

Minutes
Rail Energy Transportation Advisory Committee
March 6, 2008

The second Rail Energy Transportation Advisory Committee (RETAC) meeting was held at the Surface Transportation Board (STB) offices in Washington, DC on March 6, 2008. Paul Bowers and Alan Shaw, co-chairs, called the meeting to order shortly after 9:00 a.m. The meeting agenda and copies of documents presented during the meeting are attached separately to these minutes.

STB Chairman Nottingham welcomed the committee and said the Board was looking forward to rolling up their sleeves with the committee and developing a better understanding of the transportation of energy.

Minutes of the first RETAC meeting on October 24, 2007, were approved.

Committee treasurer David Rohal reported that dues from some committee members had been received. After paying for lunch, the committee fund held \$1,675.00. Members who had not contributed were asked to administer the \$200 invoice for the committee dues.

Committee co-chair Paul Bowers announced that he would step down from RETAC due to his promotion within Southern Company, and that the STB has named Jeff Wallace, VP of Fuels at Southern Company, to replace him on RETAC. Wallace was subsequently nominated and elected the shipper co-chair of RETAC replacing Bowers.

Co-chair Alan Shaw reviewed the RETAC charter.

Paul Aguiar of the STB Office of Economics, Environmental Analysis, and Administration presented fuel surcharge quarterly reports submitted by Class 1 railroads under STB Ex Parte No. 661 (Sub-No. 1). The reports were made a requirement following an unreasonable practice determination by the Board. Mr. Aguiar said that this was the first data from the new reporting requirement and that there were no serious problems in reporting.

Most of the meeting was dedicated to member presentations and committee discussions on respective roles in the energy supply chain. Notes of discussion points and the presenters' views are represented below. Presentation documents are attached.

Western Coal Producers – Kent Smith, Arch Coal

Kent Smith said that the western mine operations are a capital-intensive continuous mining process with heavy equipment shuttling coal from the pit to the load-outs.

The economics of the mining process favor a steady flow of production and shipping. Approximately 65 trains were loaded each day in the joint-line area of the Powder River Basin to handle the 358 million tons of coal mined in 2007.

If a train-loading opportunity is missed for whatever reason, it is difficult to recover the lost volume as the mines have limited surplus capacity in silos due to the capital-intensive nature of the facilities and permitting limitations that do not allow stockpiles.

Receivers nominate the tons wanted through the on-line NCTA forecast process, and on-site coordination handles unplanned breakdowns, delays, and disruptions between mines and railroads. Producers felt that BNSF's addition of an office assisted with local coordination, however there may be other opportunities to improve tactical communication.

For the longer-term, the Powder River Basin is where the growth in coal production is expected to take place. Reference was made to the CANAC study which projects PRB joint-line shipments will grow to 500 million tons by 2013. The world-wide demand for energy is growing led by India and China. Little infrastructure exists to efficiently export PRB coal but Smith expects a natural progression of coal to the east. For the purposes of planning capacity, the producers do not know which markets will support this expected growth.

Eastern Coal Producers -- Betsy Monseu, Foundation Coal

Production in Central Appalachia is declining while production in northern Appalachia and the Illinois Basin is projected to increase, a function of scrubbers being installed by eastern utilities. Increased foreign demand for eastern coals is currently being experienced and has the potential to continue. This, in addition to growth in electricity generation and coal to liquids projects will fuel future increased demand.

More rail and port capacity exists in the east than the west, but limitations in such capacity can challenge to eastern coal supply and expansion. To bring on new eastern mining capacity, it can take up to 10 years to install a long-wall underground mine at a green field site due to lead times and permitting issues. Other challenges to coal supply and expansion include significantly increasing costs, labor availability, and greenhouse gas reduction initiatives.

The large number of mines and diversity of load-outs on CSX and 80 Central Appalachian load-outs on NS, not all of which are equipped with efficient batch weigh flood loading facilities, make best practices and supply chain coordination challenging. It is important to coal producers that carriers continue to participate in efficiency improvement projects (tracks, scales, railcars, loading and unloading).

In terms of supply chain planning, relationships are aligned with commercial relations with transportation arranged by the coal user. Producer forecasting, scheduling, and operational needs include advance communication, carrier flexibility, and carrier reliability. Consistent processes are needed, including for example, when events cause missed loadings, it is important to determine whether permitted trains will roll into the next month or be cancelled. The ability to carryover missed trains into the following month varies by market status.

An outstanding issue in the supply chain is whether there is enough of a reserve margin in the transportation system and who pays for it. Utilities retain a service margin because the costs of failure are significant so capacity covers peak demand.

Eastern Railroads – Henry Rupert, CSX Transportation

Railroads face significant challenges as it relates to infrastructure and reserve margin and depend highly on management processes for planning and coordination.

CSX operates a 21,000 mile network in the eastern United States and handles about 185 million tons of coal annually. It serves 130 mines and 140 coal receiving destinations and has over 350 coal trains in operation daily. Most of the coal loaded on CSX originates in Central Appalachia, a very challenging coal mining and railroading geography.

Rail capacity is defined as the amount of trains that can operate over a specific railroad line segment with reliability and recoverability. Service quality for the network begins to deteriorate when the number of trains exceeds rail capacity. Incremental additional trains and unexpected spikes in demand can bog the system down.

Investments in rail capacity are based on anticipated economic returns. Strategic planning for infrastructure investment is a multi-year process. Constructing and maintaining reserve capacity is very expensive and must be supported by economics. Investment in railcars and locomotives to support acute spikes, such as fluctuations in utility stockpiles and export/import coal, is significant.

Railroads seek guidance from customers on where to invest. Uncertainty revolving around environmental compliance and regulatory issues has a dampening effect on infrastructure decisions. Since planning and constructing new capacity has a long-lead time, decisions to make wholesale shifts to new coal origins must be communicated early.

Commercial projections including a rolling five-year forecast and an annual business plan are combined with monthly, weekly and daily processes for managing the movement of coal. Receivers provide tonnage nominations, mine

operators provide production forecasts and reservations and schedules are collaboratively produced. Contracts are generally set up with minimum volumes guaranteed to the railroad. Unless otherwise provided for, the service standard for coal moves is reasonable dispatch, the same as common carriage movements.

The energy supply chain is more complex and interdependent than commonly recognized. Opportunities exist in the supply chain for increasing productivity, alignment, and communications by synchronizing loading/unloading operations, smoothing purchasing and stockpiles, and maximizing the tons per slot of railroad capacity. Improvement is dependent on the performance of all participants.

Railroads rely on the business decisions of all other parties in the coal supply chain. In the ethanol supply chain, origin and destination capacity, as well as ability to load and unload efficiently are all crucial to the coordination of ethanol logistics.

Western Railroads – Steve Bobb, Burlington Northern Santa Fe

Bobb was unable to attend and this presentation was postponed to next meeting.

Western Utilities – Susan Arigoni, Xcel Energy

Utilities are regulated by state jurisdictions with expectations for reliability, price, and quality. Coal delivery shortfalls affect inventory levels and generation reliability.

Utilities have seen increases in rail costs and declining train speed over time affects the utilization of coal cars frequently owned by utilities.

Supply chain disruptions on coal from the Powder River Basin (PRB) have been caused by a large number of events including derailments, outages, dumpers, mechanical failures, railroad work rules, miscommunications, etc.

Capacity issues seem to be route-specific. The velocity benefits of the expansion of the joint line into the PRB are evident as reserve capacity is in place for future growth. Continued vigilance is required.

Utilities have made coal-handling investments and added resources to improve cycle times and have recently reassessed inventory practices. Best practices include cycle time analysis, shipment calendars, in-pit crushing, early notification of disruptions, mid-month assessment of the supply chain performance, and supply diversification.

Utility stockpiles are utilized as a backstop against railroad and production failures. The cost associated with this inventory is balanced against the risk of not being able to reliably generate electricity.

Utilities respect the challenges of railroad investment to maintain supply chain reliability. Cost increases are expected on energy in all forms as well as challenges from greenhouse gas legislation and resolution of the coal dust issue.

Alternative energy questions will be related to economics as many coal contracts are expiring and repricing. A growing component of energy will be from renewable sources such as wind farms and the next generation of nuclear power. Under the current view, coal is the least cost, nuclear second, natural gas is most expensive, and wind generation economics continue to improve. Xcel Energy will reduce coal generation to accommodate conditions favorable to wind generation.

Eastern Utilities – Jeff Wallace, Southern Company

Eastern utilities source coal from all producing basins based on economics. Southern Company generates electricity at 21 plants with 65 producing units.

Coal flows have changed significantly. Columbian coal delivered through the port of Mobile and distributed to river and coastal units is up, as is coal from the PRB. Central Appalachian coal use is down.

Utilities have an obligation to meet demand at the best cost of energy and see continued shifts in supply. Therefore, utilities need a railroad system that will change. Best practices include advance notice procedures, communications, technology, and rolling projections.

Southern Company needs railroads to be prepared for swings in sourcing patterns and coal supply. To accommodate the unpredictable shifts in sourcing, railroads will need to maintain reserve capacity.

Utilities use competitive solicitations and contract hedging to match supply and transportation contracts.

RETAC discussed the need for open and transparent communications between all segments of the energy supply chain and the need to enhance efficiency across the supply chain.

After discussion, four sub-committees and subcommittee chairs were chartered as follows:

- Communication between shippers, receivers and railroads (Joe Hopf)
- Capacity planning (Henry Rupert)
- Best Practices (Susan Arigoni)
- Performance Measures (Betsy Monseu)

Discussion topics at the next meeting will include presentations on the ethanol supply chain, the western railroad presentation on coal transportation, subcommittee progress reports, and an update on the Christensen study on rail competition previewed at the first RETAC meeting.

STB Chairman Nottingham thanked the committee for the fact-filled and open discussion and for educating the Board on these important issues.

Co-chairs adjourned RETAC at 2:00pm.

The next meeting is tentatively scheduled for June 12, 2008.