

# System Condition Update

## Spring Operations Review Forum

July 20, 2012

1:00 – 2:00 p.m.

To participate in the call please dial: **(877) 336-1839**

When prompted, enter access code: 1687421



Celebrating 75 years of  
serving the Northwest

# Hydro Operations Update

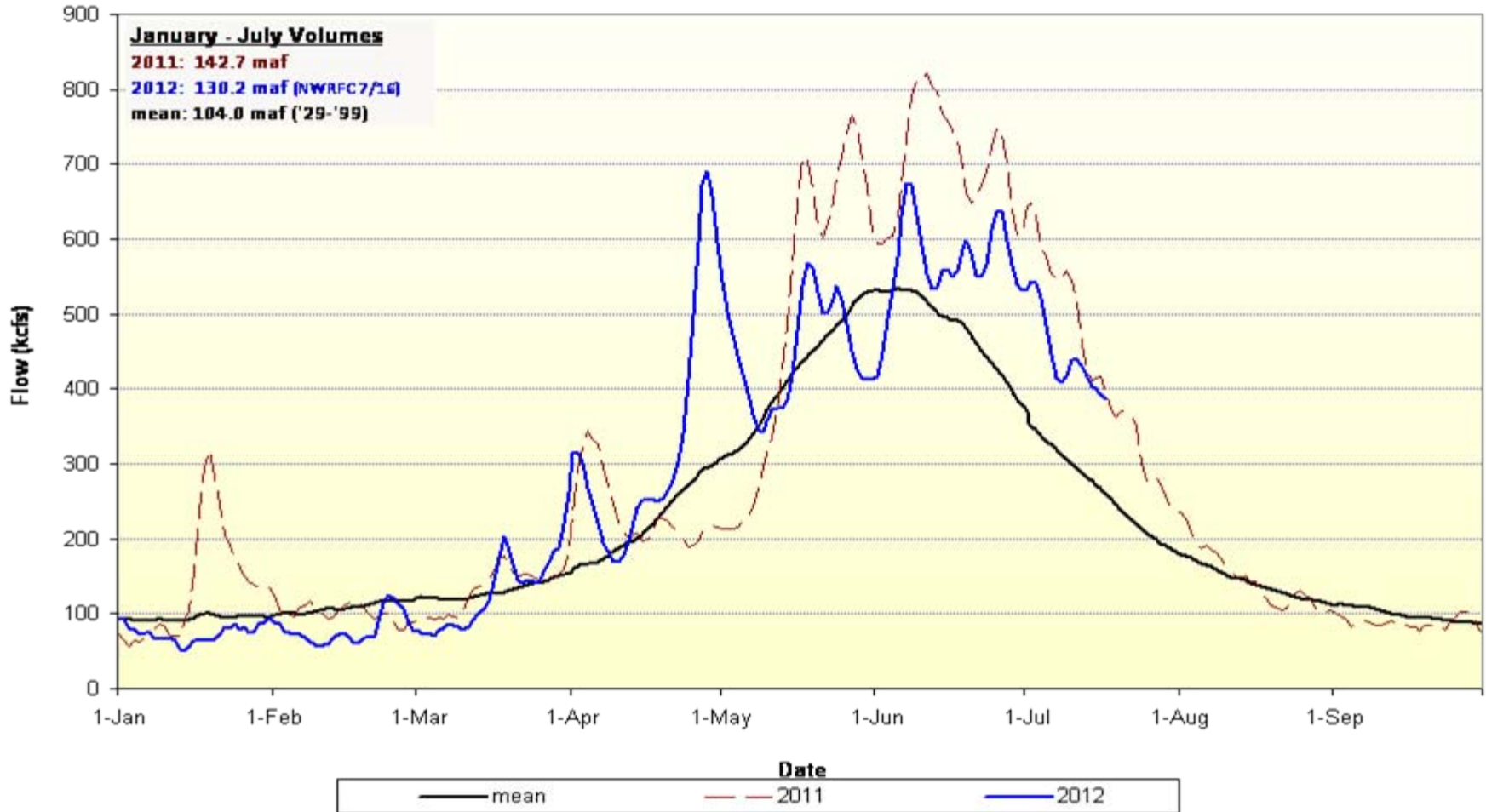
- Reservoir operations have transitioned to operating for flood mitigation and temperature control.
  - Grand Coulee is currently operating in the top foot and spilling passed fully loaded turbines to pass inflow.
  - All storage projects are, or are very near, full.
    - Many projects are still operating fuller than usual max storage ranges in order to mitigate flooding downstream.
  - Sustained river flows in Canada are at or near record levels.
- Maximum discharge at The Dalles of 450 kcfs.
- The NW River Forecast Center's July 16, January-July Water Supply Forecast at The Dalles is 130.2 million acre-feet.
- Oversupply Management Protocol was implemented this week. To date, approximately 46,600 MW-hrs of wind generation have been displaced. Please refer to the external website for further details.

# Actions to manage oversupply

- Last fall/winter BPA and BC Hydro released water from non-treaty storage in Canada. The space created by the releases last fall/winter has allowed Arrow outflows to be lower than they would have been absent the Non-Treaty Storage agreement. BPA and BCH stored nearly 2.8 Maf under this agreement between May 26 – July 15 to be released in August/September.
- As of June 14, BPA has acquired 66,260 MWh under the Mid-Columbia Spill Exchange agreement.
- Maximizing the amount of pump load.
- Coordinated spill on Willamette projects when possible within TDG limits.
- CGS has been reduced to 85% during periods when it was helpful to minimize spill.
- Spill due to lack of demand whenever possible within water quality standards.
- INC/DEC reserves have been occasionally reduced to manage to system operational objectives this Spring.
- Recallable energy is being used to reduce the amount of over-generation spill and OMP.

# Weather and Streamflow

## Natural Flows at The Dalles



# Weather and Streamflow

## Volume remaining at selected sites (kAF)

Runoff-processor date: Jul 17  
 RFC Volume Forecast: Jul 16

|                     | <i>Jul 16</i> | <i>Jul 17</i> |           |
|---------------------|---------------|---------------|-----------|
|                     | NWRFC         | Observed      | Percent   |
| <b>January-July</b> | ESP volcast   | Since 1-Jan   | Remaining |
| Grand Coulee        | 81,463        | 74,201        | 8.9%      |
| Lower Granite       | 30,065        | 29,196        | 2.9%      |
| The Dalles          | 130,202       | 121,309       | 6.8%      |

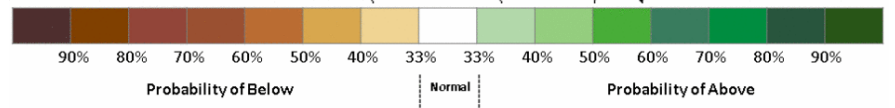
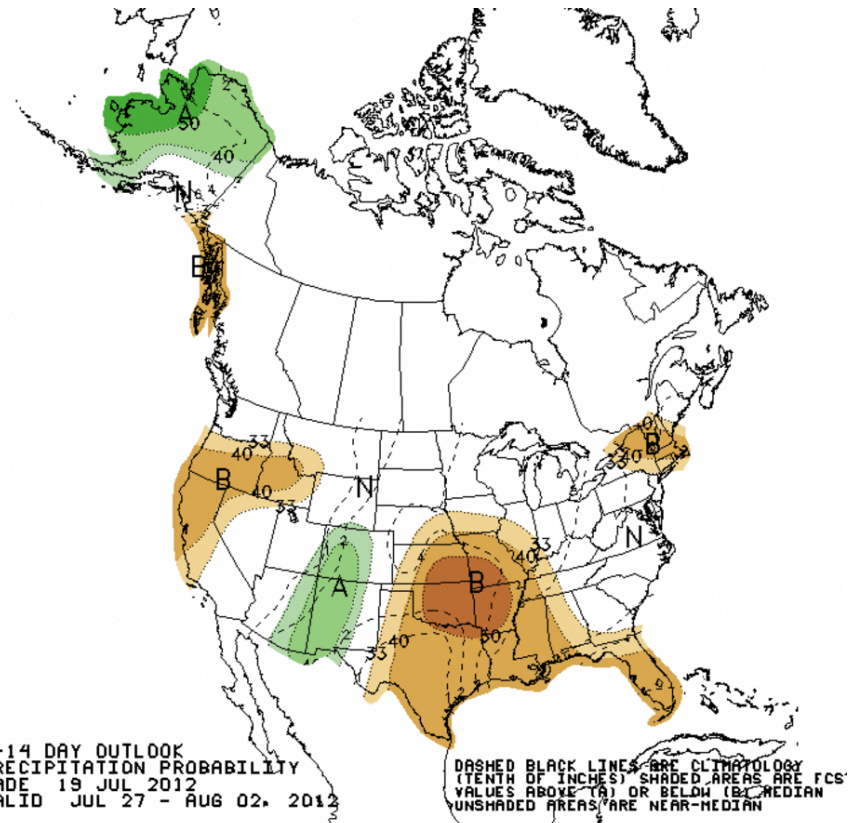
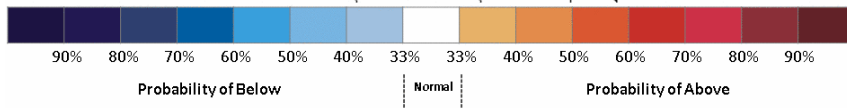
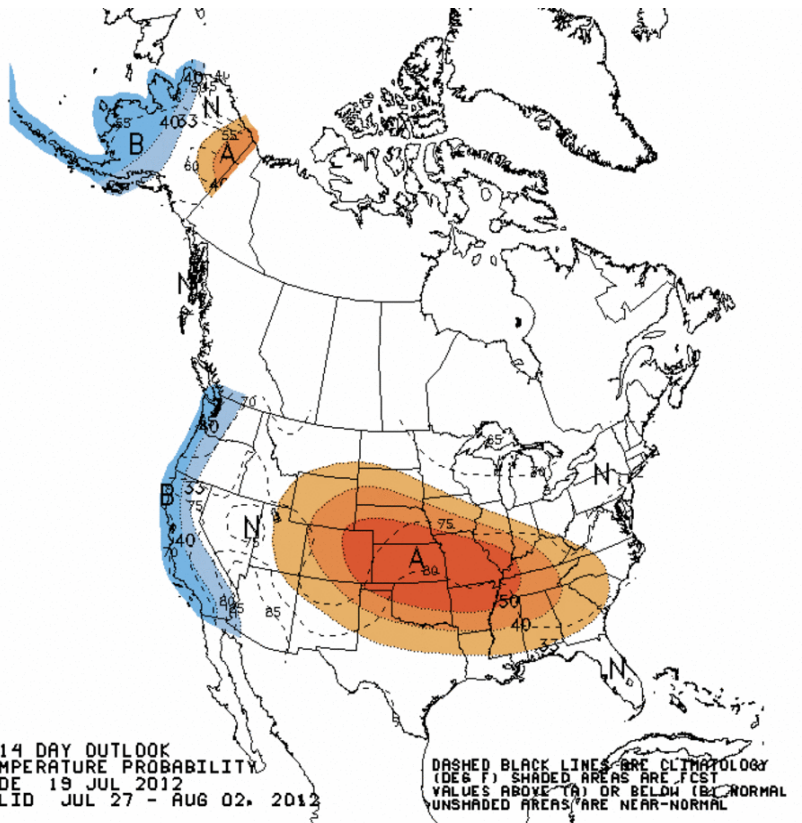
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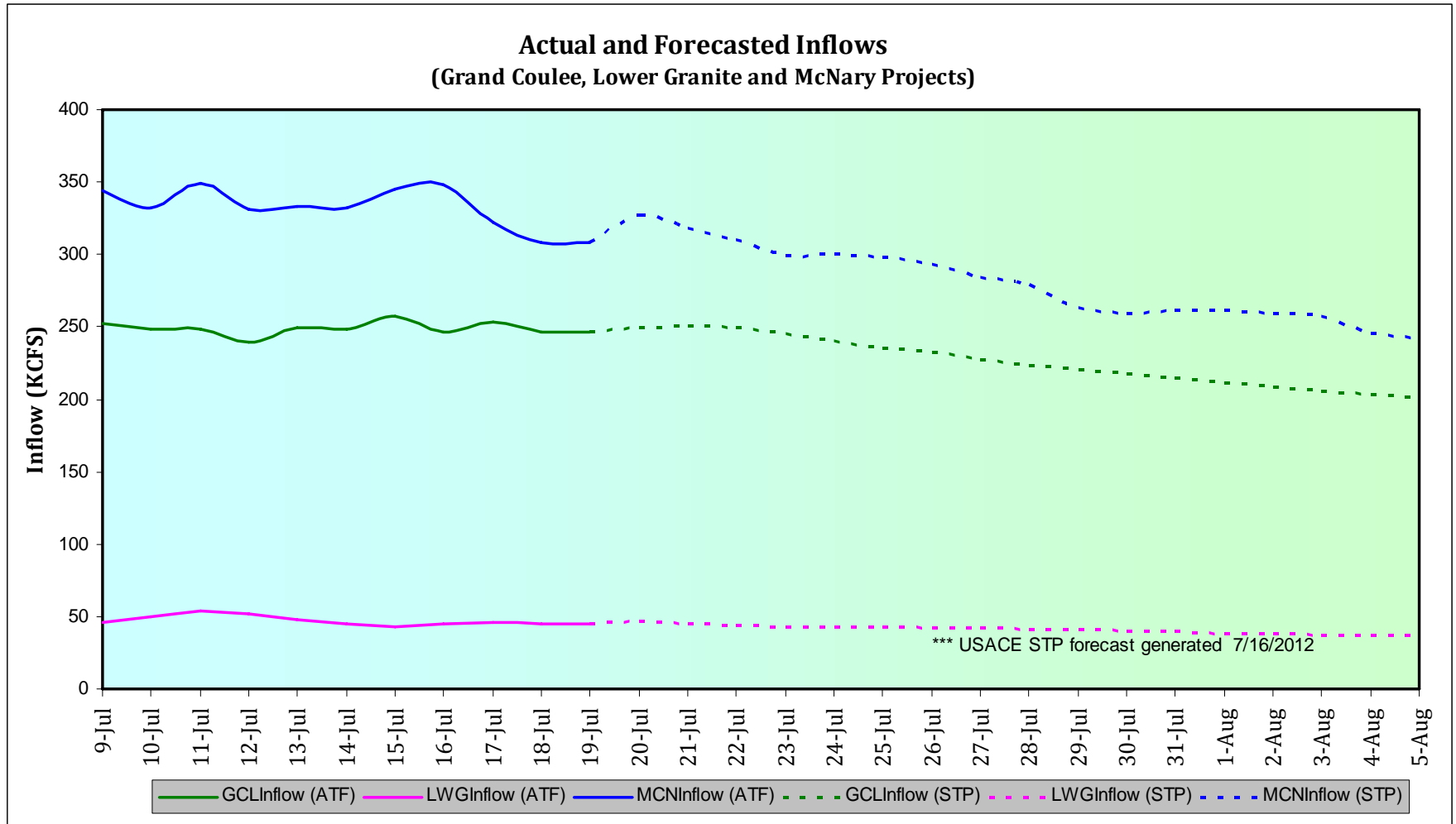
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|                     | NWRFC       | Observed    | Percent   |
|---------------------|-------------|-------------|-----------|
| <b>April-August</b> | ESP volcast | Since 1-Apr | Remaining |
| Grand Coulee        | 83,103      | 66,642      | 19.8%     |
| Lower Granite       | 24,490      | 22,025      | 10.1%     |
| The Dalles          | 122,529     | 101,845     | 16.9%     |

# Weather and Streamflow

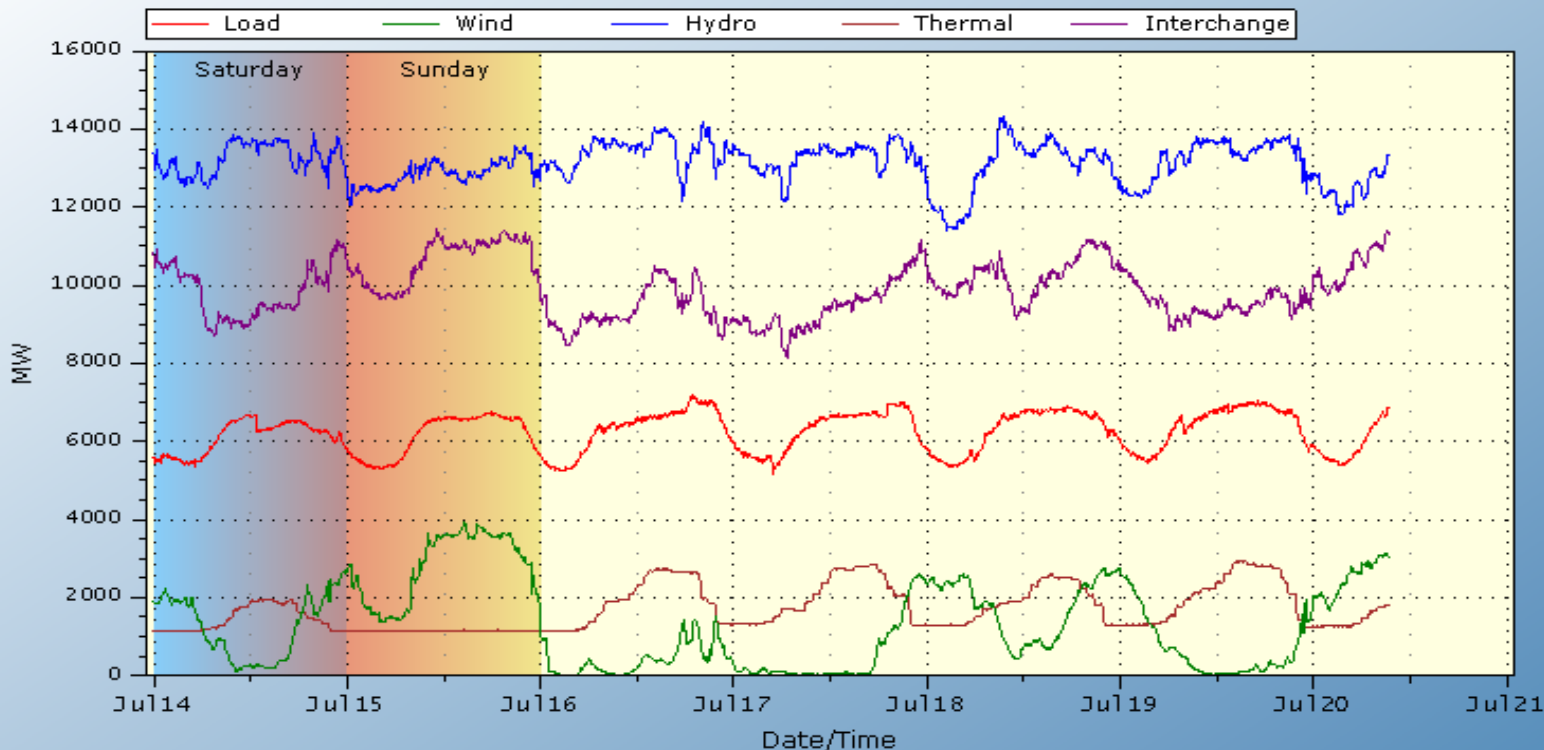


# Actual and Forecasted Flows



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

BPA Balancing Authority Load & Total Wind, Hydro, Thermal Generation, and Net Interchange Last 7 days  
 14Jul2012 - 21Jul2012 (last updated 20Jul2012 09:31:57)



Based on 5-min readings from BPA's SCADA system for points 45583, 79687, 79682, 79685, and 45581.  
 Balancing Authority Load in Red, Wind Gen. in Green, Hydro Gen. in Blue,  
 Thermal Gen. in Brown, and Net Interchange in Purple.  
 Click chart for installed capacity info  
 BPA Technical Operations (TOT-OpInfo@bpa.gov)



# Transmission Updates

## ■ COI N>S

- 4500 MW: 7/07 HE 08 to 7/22 HE 16 due to BPA Marion-Lane 1 500 kV line.
- 4225 MW: 7/18 HE 08 to 7/18 HE 17 due to CISO Table Mountain-Cottonwood 3 230 kV line.
- 4400 MW: 7/23 HE 10 to 7/27 HE 15 due to BPA-Sand Springs: Grizzly-Summer Lake 1 500kV Line Series Capacitor Group 3.
- 4325 MW: 7/24 HE 07 to 7/25 HE 18 due to CISO-Table Mountain-Vaca 500kV Series Capacitor 3 at Table Mountain.
- 4225 MW: 7/24 HE 07 to 7/24 HE 17 due to CISO-Round Mountain-Cottonwood 3 230kV Line and Cottonwood PCB 292.
- 4200 MW: 7/24 HE 09 to 7/24 HE 20 due to BPA-Sand Springs: Grizzly-Summer Lake 1 500kV Line Series Capacitor Group 3; BPA-Rock Creek-John Day 1 500kV Line; and BPA-Wautoma-Rock Creek 1 500kV Line.
- 4050 MW: 7/26 HE 06 to 7/26 HE 18 due to CISO-Tesla-Los Banos 1 500kV Line.

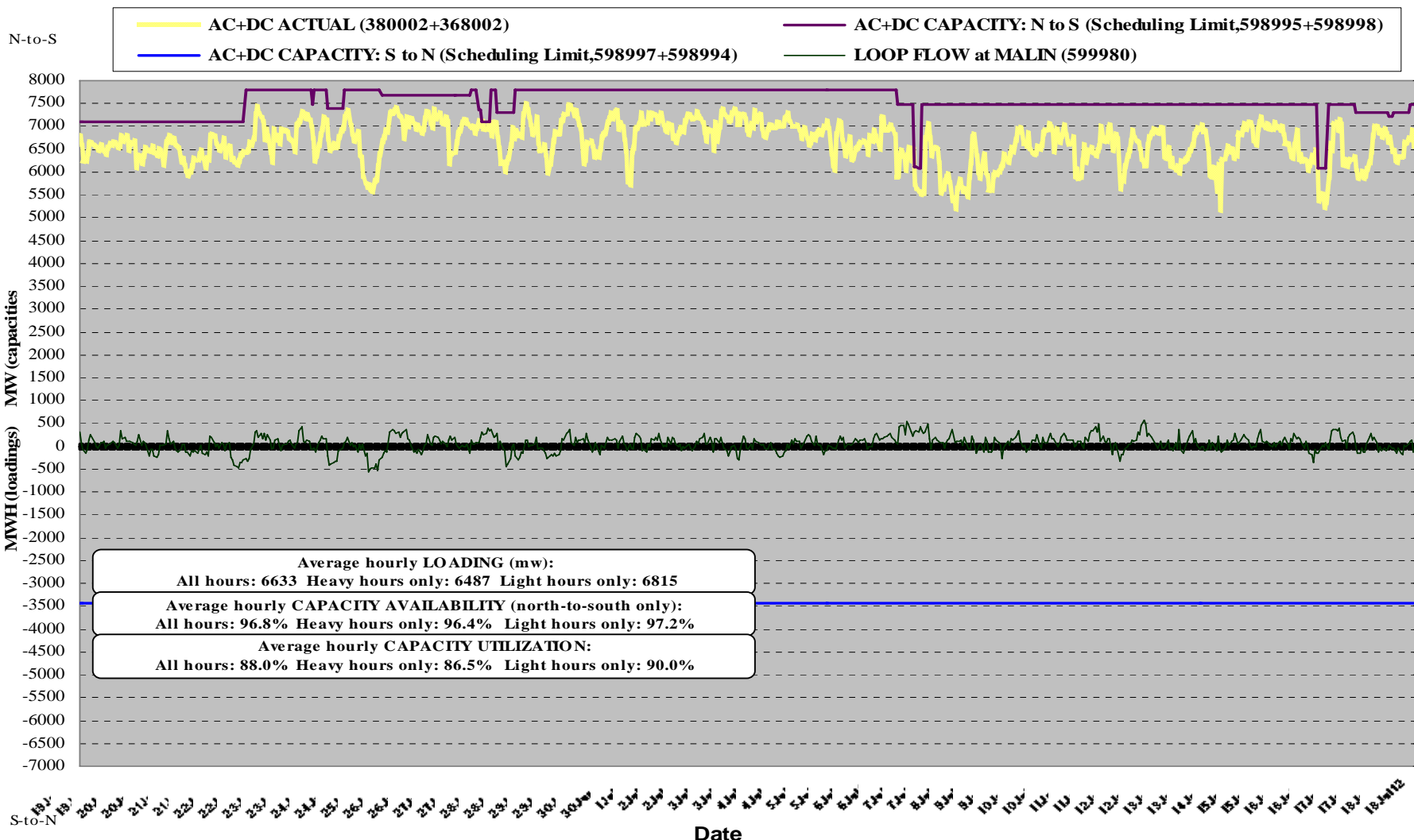
## ■ PDCI N>S

- 2990 MW: At rated capacity next seven days.

## ■ NI S>N

- ~900 MW: 7/23 HE08 to 8/03 HE 16 due to BPA-Chief Joseph-Monroe 1 500kV Line and various other combination of outages. Prescheduled forecasted capacity between 750 MW and 1250 MW.

## AC+DC INTERTIE AVAILABILITY & UTILIZATION: 19JUN12 - 18JUL12 (30 days) ACTUAL LOADINGS and CAPACITIES, BY HOUR

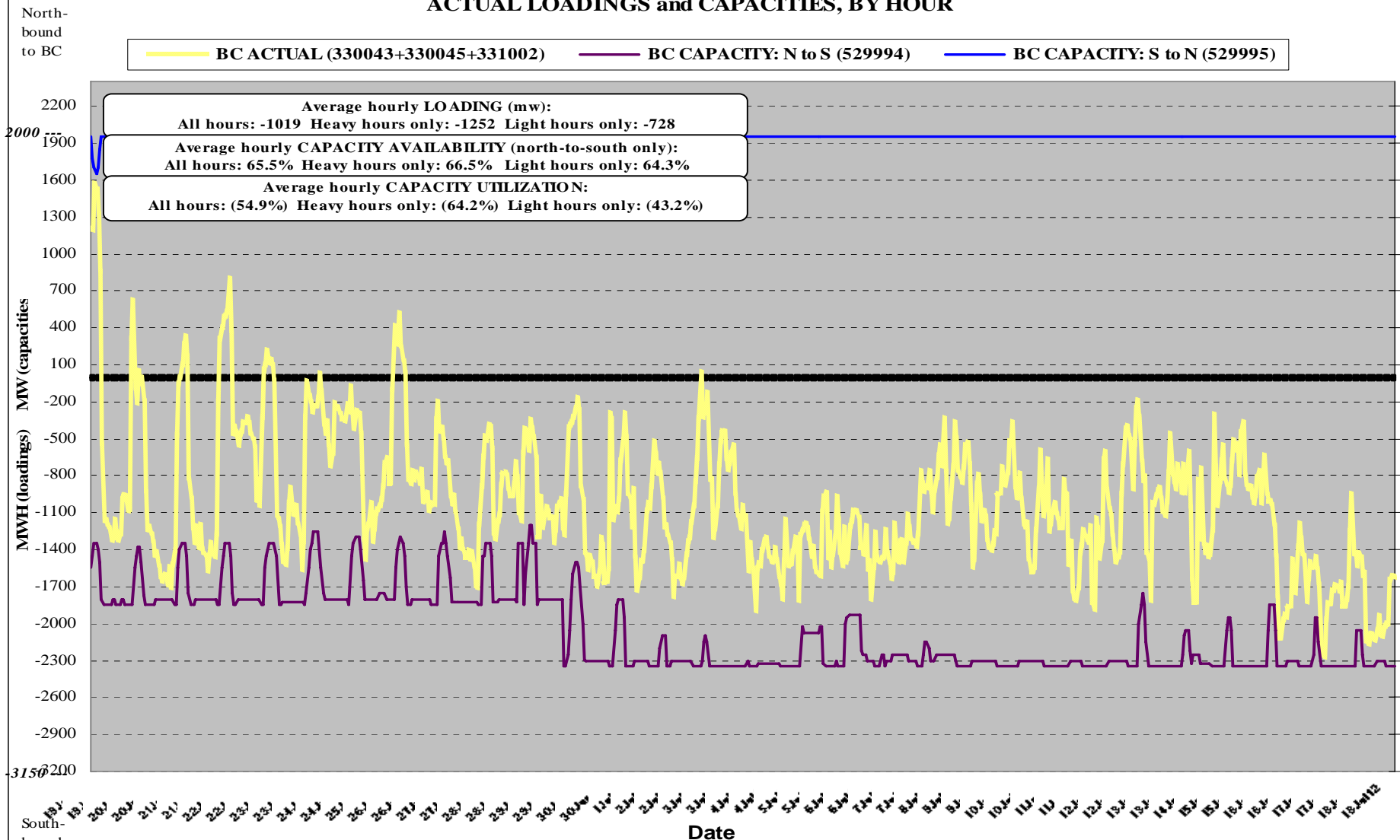


capacity availability = actual capacity/rated capacity, capacity utilization = actual loading/actual capacity  
Source: Hourly data via RODS; Capacities are those at COB or NOB and reflect total path scheduling limit

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: 19JUN12 - 18JUL12 (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 within month commercial transactions, please contact Robert Johnson at (503) 230-3183, [rcjohnson@bpa.gov](mailto:rcjohnson@bpa.gov).
- To discuss prompt month and forward transactions, please contact Alex Spain at (503) 230-5780, [ajspain@bpa.gov](mailto:ajspain@bpa.gov) or Mark Miller at (503) 230-5780, [memiller@bpa.gov](mailto:memiller@bpa.gov).
- For additional information on Oversupply, please contact:  
Project Manager: Nita Burbank - (503) 230-3935, [nmburbank@bpa.gov](mailto:nmburbank@bpa.gov)  
Public Engagement: Maryam Asgharian - (503) 230-4413, [maasgharian@bpa.gov](mailto:maasgharian@bpa.gov)
- Overgeneration website:  
<http://www.bpa.gov/corporate/AgencyTopics/ColumbiaRiverHighWaterMgmt/>