

RETAC – Capacity Subcommittee Report

December, 2008

Subcommittee Members

- Henry Rupert – CSX Transportation, Subcommittee Chair
- William Berg – Dairyland Power Cooperative
- Steve Bobb – BNSF Ry. Co.
- Sameer Gaur – GE Equipment Services
- Daryl Haack – Farmer
- Bob Hulick – TrinityRail
- Ed McKechnie – WATCO Company
- Jim Redding – Aventine Renewable Energy
- Dan Sabin – Iowa Northern Ry. Co.
- Jeff Wallace – Southern Company Generation

Subcommittee Goal

To examine energy supply chain capacity issues that impact the reliability of energy product deliveries, primarily coal and ethanol, and develop findings and recommendations to the STB.

Scope

Advocating approaches to having sufficient physical infrastructure in place and available to move energy resources when and where needed.

Process

- Focused discussions on the Specific Issues identified
- The subcommittee first met in May at the Chicago and in August at the CSXT Huntington Division office
- Meeting held at Southern Company's Scherer Plant in Macon, GA, in October
- The group agrees face-to-face meetings are productive and visiting operating sites is beneficial

Specific Issues

#1

- How can large investments for mine development, rail infrastructure, locomotives and rolling stock be made when the political and regulatory climate for coal mining and use (or policy changes supporting alternative energy sources such as ethanol or other bio-fuels) is uncertain?

Specific Issues

#2

- What is the nature and extent of reserve capacity that railroads need in order to meet the increasing demand for flexibility and to accommodate surges in volume?

Specific Issues

#3

- What mechanism is necessary to ensure that investments in capacity are made when and where needed?

Specific Topic #1

- How can large investments for mine development, rail infrastructure, locomotives and rolling stock be made when the political and regulatory climate for coal mining and use (or policy changes supporting alternative energy sources such as ethanol or other bio-fuels) is uncertain?

Discussion #1

Impacts on Coal Producers

- Mountaintop Mining (Section 404 permits) is basically a water pollution issue
 - Major environmental concern facing coal producers, primarily impacting Central Appalachia and eastern Kentucky
 - Litigation has caused delays in issuance of some mining permits and could lead to cancellation of others
- Increased federal scrutiny and more stringent safety requirements and procedures introduced by MSHA (Mine Safety Health Administration)
- These actions threaten to increase mining costs, reduce production, escalate the potential for mine closures, while rendering some coal reserves economically unrecoverable.

Discussion #1 (Cont'd)

Impacts on Utilities

- The Federal Government over the years has enacted several programs to reduce SO₂, NO_x and mercury air emissions through. Some states and regions adopted even more stringent emission abatement programs.
- Pressure from these states, along with the environmental community, resulted in two U.S. Court of Appeals decisions to vacate the Federal CAIR and CAMR regulations.
- The resulting patchwork of complex state and regional initiatives increases uncertainty for emissions reduction strategies.
- Green House Gas (GHG) emissions (aka CO₂; Climate Change; Global Warming) Legislation at the federal level, regional/state alliances are underway

Position #1

- Continued and significant uncertainty with respect to how environmental regulatory/legislative specifics and timing poses major strategic obstacles for consumers.
- Implications have direct impact on compliance strategies and affect:
 - Coal production, coal sourcing, logistics flows/opportunities
 - Control Technology installations and operations, fuel switching, unit dispatch
 - Viability of older generating units, and development of new, coal-fired generation.
- The high degree of uncertainty makes investment decisions difficult and risky

Specific Issue #2

- What is the nature and extent of reserve capacity that railroads need in order to meet the increasing demand for flexibility and to accommodate surges in volume?
 1. The need for diversification and flexibility between coal sourcing regions is increasing
 2. The ability of railroads to provide flexibility is limited by cost of capacity and necessary economic returns on capital
 3. Flexibility is limited by the uncertainty and long lead times required to build needed infrastructure

Discussion #2.1

The need for diversification and flexibility between coal sourcing regions

- Consumers want the option to purchase from the most economic source and be certain of prompt delivery
- Consumers view a need for rail industry reserve capacity to accommodate both additional traffic in traditional lanes and significant shifts in coal sourcing.
- Determining the capacity need and timing is complex;
 - Reserve capacity must be supported by adequate economic justification

Discussion #2.1

The need for diversification and flexibility between coal sourcing regions (cont'd)

- Coal produced in each region has different physical and chemical characteristics
 - freight costs are relative geographically to the end user
- Many utilities have added control technologies allowing them to burn coals with lowest delivered cost
 - Utilities want the ability to change sources to meet that goal
- However, the magnitude of the shifts can strain transportation or leave expensive assets stranded
 - Maintaining capacity that would be seldom used is costly and, from a business perspective, prohibitive
- Maintaining flexibility will be a primary goal of the participants in the energy supply chain.

Discussion #2.2

The ability of railroads to provide flexibility is limited

- Significant changes to existing transportation flows and / or new transportation demand stresses the rail network and impacts service quality
- Predicting where fuel will be sourced is challenging for utilities.
- The reality of rail transportation is the long-lived capital intensity of its infrastructure.
- Railroads cannot afford to have significant amounts of spare capacity on hand “just in case” it may be needed for future shifts or growth in demand
- Individual shippers are likely not willing to pay for the future reserve capacity that they may never use

Position #2

- A reckless “build it and they will come” approach is not a financially feasible strategy for today’s railroads.
- Railroads cannot always expand capacity quickly enough to meet today’s demand changes that result from a very dynamic energy market.
- Robust forecasting and business planning, an overall network capacity expansion and commercial arrangements that support investments are needed

Specific Issue #3

- What mechanism is necessary to ensure that investments in capacity are made when and where needed?

Discussion #3

- A railroad's capital budget consists of track maintenance (rail, ties, ballast, bridges), locomotives, rolling stock (railcars of various types), technology and capacity.
- Capacity expenditures are directly related to increasing the number of trains that can operate over a particular segment of the railroad.
- Candidate projects are determined by an operations research technique that models traffic flows and density.
- Typically, capacity projects are evaluated independently and generally must exceed a hurdle rate to be considered.
- Each year, several capacity projects remain on the drawing board.

Discussion #3 (cont'd)

- Capacity planning and choke point analyses are highly dependent on volume projections provided to railroads by customers.
- Broader market indicators and independent assessments are also used to project changes in volume.
- Efforts to modernize consumer facilities and to design more efficient operations have increased.
- An example is redesigning a consumer facility to increase the number of railcars that can be loaded or unloaded in a twenty-four hour period.

Discussion #3 (cont'd)

- A contemporary topic regarding rail capacity is the **Freight Rail Infrastructure Capacity Expansion Act of 2007 (FRICEA)**.
- Railroads view the bill as means to improve the capacity of the overall network by advancing projects that would have otherwise been delayed or never approved.
- Shippers want to see direct benefits and be able to hold railroads and other beneficiaries accountable for ensuring that qualifying investments meet the test of adding capacity
- The ability for an individual rail customer to see a direct benefit from capacity investments is nearly impossible in a network industry like railroads

Position #3

- The consensus view of the Subcommittee is that:
 1. Railroads and shippers agree that additional investment is needed and that FRIECA could lead to increased investments and capital spending.
 2. In general, shippers do not oppose the tax credit.
 3. Shippers would be more willing to provide support for the legislation with more assurance that qualifying investments actually increase capacity beyond that which would have otherwise occurred.

Next Steps

- Continue discussions
- Subcommittee members to solicit input from industry participants not directly represented in RETAC.
- Obtain direct feedback from Committee members and STB
- Develop a strategy to advance the Positions of the Subcommittee including the furthering of FRICEA with relevant constituents