Surface Transportation Board – Rail Energy Transportation Advisory Committee Meeting

Performance Measures Subcommittee Update

September 15, 2011
Using EIA, AAR and individual railroad data sources, a data table is assimilated, and from it......

Five coal-related dashboards, organized as follows:

1. Coal Production, Consumption, and Inventories Dashboard
2. Coal Exports Dashboard
3. Western Rail Coal Carloads Dashboard
4. Eastern Rail Coal Carloads Dashboard
5. Railroad Coal Train Speed Dashboard

*Also added a new dashboard with currently-available CN data*

Each dashboard has three sections:

a. Left - historical and forecasted data (no forecasts of rail metrics)
b. Middle - comparison for the most recent quarter (in this case Q2)
c. Right - current YTD comparison versus the 5-year range
Source Data: EIA

Historical and Forecasted Exports

Q2 Exports Comparison

2011 YTD Exports vs 5-Year Range
Source Data: AAR, BNSF, UP, KCS
CN RAILROAD COAL CARLOADS DASHBOARD

**CN Historical Originations**

*Source Data: AAR/CN*

**CN Q2 Originations Comparison**

**2011 CN YTD Originations vs 5-Year Range**
EASTERN RAILROAD COAL CARLOADS DASHBOARD

Source data: AAR, CSX, NS
Key points from data and dashboards, and general trends

Coal Production and Consumption:

- **Coal Production**: flat for first half 2011. By region, on a YOY basis:
  - Western decreased 2% or -5.6 mn tons
  - Appalachia increased 1.6% or 2.7 mn tons
  - Interior increased 5.7% or 4.3 mn tons

  EIA forecasts total coal production declining by 2.2% or -24 mn tons in 2011 despite higher coal exports

- **Coal Consumption**:
  - Electric Power Sector consumption down by 3.6%, or -17.3 mn tons first half 2011
  - EIA expects full year 2011 consumption in the Electric Power Sector to be down by about 2% or -21 mn tons, in spite of recent hot weather in Texas and much of the East. Natural gas continues to displace some coal in the generation mix.
Key points from data and dashboards, and general trends

Coal Inventories, Exports, and a 2012 Forward Look:

- **Coal Inventories:**
  - Electric Power Sector ended Q2 at 165.8 mn tons per EIA, down 7.3% or -26 mn tons first half of 2011 compared with 2010
  - EIA forecasts year-end inventories at 153.1 mn tons, compared with ending 2010 inventories of 175.2 mn tons

- **Coal Exports:**
  - First half 2011 up 13.8 mn tons in total, or nearly 35% YOY. At 54 mn tons, this is the highest first-half level since 1982 when exports were 57mn tons.
    - Metallurgical coal exports increased 17% or 5.2 mn tons versus first half 2010
    - Steam coal exports increased 86% or 8.6 mn tons versus first half 2010
  - EIA projects total 2011 exports to be up 21%, ending at 99 mn tons versus 82 mn in 2010

- **2012 Forward Look:** EIA expects coal production as well as consumption in the Electric Power Sector to continue to decline in 2012, by about 2% each. Coal exports will decline by about 14% as supply from other global coal producing regions such as Australia recovers from 2010 disruptions.
Key points from data and dashboards, and general trends continued

**Railroad volumes:**

- **General 2011 Trend:** latest YTD data through week 35 of 2011 - AAR reported volumes for major U.S. railroads up 1.9% for carloads and 5.8% for intermodal YOY.

- **COAL CARLOADS:** through week 35, AAR’s originated coal carloads for major U.S. railroads down 0.7% in the aggregate.

  First half 2010 individual railroad YOY coal comparisons:
  - BNSF originations: -36,000 carloads, or -3.1%
  - UP originations: +24,000 carloads, or +2.7%
  - CSX originations: -11,000 carloads, or -1.7%
  - NS originations: +46,000 carloads, or +7.9%
  - CN originations: +12,000 carloads, or +12.3%
  - KCS received: +2,000 carloads, or +1.8%

- Flooding in the West and Midwest has disrupted coal movements beginning in the latter part of Q2, especially from the Powder River Basin – and the BNSF system has been affected to a greater extent than Union Pacific. More recently, heavy rain and flooding in the East and Northeast has caused some delays.
Key points from data and dashboards, and general trends continued

Railroad train speeds:

- **COAL TRAIN SPEEDS:**

  2011 first half coal train speed performance by railroad:
  - BNSF: average 20.1 mph -- 3.6 mph slower, or -8.2%
  - UP: average 25.9 mph -- 1.0 mph faster, or +2.0%
  - CSX: average 16.1 mph -- 0.6 mph slower, or -1.8%
  - NS: average 15.2 mph -- 0.1 mph slower, or -0.2%
  - CN: average 25.2 mph -- 0.3 mph slower, or +0.6%
  - KCS: average 26.4 mph -- 2.0 mph faster, or +3.9%