Surface Transportation Board – Rail Energy Transportation Advisory Committee Meeting

Performance Measures Subcommittee Update

March 5, 2015
Using EIA, AAR and individual railroad data sources, a data table is assimilated, and from it......

Six coal-related dashboards, organized as follows:

1. Coal Production, Consumption, and Inventories Dashboard
2. Net Generation by Fuel Type Dashboard
3. Coal Exports Dashboard
4. Western Rail Coal Carloads Dashboard
5. Eastern Rail Coal Carloads Dashboard
6. Canadian Rail Coal Carloads Dashboard
7. Railroad Coal Train Speed Dashboard

Most dashboards have three sections:

a. Left - historical and forecasted data (no forecasts of rail metrics)
b. Middle - comparison for the most recent quarter (Q3 or Q4 as noted)
c. Right - current YTD comparison versus the 5-year range
### Performance Summary

**Coal Production** (2014 vs 2013)
- **Appalachia**: Decreased 1.3 million tons (-0.4%)
- **Interior**: Increased 4.7 million tons (+2.6%)
- **Western**: Increased 9.4 million tons (+1.7%)
- **Total Production**: Increased 12.7 million tons (+1.3%)

**Coal Consumption** (2014 vs 2013)
- **Electric/Power**: Decreased 4.1 million tons (-0.5%)
- **Retail/Other**: Decreased 0.6 million tons (-1.3%)
- **Met/Coke**: Decreased 1.1 million tons (-5.1%)
- **Total Consumption**: Decreased 5.8 million tons (-0.6%)

**Coal Exports** (2014 vs 2013)
- **Met Coal**: Decreased 3 million net tons (-4.6%)
- **Steam Coal**: Decreased 17 million net tons (-33%)
- **Total Exports**: Decreased 20 million net tons (-17%)

### Coal Production MM Tons

<table>
<thead>
<tr>
<th>2014</th>
<th>Appalachia</th>
<th>Interior</th>
<th>Western</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>67.5</td>
<td>46.3</td>
<td>131.4</td>
<td>245.2</td>
</tr>
<tr>
<td>Q2</td>
<td>69.7</td>
<td>44.8</td>
<td>131.4</td>
<td>245.8</td>
</tr>
<tr>
<td>Q3</td>
<td>67.5</td>
<td>49.3</td>
<td>138.5</td>
<td>255.3</td>
</tr>
<tr>
<td>Q4</td>
<td>65.6</td>
<td>47</td>
<td>137.7</td>
<td>250.3</td>
</tr>
<tr>
<td>Sum:</td>
<td>270.3</td>
<td>187.4</td>
<td>539.0</td>
<td>996.6</td>
</tr>
</tbody>
</table>

### Coal Consumption MM Tons

<table>
<thead>
<tr>
<th>2013</th>
<th>Electric Pwr</th>
<th>Other</th>
<th>Coke</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>212</td>
<td>11.8</td>
<td>5.3</td>
<td>229.1</td>
</tr>
<tr>
<td>Q2</td>
<td>200.2</td>
<td>10.8</td>
<td>5.5</td>
<td>216.5</td>
</tr>
<tr>
<td>Q3</td>
<td>237.3</td>
<td>10.8</td>
<td>5.4</td>
<td>253.5</td>
</tr>
<tr>
<td>Q4</td>
<td>208.9</td>
<td>11.9</td>
<td>5.3</td>
<td>226.1</td>
</tr>
<tr>
<td>Sum:</td>
<td>858.4</td>
<td>45.3</td>
<td>21.5</td>
<td>925.2</td>
</tr>
</tbody>
</table>

### Coal Exports MM Tons

<table>
<thead>
<tr>
<th>2013</th>
<th>Met</th>
<th>Steam</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>18.2</td>
<td>13.7</td>
<td>31.8</td>
</tr>
<tr>
<td>Q2</td>
<td>16.1</td>
<td>13.3</td>
<td>29.4</td>
</tr>
<tr>
<td>Q3</td>
<td>15.9</td>
<td>12.7</td>
<td>28.6</td>
</tr>
<tr>
<td>Q4</td>
<td>15.4</td>
<td>12.4</td>
<td>27.8</td>
</tr>
<tr>
<td>Sum:</td>
<td>65.6</td>
<td>52.1</td>
<td>117.6</td>
</tr>
</tbody>
</table>

### Coal Inventories MM Tons

<table>
<thead>
<tr>
<th>2013 YTD</th>
<th>Electric Pwr</th>
<th>Bit</th>
<th>Sub-Bit</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>172</td>
<td>246</td>
<td>266</td>
<td>684</td>
</tr>
<tr>
<td>Q2</td>
<td>171</td>
<td>249</td>
<td>255</td>
<td>674</td>
</tr>
<tr>
<td>Q3</td>
<td>152</td>
<td>221</td>
<td>230</td>
<td>603</td>
</tr>
<tr>
<td>Sum:</td>
<td>494</td>
<td>716</td>
<td>751</td>
<td>1,961</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2014 YTD</th>
<th>Electric Pwr</th>
<th>Bit</th>
<th>Sub-Bit</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>118</td>
<td>171</td>
<td>182</td>
<td>471</td>
</tr>
<tr>
<td>Q2</td>
<td>133</td>
<td>184</td>
<td>194</td>
<td>511</td>
</tr>
<tr>
<td>Q3</td>
<td>124</td>
<td>181</td>
<td>171</td>
<td>476</td>
</tr>
<tr>
<td>Sum:</td>
<td>375</td>
<td>537</td>
<td>547</td>
<td>1,459</td>
</tr>
</tbody>
</table>

**Tonnage**
- 2013: -1.2, 4.7, 9.4, 12.7
- 2014: -1.2, 4.7, 9.4, 12.7

**Percent**
- 2013: -0.44%, 2.57%, 1.77%, 1.29%
- 2014: -0.44%, 2.57%, 1.77%, 1.29%
**Performance Summary**

**Railroad Carloads** (2014 estimate versus 2013)

- **Burlington (BNSF):** Increased 51,000 carloads (+2.3%)
- **Union Pacific:** Increased 62,000 carloads (+4.1%)
- **Kansas City Southern:** Increased 1,000 carloads (+0.4%)
- **Norfolk Southern:** Decreased 39,000 carloads (-3.8%)
- **CSX Transportation:** Increased 14,000 carloads (+1.5%)
- **Canadian National:** Decreased 4,000 carloads (-1.7%)
- **Canadian Pacific:** Increased 10,000 carloads (+4.3%)

**Total Carloads:** Increased 96,000 carloads (+1.5%)
U.S. COAL PRODUCTION, CONSUMPTION, AND INVENTORIES DASHBOARD

**Historical and Forecasted Production**
- Total
- Appalachia
- Interior
- Western
- Forecast

**Q4 Production Comparison**
- 2010
- 2011
- 2012
- 2013
- 2014

**2014 Production vs 5-Year Range**
- 5 Year Range
- 2014

**Historical and Forecasted Consumption**
- Electric Pwr Sector
- Retail & Other Industry
- Coke
- Forecast

**Q4 Consumption Comparison**
- 2010
- 2011
- 2012
- 2013
- 2014

**2014 Consumption vs 5-Year Range**
- 5 Year Range
- 2014

**Historical and Forecasted End-of-Period Inventories**
- Bituminous Coal
- Sub-Bituminous Coal
- Electric Pwr Sector

**Q4 End-of-Period Inventories Comparison**
- 2010
- 2011
- 2012
- 2013
- 2014

**2014 End-of-Period Inventories vs 5-Year Range**
- 5 Year Range
- 2014

Source Data: EIA
Source Data: EIA

NET GENERATION BY FUEL TYPE DASHBOARD

Historical Net Generation by Fuel Type

- Coal
- Natural Gas
- Nuclear
- Hydroelectric
- Renewables

(000 Megawatthours)

Q1 Q2 Q3 Q4 2009 2010 2011 2012 2013 2014

Source Data: EIA
Source data: AAR, CSX, NS