Only: 81.8%

  - Light Load Only: 79.2%

- **Northern Intertie (S to N) Capacity Utilization (05/31– 06/29)**

  - All Hours: 43.0%

  - Heavy Load Only: 32.5%

  - Light Load Only: 57.3%

  - \*\*\*\*\* Many hours in previous seven days with actual NI flows N to S\*\*\*\*\*

- **Montana-PNW Average Utilization (05/31– 06/29)**

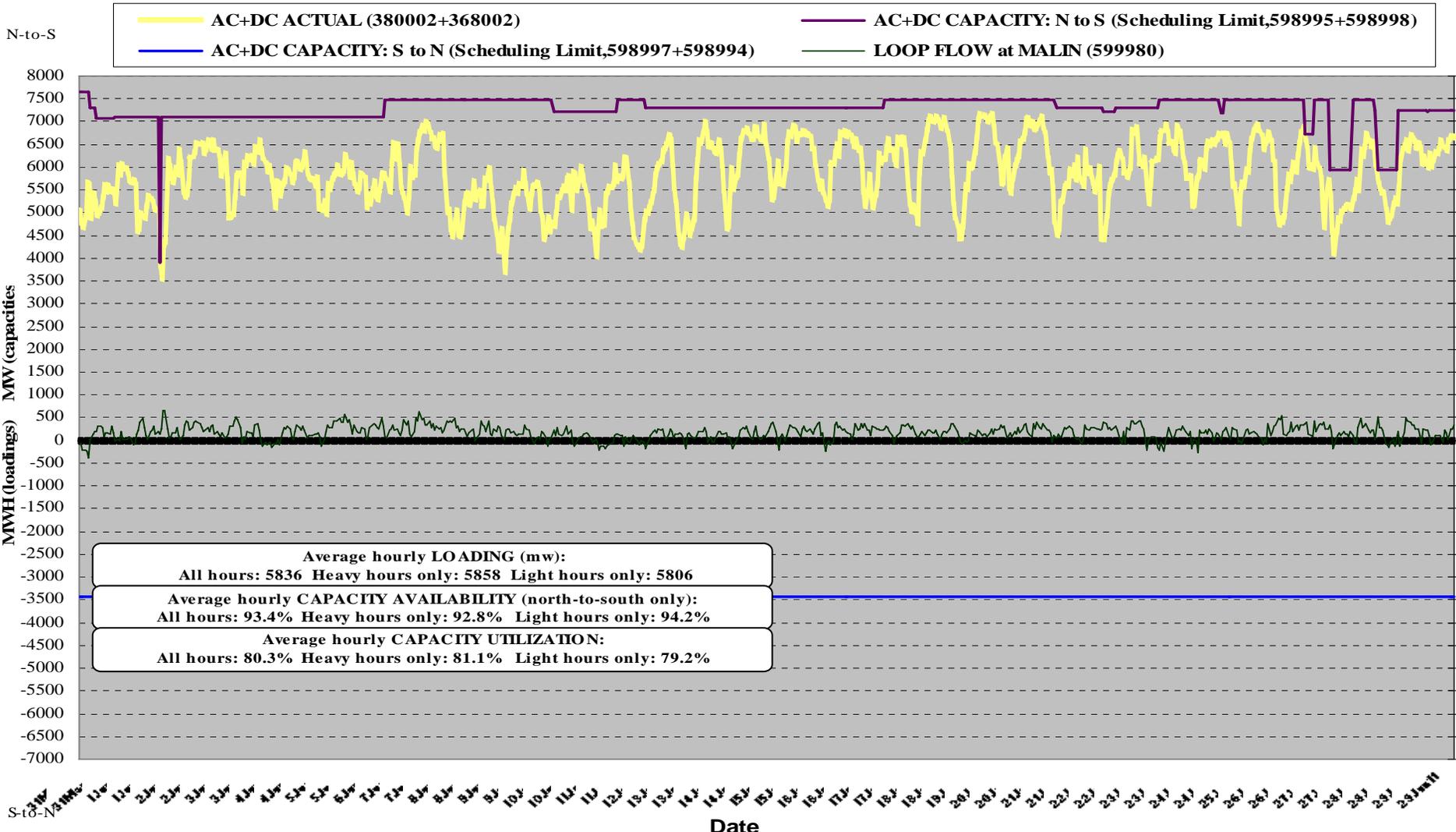
  - All Hours: -10 MW

  - Heavy Load Only: -90 MW

  - Light Load Only: 83 MW

  - \*\*\*The PNW is a net importer of energy from Montana\*\*\*

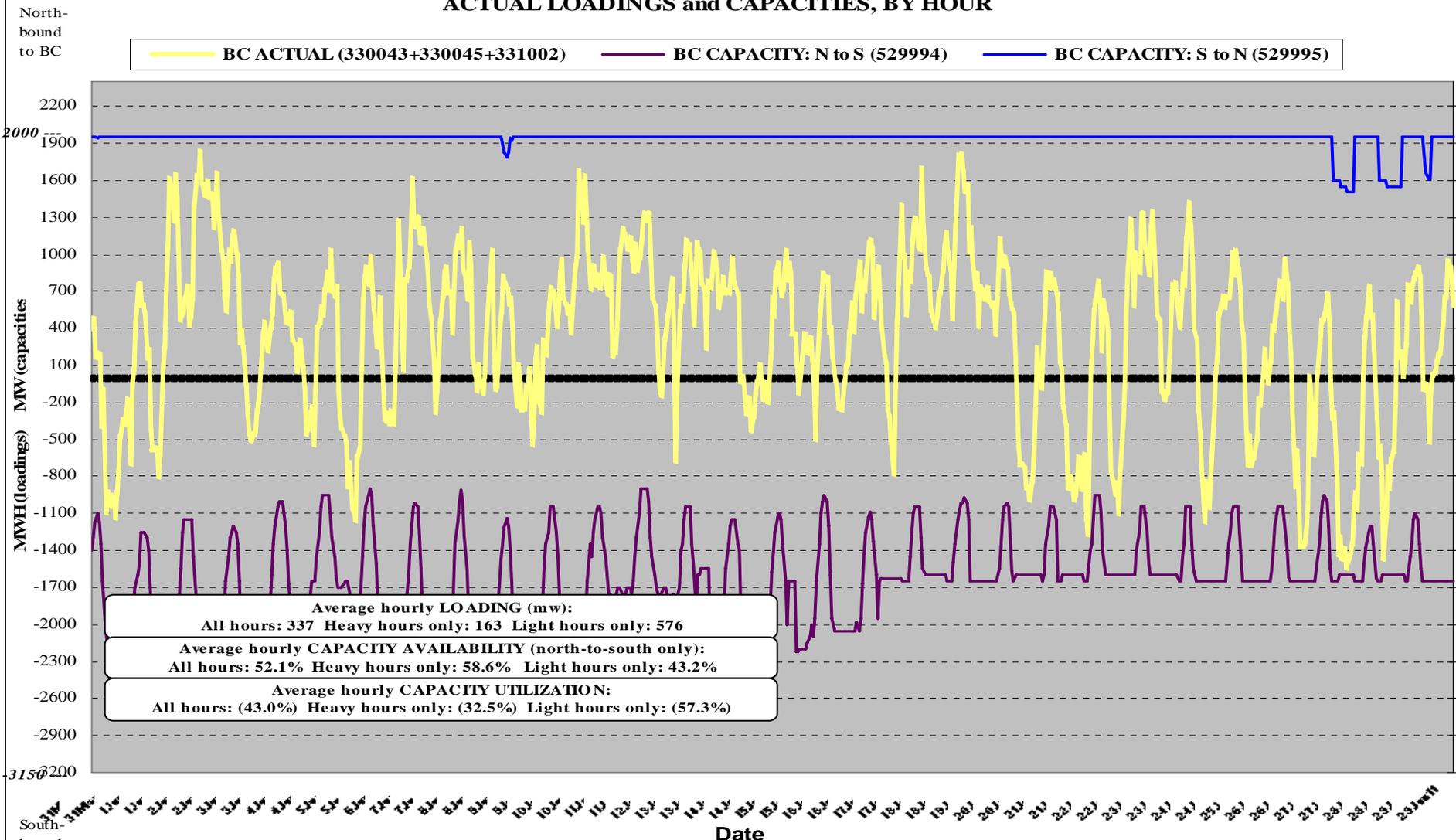
## AC+DC INTERTIE AVAILABILITY & UTILIZATION: 31MAY11 - 29JUN11 (30 days) ACTUAL LOADINGS and CAPACITIES, BY HOUR



capacity availability = actual capacity/rated capacity, capacity utilization = actual loading/actual capacity  
 Source: Hourly data via RODS; Capacities are those at COB or NOB and reflect total path scheduling limit  
 Actuals may exceed scheduling limit as long as conditions remain within North-of-John-Day vs. COI & PDCI operating nomogram limits

**BC INTERTIE (WEST+EAST) AVAILABILITY & UTILIZATION: 31MAY11 - 29JUN11 (30 days)**

**ACTUAL LOADINGS and CAPACITIES, BY HOUR**



capacity availability = actual capacity/rated capacity, capacity utilization = actual loading/actual capacity  
 Source: Hourly data via RODS; Capacities are those as recorded by and used for scheduling, and are based on electrical limits, not considering Intertie ownership shares; Rated capacities labeled as -3150 (N-S) and 2000 (S-N)

# Contact Information

- To discuss commercial operations, please contact Alex Spain at (503) 230-5780, [ajspain@bpa.gov](mailto:ajspain@bpa.gov).
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- Overgeneration Web site:  
<http://www.bpa.gov/corporate/AgencyTopics/ColumbiaRiverHighWaterMgmt/>