

Commission on Coal and Energy
November 15, 2010
Mineral, Virginia

The Virginia Commission on Coal and Energy, chaired by Delegate Terry Kilgore, held its first meeting of the 2010 interim at Dominion Resources' North Anna nuclear facility in Mineral. The meeting featured the reelection of Delegate Kilgore as chairman and Senator John Watkins as vice chairman.

Update on North Anna 3

Diane Leopold, Senior Vice President for Business Development and Generation Construction at Dominion Resources, briefed the Commission on the status of Dominion's plans to build a third nuclear reactor at its North Anna site. Ms. Leopold stated that Dominion is evaluating options for the North Anna 3 project and has not committed to moving forward at this time.

The development of North Anna 3 may be part of the utility's response to the growing need for electricity to serve its Virginia customers. Since 1992, the electricity usage of the average homeowner has increased by 8.6 percent, and the number of customers continues to increase. In the next decade, Dominion anticipates that the deficit between the electricity it generates and the peak demand of its customers will increase by 5,600 megaWatts (MW) if the utility's generation capacity remains at around 16,000 MW.

In 2009, 32 percent of Dominion Virginia Power's electricity generation was from its four nuclear reactors. After many years of being out of favor in certain circles, nuclear power is being viewed favorably by many former skeptics. Much of the change in perceptions of nuclear power is attributable to its low level of greenhouse gas emissions. While 0.01 tons of carbon dioxide are produced per MW hour generated at a nuclear plant, between 0.83 and 1.01 tons of carbon dioxide are produced per MW hour generated from coal.

The economic benefits of building North Anna 3 are substantial. Chmura Economics and Analytics has forecast that during the nine years of construction the project could produce an average of 3,873 jobs in Virginia per year and have an annual economic impact of over \$1.1 million. Once it is operational, the direct, indirect, and induced impacts on Virginia's economy were estimated to be \$510 million per year and the average number of jobs per year in Virginia was pegged at 1,320.

If Dominion builds North Anna 3, the current plans call for it to be a US-style Advanced Pressurized Water Reactor (US-APWR) built by Mitsubishi Heavy Industries. When operational, the US-APWR would have a rating of 1,463 MW capable of serving approximately 360,000 homes. Dominion has filed a revised application for a combined construction and operating license with the Nuclear Regulatory Commission (NRC) that reflects the Mitsubishi technology. The utility has slowed development of the project, but will continue working with Mitsubishi on licensing, engineering, and preliminary site work.

Ms. Leopold reported that Dominion will reassess a schedule for construction of North Anna 3 as the NRC's issuance of the license approaches, which is expected to occur in 2013. Construction of the facility will take between 50 and 60 months after ground is broken. The need to improve the company's transmission network and to comply with anticipated environmental regulations, including the final Clean Air Transport rules and the MACT rules for mercury, are expected to cause Dominion to make investments in projects other than North Anna 3. As a result of this uncertainty, Dominion has not decided whether or when it will build the facility.

Carbon Capture and Sequestration Legislation

M. Patrick McShane, Legal and Regulatory Analyst with the Southern States Energy Board, briefed the Commission on state legislation addressing issues relating to the capture and long term underground sequestration of the carbon dioxide that is released in the course of burning coal. Carbon capture and sequestration (CCS) is viewed by many as a technique that will permit America to continue to use cheap, domestic, and abundant coal as the predominant fuel source of electricity generation. In the absence of technological solutions such as CCS, pending federal greenhouse gas legislation and federal Clean Air Act regulations implementing the Supreme Court's decision in *Massachusetts v. EPA* may make it much more difficult or expensive to burn coal to generate power. In February 2010 the federal government established an Interagency Task Force on CCS which is charged with developing a plan to overcome barriers to the deployment within 10 years of widespread and affordable CCS.

Many states are considering legislation to address four issues relating to CCS. The first involves identifying the state entity that will be responsible for authorizing and regulating CCS projects. The second relates to ownership rights in both the subterranean pore space where the carbon dioxide will be stored and the gas itself. Third, legislation is required to address issues of liability of the state or the operator to third parties for damages resulting from such possibilities as the sudden release or seepage of stored gas. Finally, legislation has attempted to address funding issues, including incentives to undertake CCS projects. Some states are waiting for the EPA to issue its final rules before proceeding with CCS legislation.

In the 2010 Session, Senator Watkins introduced Senate Bill 247, which would have authorized the issuance of permits for the geologic storage of carbon dioxide, required operators to pay fees to fund the administration of the regulatory program, and released the operator from liability stemming from the geologic storage of carbon dioxide after 10 years if the operator demonstrates the integrity of the facility. The bill was passed by with a letter requesting further study of the issues, and Mr. McShane observed that the bill, as well as laws in effect in Montana, Texas, Louisiana, and Kansas, may serve as models if Virginia elects to pursue legislation in this area. He demurred when asked what the effect of CCS would be on electricity rates.

Coalbed Methane Gas

Three spokesmen from the Virginia Department of Mines, Mineral and Energy (DMME) reported on issues relating to the ownership and development of coalbed methane gas in Virginia. Much of the presentation addressed issues raised by House Joint Resolution 121 from the 2010 Session. This measure, introduced by Delegate Morgan Griffith, directed the

Commission to study ownership rights of coalbed methane and other natural gases under the Virginia Gas and Oil Act and opportunities to encourage production and use of natural gas in Virginia.

Butch Lambert, Deputy Director of DMME and chairman of the Virginia Gas and Oil Board, announced that natural gas production in the Commonwealth has increased from less than 15 billion cubic feet from 819 wells in 1990 to 140.7 billion cubic feet from 7,303 wells in 2009. He attributed the increase to this Commission's recommendation in 1989 that the legislature enact legislation establishing a procedure for forced pooling. The Commission's recommendations were enacted by the General Assembly in 1990. The legislation established an alternative to the Rule of Capture that prevailed under Common Law. Under this Rule, the law provided no protection of correlative rights, which means that a neighboring well operator could withdraw all of the gas from a pool underlying a surface owner without being subject to a complaint of trespass or a requirement that he compensate others.

The Virginia Gas and Oil Act of 1990 provides for compulsory pooling of the revenues from the well operation in order to provide for the equitable sharing of the resource among all persons with a valid claim to it. The Virginia Gas and Oil Board oversees the implementation of the Act by establishing field rules to protect correlative rights and provide for unitization, under which units consisting of 50 or 80 acres are designated. The Board also designates operators for the units, approves forced pooling orders, approves disbursements from escrowed funds, and hears appeals of agency decisions.

David Asbury, Director of the Division of Gas and Oil within DMME, updated the Commission on several issues related to the implementation of Act. A major issue involves who is an owner of coalbed methane gas. The Act provides that when conflicting claims exist regarding ownership of gas within a unit, the owner may be force pooled with other claimants. The conflicting ownership claims may be resolved either by a court decision, a split agreement among all claimants, or an agreement to have the dispute resolved by binding arbitration.

Recent litigation is clarifying certain relevant issues. In the *Ratliff* case, the Virginia Supreme Court held that a deed conveying "coal only" did not convey the coalbed methane gas. Mr. Asbury spoke briefly to pending class action litigation that, among other things, challenges the constitutionality of the forced pooling mechanism of the Act. Though the Commonwealth is not a defendant in the litigation, the Attorney General is participating to defend the Act's constitutionality. Mr. Asbury cautioned that the class action suits may delay arbitration activity.

Forced pooling rules determine royalty rates and allocation of production and postproduction costs. Though rarely exercised, claimants have the option to be a "participating operator" in a pool, which provides a proportional share of production while sharing in the risks and costs of drilling, completing, equipping, operating, and related activities. Claimants who elect to be "royalty owners" are eligible to receive payment based on the production of gas or oil. A pooling order provides a royalty of one-eighth of the net proceeds received after deducting for the costs of gathering, compression, treatment, transportation, and marketing.

The Commission was advised that there is over \$26 million in escrow accounts. About 80 percent of the moneys placed in escrow are paid out to claimants through split agreements and other mechanisms. Some of the moneys in escrow are owed to persons unknown or unlocatable, and the question has arisen as to whether the Board should be required to turn those funds over to the Treasury Board under the Commonwealth's unclaimed property laws. Mr. Asbury estimated that about between \$1 million and \$1.5 million of funds in escrow are owed to persons unknown or unlocatable.

Mr. Asbury also provided information regarding the Gas and Oil Division's staffing requirements. While the number of new docketed items has grown from 123 in 2002 to over 400 in 2010, the number of Board staff handling docketed items has remained at fewer than two full-time employee equivalents. Similarly, the staff assigned to handle compliance matters has remained stable while the number of producing wells has more than doubled in the past eight years.

Michael Skiffington of the DMME closed this portion of the agenda by reporting on the economic benefits of gas production in Virginia. He noted that exploratory work is underway in the Shenandoah Valley and Scott/Washington County shale areas. Options for "growing the market" for natural gas, and thereby encouraging production, include increasing the number of gas-fired electric generation facilities and developing a natural gas vehicle refueling infrastructure.

In addition to providing localities with revenues from the gas severance tax (which jumped from \$6.9 million in fiscal year 2003 to \$28.8 million in fiscal year 2009), the economic impact of the natural gas industry in Virginia is substantial. A 1995 study by the Virginia Center for Coal and Energy Research at Virginia Tech found that the industry's total in-state impact was \$1.5 billion based on 1993 production data. Though the figures cannot be extrapolated with any degree of precision, Mr. Skiffington observed that gas production in 2009 was four times that of 1993. The industry provides between 2,500 and 3,000 high paying jobs and generates \$5 million in real estate tax revenue.

The DMME report closed with an observation that an amendment to Virginia's renewable portfolio standard law to provide credit for electricity generated from coalbed methane gas would provide an increase incentive to the gas industry in the Commonwealth. Pennsylvania's inclusion of coalbed methane as an eligible fuel in that state's Alternative Energy Production Standard was cited as a model.

Uranium Mining Update

Delegate R. Lee Ware, Jr., chairman of the Commission's subcommittee on uranium mining, briefed members on the status of two studies underway regarding the proposal that the Commonwealth lift its moratorium on such mining. The removal of the legislative moratorium would allow development to proceed at the Coles Hill site in Pittsylvania County.

The first study, which is focusing on technical, scientific, environmental and health issues associated with uranium mining, is being conducted by the National Research Council of the

National Academy of Sciences. The Council held its initial meeting in Washington on October 26 and 27, 2010. It is scheduled to meet in Danville in December 2010 and in Richmond in January 2011. The group's final report is due to be delivered to the Commission in December 2011.

The second study involves the socioeconomic impact of uranium mining in Virginia. A request for proposals has been released, and the date of the meeting was the final date for submitting proposals. As of the time of Delegate Ware's presentation, three proposals had been received. All of the timely proposals will be reviewed and circulated among the subcommittee members prior to making a decision to award the study contract. Chairman Kilgore added that he was aware of at least two other studies of the issue that are being undertaken, one by the Danville Foundation and the other by the City of Virginia Beach.

Public Comment

Mr. Jerry Rosenthal of Louisa County cautioned members of the Commission about Dominion's development of North Anna 3. He recounted the history of the partial construction of two reactors at North Anna in the 1970s, both of which were cancelled prior to completion at a cost to ratepayers in excess of \$600 million. He identified several issues, including escalating construction costs, waste storage, and water temperature in Lake Anna, that he believes should be resolved prior to development of another reactor.

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