Surface Transportation Board – Rail Energy Transportation Advisory Committee Meeting

Performance Measures Subcommittee Update

March 14, 2013
Six 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. Canadian Rail Coal Carloads Dashboard
6. Railroad Coal Train Speed Dashboard

Also added new data beginning with Q1 2009 for coal generation and coal’s % share of generation, and a dashboard of generation by fuel type

Most dashboards have three sections:

a. Left - historical and forecasted data (no forecasts of rail metrics)
b. Middle - comparison for the most recent quarter (in this case Q4)
c. Right - current YTD comparison versus the 5-year range
NET GENERATION BY FUEL TYPE DASHBOARD

Historical Net Generation by Fuel Type

Coal  Natural Gas  Nuclear  Hydroelectric  Renewables

Source Data: EIA
WESTERN RAILROAD COAL CARLOADS DASHBOARD

Source Data: AAR, BNSF, UP, KCS
Key points from data and dashboards, and general trends

**Coal Production and Consumption:**

- **Coal Production:** down 7.1% or -77.7 mn tons for FY 2012. By region, on a YOY basis:
  - Western decreased 8.3% or -48.5 mn tons
  - Appalachia decreased 9.0% or -30.3 mn tons
  - Interior increased 0.5% or 0.9 mn tons

  EIA forecasts total coal production declining by 0.8% or -8 mn tons in 2013

- **Coal Consumption/Generation:**
  - Electric Power Sector consumption down by 5.3%, or -26.9 mn tons second half 2012
  - EIA reports full year 2012 consumption in the Electric Power Sector is down by 11.3% or -113.1 mn tons, due to mild winter and natural gas displacement in the generation mix.
  - Coal’s share of net generation decreased to 38% in Q3 2012, versus 42% for the same period in 2011. Gas’s share increased to 33% in Q3 2012, compared with 28.5% for Q3 of 2011.
Key points from data and dashboards, and general trends

Coal Inventories, Exports, and a 2013 Forward Look:

- **Coal Inventories:**
  - Electric Power Sector ended Q3 2012 at 180.6 mn tons per EIA, up 20.7% or an average of 33 mn tons YTD Q3 2012 versus YTD Q3 2011
  - EIA forecasts year-end 2012 inventories at 187.1 mn tons, compared with ending 2011 inventories of 175.1 mn tons

- **Coal Exports:**
  - 2012 exports totaled 124.2 mn tons, up 16.9 mn tons or 15.8% YOY.
    - Metallurgical coal exports decreased 0.7% or -0.5 mn tons vs 2011
    - Steam coal exports increased 46.7% or nearly 18 mn tons vs 2011

- **2013 Forward Look:** EIA expects coal production and consumption to rise versus 2012, due to increasing electricity consumption and higher natural gas prices. Electric Power Sector inventories will decline versus 2012, but will remain on the high side. Exports will decline due to slower economic growth in China and competition from Australia and Indonesia, but will be higher than during the decade preceding 2011.
Key points from data and dashboards, and general trends continued

**Railroad volumes:**

- **General 2013 Trend:** latest YTD data through week 9 of 2013 - AAR reported volumes for major U.S. railroads down 4.0% for carloads and up 7.6% for intermodal YOY

- **COAL CARLOADS:** through week 36, AAR’s originated coal carloads for major U.S. railroads down 9.3% in the aggregate.

  2012 vs 2011 coal comparisons:
  - BNSF originations: -141,000 carloads, or -6.2%
  - UP originations: -260,000 carloads, or -13.4%
  - CSX originations: -182,500 carloads, or -14.8%
  - NS originations: -141,500 carloads, or -11.5%
  - CN originations: +14,500 carloads, or +6.7%
  - CP originations: +11,000 carloads, or +5.2%
  - KCS received: -31,000 carloads, or -13.2%
Key points from data and dashboards, and general trends continued

Railroad train speeds:

- **COAL TRAIN SPEEDS:**

  2012 first half coal train speed performance by railroad:
  - BNSF: average 22.8 mph -- 2.7 mph faster, or +13.6%
  - UP: average 27.2 mph -- 2.2 mph faster, or +8.8%
  - CSX: average 18.5 mph -- 2.0 mph faster, or +11.9%
  - NS: average 17.7 mph -- 2.4 mph faster, or +15.5%
  - CN: average 25.0 mph -- 0.5 mph slower, or -2.1%
  - CP: average 20.3 mph -- 0.2 mph slower, or -1.0%
  - KCS: average 27.1 mph -- 1.2 mph faster, or +4.5%