Rick Siger, Deputy Secretary of Commerce and Trade opened the meeting.

Introductions

Mr. Siger performed meeting introductions and reviewed schedule of upcoming meetings. This was followed by attendees introducing themselves followed by a review of the agenda.

Background

Steve Walz from DMME reviewed the statute calling for the Energy Plan, the eight primary plan objectives, and plan outline.

Infrastructure Presentations

Dick Spellman from GDS Associates Inc. provided a presentation and general overview of energy infrastructure in Virginia.

Matt LaRocque from PJM provided a presentation on PJM’s Regional Transmission Expansion Plan.

- The PJM regional transmission planning process provides for public input through the Transmission Expansion Advisory Committee (TEAC) and the Organization of PJM States Initiatives (OPSI)
- Ten backbone transmission projects have been proposed in the PJM area to resolve reliability criteria violations through 2021

Erin Puryear from the Old Dominion Electric Cooperative provided an Energy Infrastructure presentation.

- Investment in generation has exceeded in transmission by about 20 times between 1999 and 2005. We need better balance between generation and transmission.
- Strongly encourage state participation in all PJM forums such as OPSI.

Jim Kibler, representing the 4 primary gas companies in Virginia spoke about gas demand growth trends and associated challenges. Points of interest included:

- Virginia is experiencing twice the national average of growth/demand. At current rates, demand could exceed capacity by 193 billion cubic feet/year.
- Infrastructure needs to face this shortfall include increased upstream capacity, access to Outer Continental Shelf resources, liquefied natural gas options, additional storage and peak day assets, and improved intrastate transmission assets.
- Policy needs include rate-making reform, accelerated siting permitting, and reward of long-term capacity enhancements.
Advisory Group Open Discussion

After the break, Rick Siger introduced discussion questions on energy infrastructure issues.

Discussion Question 1

*We are close by the primary energy-producing region in Virginia. We have seen highlights about the infrastructure involved in production, storage, and delivery of coal and natural gas produced in Southwest Virginia. Do we have an adequate system to continue to produce and deliver these resources to end-users? If not, what improvements are needed?*

Question 1 Discussion

Mike Quillen, Alpha Natural Resources:
Virginia has an extensive coal transportation system providing alternate routes moving coal from the mines to customers. However, container traffic into Hampton Roads is creating a capacity challenge and scheduling delays for coal shipments.

Jim Kibler, Virginia Natural Gas/AGL Resources:
Constraints on delivery in the eastern portion of the state. There were 22 days of natural gas shut-offs to Hampton Roads interruptible customers post Katrina.

Dale Lee, Roanoke Gas:
There are natural gas pipeline constraints and storage capacity in the western part of the state also.

10-year demand will require additional infrastructure. Infrastructure constraints have cost impacts to customers.

Several members:
Size of electric utilities stockpile of coal has reduced over past decade – reliability of receiving shipments has been adequate and stable.

Augie Wallmeyer, Virginia Independent Power Producers, Inc.:
Independent Power Producers are generally comfortable with coal supplies. New plants have smaller footprints and less room for storage options.

Tommy Hudson, Virginia Coal Association:
Planning needs to include a wok-force focus. Rick Siger mentioned that the Economic Development strategic planning process will also address workforce issues. Steve mentioned similar challenges with support (commercial drivers for transport/hauling, mining engineers, etc.).

Aldie Warnock, Allegheny Power:
Workforce is also an issue with other energy industry sectors.

Tommy Hudson:
Declining workforce is not a wage issue – coal is highest paid work in the region.
New employment prospects are either not willing or not certified.

Mike Quillen:
There was a generation of potential coal industry workers lost due to the dip in demand and cost of coal. There is a need to improve curriculum (advanced technology) and to provide more access to educational opportunities. Coal is also subject to bad PR and geography (demographics) does not attract workers from other areas.

Mike Town, Sierra Club:
If interests work together, should be able to arrive at a positive solution – noted emphasis on underground mining.

**Discussion Question 2**
*We have heard about the PJM’s regional electric transmission planning process – how it involves the PJM Interconnection, its Transmission Expansion Advisory Committee, the Federal Energy Regulatory Commission (FERC), and the state. How can Virginia ensure it has a reliable electric delivery system, involving both electric transmission and adequate generation to supply our needs, under this system? Can this system support development of distributed electric generation from renewable sources, combined heat and power projects, and new large generating plants? Does Virginia need any different processes to address electric infrastructure issues?*

**Question 2 Discussion**

Herbert Wheary, Dominion Virginia Power:
Reminded the group that this is a regional issue and with electricity, there is a need to optimize assets on a regional basis (PJM). Noted the solution will require a combination and balance of generation and transmission improvements.

Matt LaRocque, PJM Interconnection:
Up until several years ago, wholesale price of electricity was not enough to invest in new generation.
PJM developed a new capacity market model to bring new generation assets to PJM footprint.
Stated there had been a significant recent increase in demand response.

Dan Holmes, Piedmont Environmental Council:
Asked if growth increase was consistent across the region or was it concentrated in VA?
Response was that growth is relatively across the board but it was higher in the Northern Virginia area.

Matt LaRocque:
Locational Marginal Pricing (LMP) provides an economic model to help infrastructure development and resolve congestion.

Irene Leech, Virginia Citizens Consumer Council:
Stated that it seemed that LMP was an actually an incentive to keep prices high. Matt LaRocque said that PJM felt otherwise.

Augie Wallmeyer:
Noted that some people don’t care about price and don’t want infrastructure regardless of cost threat.
Price signals won’t solve alone – also need investment and policy solutions.

There was some discussion on the Generation Asset Tracking System (GATS) as a means to track renewable energy resources.

Mitch King, MDV Solar Energy Industries Association:
In regards to 2003 northeast blackout, there was a study indicating that if there had been more solar generation, the blackout could have possibly been avoided.

LMP does good job for wholesale pricing signals, but this is not passed through and there is nothing offered at the retail level.

Pacific (CA) invested $1.5 billion for smart meters for retail pricing signal response. It was acknowledged that this was a utility-based application, not PJM (wholesale).

Mike Town:
Need a balance of placing infrastructure near transmission (and other responsible development) with reducing future needs (through conservation and efficiency).
Need better infrastructure management.

Aldie Warnock:
There is a disconnect between reliability and environmental requirements. Example of Potomac Plant (shut-down due to emissions problem or keep running for critical supply to DC area grid). Need a clearinghouse with a final say.

**Discussion Question 3**
The state, through the State Corporation Commission, has direct involvement in addressing electric and natural gas distribution systems. Is this process adequate to ensure distribution system reliability?

**Question 3 Discussion**

Brett Vassey, Virginia Manufacturing Association:
No state support for gas pipeline infrastructure decision-making as is done for other types of infrastructure, eg. industrial site road and rail access. Needs to be more interaction between government and industry with issues such as pre-siting.

Economic development opportunities could include using public-private partnerships, industrial development authorities, or the Virginia Resources Authority to develop infrastructure.

There was discussion on using TEAC for states input to transmission siting.

Mitch King:
Is state government looking at bridging gap between generation and high-congestion areas?

Stated that SCC has a role in this. Question was raised if there should be incentives for lines based on price, not just reliability.

**Discussion Question 4**
We have heard about issues related to our natural gas infrastructure. Do we have weak links in our natural gas supply system to Virginia as a whole or to regions in Virginia? If so, what would you recommend we put in place to shore this system up?

**Question 4 Discussion**

Dale Lee:
Noted that SCC process is barely adequate and needs to be quicker.
Augie Wallmeyer;
   Noted this as another example of public policy needs.

Discussion Question 5
Many environmental and community development issues arise when considering new energy infrastructure. Developers must meet federal, state, and local environmental and land use requirements. They must obtain permits, certificates, or other approvals from organizations such as the FERC, SCC, DEQ, other state agencies, and local cities or counties. Senate Bill 262 directed the Secretary of Natural Resources and the SCC to develop a proposal for a coordinated review of permits for an energy facility requiring a state environmental permit from a natural resource agency and a SCC certificate. Many activities require environmental impact review. Can environmental and community issues, including impact on economically disadvantaged or minority communities, be adequately aired in the permit and certificate review process? Should this process be modified?

Question 5 Discussion

Jim Kibler:
   Substance of permitting is okay, but the process is not a regular or rational. Described the process as “circular”. Need a process to scope out and deal with the issues on a systematic (linear) basis and move on.

See FERC pre-filing permitting process as example.

Irene Leech:
   Need more public information. In many cases, the public is dissatisfied because they feel like a project is “run down their throat”.

   Spoke about land-owner issues and the possibility of compensating for right-of-ways similar to the cell phone industry compensation for tower placement sites.

Dale Lee:
   Cautioned against pre-publicizing projects before having a clear scope and direction.

Mike Town:
   Need checks and balances and can’t change the fundamental philosophy of public review and allowing the public to have their voice. Mentioned concern that streamlining will short-circuit public input.

Steve Walz:
   Discussed the difference between coordinating and streamlining and the importance of being more efficient in the decision making process without adversely impacting the outcome.

Jim Kibler:
   Stated there is a need for a “yes” or “no” before getting in to a long drawn out process and spending considerable money.

Judy Dunscomb, The Nature Conservancy:
   The public needs adequate, relevant information and time to digest it.
Augie Wallmeyer:  
Stated that he felt like even though there were good intentions, coordination efforts were a bad idea and won’t work. Groups are only able to make decisions in the areas of their expertise and legal authority.

Brett Vassey:  
Sees the potential advantages and noted analogy of local permitting and the success of “one-stop-shopping”.

Mitch King  
Stated that the current process places a larger proportional burden on renewables (economy of scale issue because renewable installations are small systems).

**Discussion Question 6**

*Companies must have reasonable assurances that it can recover its costs and an adequate return when making investments in energy infrastructure. Decisions on investment are primarily made in the marketplace. However, many utility investments are also subject to regulatory controls through certification and rate case proceedings. Is this process adequate to balance the need for business flexibility and rate of return against protection of consumers’ interests in equitable rates?*

**Question 6 Discussion**

Dale Lee:  
There is an adequate but outdated process of investment decisions and for cost recovery. The process changes have not kept up with regulatory changes.

Hugh Montgomery, Center for Innovative Technology:  
Virginia is target rich for terror attack. He emphasized to the group that energy infrastructure is very vulnerable and this risk needs to be included in decision-making processes.

Herbert Wheary:  
Noted that regulatory requirements do not include permitting based on security implications.

**Discussion Question 7**

*We heard how Virginia’s liquid fuels – petroleum, propane, and biofuels – primarily come from outside the state. Virginia has one petroleum refinery in Yorktown, one biodiesel production plant in New Kent County, and one small ethanol producer here in Abingdon. However, most other petroleum comes from the Gulf of Mexico area. Virginia’s propane is imported. Almost all ethanol and some biodiesel is imported to the state. Primary distribution points for petroleum are located at terminals in Virginia and in nearby areas of neighboring states. These must supply many products, including regular and reformulated gasoline and diesel/clear kerosene for transportation, light and heavy heating oils, dyed kerosene for off-road uses, and aviation fuels. Some states have proposed minimum bio-based requirements for some fuels. At the same time, the marketplace is independently bringing biofuels to consumers. Is this system adequate to maintain reliable supplies of liquid fuels at competitive prices to meet demand in Virginia?*

**Question 7 Discussion**

Mike Ward, Virginia Petroleum Council
Terminals represent a pressure point in the system due to limited locations and storage.

There is not much opportunity for new terminals, but there is potential for new tanks at existing terminal. Complications include public demand, the number of different fuels and associated tank requirements.

There is also not much opportunity for new refineries, but expansion of existing refineries is taking place.

With respect to terminals on deep water, dredging may allow larger capacity tankers to get to existing unloading infrastructure.

Market and government changes complicate matters. Creating requirements that result in demand without adequate supply (ethanol in RFG) can cause problems. Noted that there is room for biofuels in the industry/market.

Lindsay Potts, Virginia Farm Bureau:
VA should support initiatives to increase grain supply because energy uses are competing with livestock feed.

Linda McMinimy, Virginia Transit Association:
VA Transit is interested in biofuels. Comment was made about incentivizing instead of mandating what may or may not be possible.

Brett Vassey:
Four Virginia Manufacturers Association members are performing a joint test of use of biofuels. Challenges include the need for separate fuel tanks when used in combustion turbines (warranty issue). New source reviews may cause problems. Resolution of issues will allow use to move forward.

The Federal government is also driving requirements through the Renewable Fuels Standard. Need to look at ethanol energy density (reduced relative to gas and diesel) and consider during decision-making.

Hugh Montgomery:
Warned against long-term investment only in ethanol. Aviation fuel is in big demand and can’t be replaced with ethanol. Must include feedstock issues and impacts on land and costs for poultry industry.

Comment was made that higher efficiency will help offset demand issues.

Other Comments

Herbert Wheary spoke about the Wise County proposed power plant and how building it at a mine mouth will eliminate coal availability problems.

Coal-to-liquids activities are ongoing and coal is being counted on in a number of energy sectors. The industry will need help if coal is to be used as a transportation fuel, too.

Irene Leech said not to forget about the importance of the disadvantaged communities issue.
Steve Walz performed introductions and provided a brief background on the Energy Plan process.

Dink Shackelford of the Virginia Mining Association presented. He noted that coal provides fuel for 48% of electricity generation. Spoke about the IT boom and the impact of technology hardware on energy demand and stated that there is a 3 to 5% increase in coal demand. Clean coal technologies have resulted in decreased emissions even though consumption has significantly increased.

Michael Maiden from the Abingdon Waste Water Treatment plant spoke on opportunities to reduce plant costs. They considered using methane gas to drive microturbines for on-site electricity. Also looked in to low-head hydro options. Found there was a potential for 10% reduction, but capital costs were too high (10 year payback). He noted that other states offered financial incentives. He would like to see Virginia “green” funds or grants or other incentives.

Carl Ramey spoke about environmental concerns. He stated it was critical for the committee to adopt regulations to protect the environment. With amendments to law resulting from a child’s death (mining accident), public input was received, but he said the laws passed in Richmond didn’t use the input. He commented that decisions should be made on a local level. He said he was glad someone has addressed the environment not being protected.

Meeting adjourned.