REPORT TO THE LEGISLATIVE TRANSITION TASK FORCE OF THE VIRGINIA GENERAL ASSEMBLY

THE FEASIBILITY, EFFECTIVENESS, AND VALUE OF COLLECTING DATA PERTAINING TO VIRGINIA'S ENERGY INFRASTRUCTURE

PURSUANT TO SENATE BILL 684 ENACTED BY THE 2002 SESSION OF THE GENERAL ASSEMBLY OF VIRGINIA

NOVEMBER 20, 2002

INTRODUCTION

Senate Bill 684 (Attachment No. 1) requires that the State Corporation Commission ("Commission" or "SCC") convene a workgroup of stakeholders relative to Virginia's electric and natural gas industries. Specifically, this legislation requires that the workgroup study the *"feasibility, effectiveness, and value"* of collecting information related to Virginia's energy infrastructure. In response to this legislative directive, the Commission Staff issued a letter on May 29, 2002, soliciting written comments in preparation for a July 10, 2002, stakeholder meeting. Comments were received from an array of participants including: incumbent electric utilities, interstate gas transmission companies, representatives of large industrial customers, the Office of Attorney General, the Department of Environmental Quality, the Municipal Electric Power Association of Virginia, and representatives of non-utility and merchant generation. The comments provided are presented as Attachment No. 2 to this report.

As expected, the written comments presented a divergence of opinions as to the *feasibility, effectiveness, and value* of collecting the data outlined in Senate Bill 684; there was, however, a common theme echoed by the incumbent electric utilities. For example, Dominion Virginia Power stated:

> *With the establishment of RTOs* [Regional Transmission Organizations], *the use of traditional control areas to delineate boundaries for the purpose of assessing the adequacy of generation will have limited value. Similar attempts to distinguish load served in Virginia from that of other customers in other states may be of little value in assessing adequacy of generation.*

Dominion Virginia Power further stated:

> *. . . . the deregulated nature of the generation business after December 31, 2001, leaves questions about the value of such data in monitoring reliability.*

AEP-Virginia echoed Dominion Virginia Power's sentiments by stating:

> *Monitoring the adequacy of energy infrastructure should recognize that Virginia electricity users will be served by regional electricity markets not necessarily coinciding with state boundaries.*

The Potomac Edison Company expressed a similar view in its statement:

> *We feel the effectiveness and value of determining the adequacy of energy infrastructure in Virginia is minimal at best.*

Views counter to those detailed above were provided in joint comments by the Virginia Committee for Fair Utility Rates, the Old Dominion Committee for Fair Utility Rates, and the Virginia Industrial Gas Users Association. Those organizations noted that:

> *Collection of such data would be invaluable in assisting the Commission in developing appropriate solutions to market power problems including steps to facilitate increases in transmission capacity, to identify and eliminate bottlenecks within Virginia, and to increase inter-tie capacity between Virginia's utilities and those in other jurisdictions.*

This industrial group also expressed concern relative to the:

> *Adequacy of interstate gas pipeline capacity into and within Virginia.*

The Office of the Attorney General buttressed the comments of the large industrial end-users with the following comments:

> *The Division of Consumer Counsel of the Office of Attorney General (Consumer Counsel) supports the goal of Senate Bill 684 to enable the SCC and the General Assembly to monitor the adequacy of the energy infrastructure within Virginia.*

The Consumer Counsel further stated:

> *We note that the information obtained should detail the extent to which generation and transmission capabilities of facilities are dedicated under long-term contracts to serve loads within and without Virginia. Similarly, it would appear that the information, to the extent feasible, should also include facilities from outside the Commonwealth with commitments to serve load in Virginia. Only with this information can a complete assessment be made of the adequacy of the energy infrastructure dedicated to serving Virginia consumers. In addition, it may be appropriate to consider not only the infrastructure "in the ground" serving existing loads, but also load growth projections and to what extent planned construction of new facilities are anticipated to meet such future load requirements.*

The preceding quotes are provided to illustrate the divergence of stakeholder views relative to the *"value"* and *"effectiveness"* of collecting the data outlined in Senate Bill 684. The reader is encouraged to read the comments in their entirety in order to appropriately contextualize the preceding quotes and to get an understanding of the specific positions of commenters that are not quoted.

On July 10, 2002, the Staff convened a workgroup to begin a dialogue relative to the requirements of Senate Bill 684. That meeting was attended by a broad spectrum of stakeholders. The participants in this meeting essentially reiterated and reinforced the written comments previously referenced. The discussion primarily centered on the usefulness of providing the type of data outlined in the legislation, especially given Virginia's decision to rely

on the competitive market for the ultimate provision of electricity service in the Commonwealth. Discussions relative to the impact of RTO control of the transmission systems of Virginia's utilities[1] generated specific concerns relative to the practicality, value and cost effectiveness of maintaining a data base relative to the capability and performance of the transmission facilities serving Virginia as part of a broad geographic region.

Gas transmission companies noted that currently there is no specific physical dedication of gas transmission capacity to Virginia; rather, under the Federal Energy Regulatory Commission (FERC) jurisdiction, pipeline capacity is acquired under contract for firm load and excess capacity is released on an interruptible basis for specific durations until firm load requires that capacity. Gas LDCs stated that to the extent interstate pipeline capacity is an issue, it is one of FERC jurisdiction; they further noted that the construction and use of such facilities is market driven. Most participants, however, expressed a willingness to cooperate in terms of providing data that is useful and appropriate for satisfying the intent of Senate Bill 684.

During the July 10, 2002, meeting, a representative from Dominion Virginia Power volunteered to conduct some internal research to determine whether a simplified approach relative to data collection might satisfy the intent of the legislation. The Company agreed to conduct a sub-group meeting to explore this concept; that meeting was held on August 7, 2002. In preparation for this dialogue, the Staff of the Commission sent a letter on July 22, 2002, requesting feedback as to the current reporting of Senate Bill 684 data requirements to other agencies/organizations. The responses to this letter are presented as Attachment No. 3 to this report.

[1] Section 56-579 requires that incumbent electric utilities transfer management/control of their transmission assets to a regional transmission entity subject to the prior approval of the Commission.

While the August 7, 2002, meeting did not result in a specific proposal for satisfying the requirements of Senate Bill 684, it generated additional discussion relative to the availability and value of the data outlined in the bill. The dialogue in this meeting focused largely on the fact that the value of collecting detailed data relative to Virginia's energy infrastructure is impacted by RTOs. As a result, several stakeholders supported the idea of a presentation by PJM in order to further explore this issue. In response to this proposal, on August 14, 2002, representatives from PJM provided the workgroup with an overview of the "PJM Regional Transmission Expansion Process." A final participant meeting was held on Friday, October 25, 2002, to determine whether stakeholder views relative to the effectiveness/value of extensive data collection had evolved as a result of the dialogue that occurred over the preceding months. The results of this meeting will be detailed in the "Findings" section of this report.

DISCUSSION

Electric Utilities

When discussing the reliability of an electric utility infrastructure, one must focus on both transmission and generation facilities. Transmission and generation are substitutable, inter-dependent, and complimentary. A generation fleet is obviously no more reliable than the transmission system delivering the generation output. Likewise, an extraordinarily reliable transmission network cannot provide adequate service if generation reliability is substandard. While the following discussion will deal with transmission and generation separately, an understanding of the integrated nature of their operation as a bulk power supply system is critical in the context of gauging infrastructure reliability.

Prior to the passage of the Virginia Electric Utilities Restructuring Act, the SCC monitored the reliability of Virginia's electric utility infrastructure from several perspectives.

Each of Virginia's investor-owned electric utilities was required (pursuant to Section 56-234.3 of the Virginia Code) to submit annually a detailed resource plan that presented long-term load projections and the utility's plans for serving projected load via a combination of generation additions, transmission enhancements, firm power purchases from neighboring utilities/non-utility generators and load management. Inherent within that process was the development of an appropriate reserve margin to accommodate the realities of load forecast error, unexpected unit outages, abnormal weather, and a number of other factors. While the Commission did not specify absolute reserve levels, the Staff regularly reviewed utility studies that generated reserve needs. In some instances, the Commission expressed concern relative to appropriate reserve margins and directed further study. On one occasion, higher reserves were instituted as a result of such a directive. The Commission's oversight of the planning process referenced above not only focused on the level of reserves but on installed capacity mix as well to determine whether an appropriate portfolio of base load, intermediate and peaking generation facilities combined with power purchases was planned to minimize reliability risk and to optimize the cost of service to ratepayers.

As part of its oversight of Virginia utilities' generation infrastructure, the Commission also closely monitored the actual operational performance of generating units and encouraged high performance levels by tying authorized equity returns to generating unit efficiencies. This program was implemented to recognize the impact of generating unit performance on reserve requirements and on fuel expenses that are recovered on a dollar-per-dollar basis from retail consumers.

With regard to transmission facilities, Virginia electric utilities periodically reviewed their transmission infrastructure to ensure that the Commonwealth's load could be adequately

and reliably served by generation dedicated to the State. While the transmission networks could often accommodate the economic transfer of power to and from neighboring utilities, reliability was the primary focus when transmission enhancements were proposed by our electric utilities.

With passage of the Virginia Electric Restructuring Act, the State Corporation Commission's role concerning reliability is less defined than had previously been the case. For example, Section 56-577.3 of the Act states: *"On and after January 1, 2002, the generation of electric energy shall no longer be subject to regulation under this title, except as specified in this chapter."* Section 56-585.B.3 states that: *"the Commission, to the extent that default service is not provided pursuant to a designation under subdivision 2, may require a distributor to provide, in a safe and* ***reliable*** *manner, one or more components of such services. . . ."* Likewise, in the context of the Commission's review of fuel expenses, Section 56-249.6 of the Code requires that the Commission give due regard to: ***reliability*** *of service and the need to maintain* ***reliable*** *sources of supply, economical generation mix, generating expense of comparable facilities and minimization of the total cost of providing service.*

The comments provided by the utilities and cited in the Introduction Section of this report indicate, at least from their perspectives, that the Commission's authority with respect to generation reliability has been significantly diminished. The issue of whether the Commission can mandate the construction of generation facilities in the interest of maintaining reliability has arisen with different stakeholders proffering opposing views. This issue, like many others, will likely receive additional attention in the future. In any event, under the Restructuring Act, the market will play a larger role in determining the amount and characteristics of incremental capacity that is commercialized and dedicated to the service of Virginia.

With regard to transmission facilities, two specific provisions of the Restructuring Act are notable in the context of evaluating infrastructure adequacy. First, Sections 56-577 and 579 of the Restructuring Act require that incumbent electric utilities controlling or having entitlement to transmission capacity transfer the management and control of its transmission system to a regional transmission entity subject to prior approval of the Commission and to terms and conditions that the Commission determines will promote the public interest and the reliable planning, operation, maintenance and upgrading of transmission facilities. Transfer of control of the transmission system will essentially transfer jurisdiction of the transmission facilities serving Virginia to the Federal Energy Regulatory Commission (FERC). Additionally, Section 56-578 of the Restructuring Act gives the Commission specific authority relative to the construction, operation, planning, maintenance and financing of transmission systems in the Commonwealth. This section, however, recognizes that this authority exists *"to the extent not preempted by federal law."*

Section 56-590 of the Restructuring Act requires that the Commission direct the functional separation of generation, retail transmission and distribution. Unbundled transmission service is subject to FERC pricing jurisdiction and the realities of a transfer of jurisdiction to the FERC are significant. If the transmission facilities serving Virginia are "regionalized," the concept of monitoring the dedication of facilities to the service of local load becomes problematic. Transmission planning will occur on a regional level as opposed to a local, state, or control area level. Likewise, operation and maintenance of the system will reflect regional as opposed to local priorities. Ultimately even pricing may reflect the cost of providing service over a broad geographic region rather than assigning the cost of local facilities to local load.

The FERC's recent Notice of Proposed Rulemaking (NOPR) on Standard Market Design is a revolutionary proposal that sheds significant insight as to FERC's vision of a new paradigm for the expansion, operation, control and pricing of the transmission network serving this country. This proposal has far-reaching implications for all states regardless of whether they have restructured. For example, the FERC now proposes to exercise jurisdiction over bundled, as well as unbundled, transmission service. The NOPR also states FERC's desire to eliminate a preference for both existing and future native load in terms of the access/use of the transmission system. In addition, the NOPR expresses a preference for allocating transmission capacity to those customers willing to pay the most; the implications obviously being customers competing for such capacity during times of scarcity. These concepts are especially troubling since Virginia's native load has largely funded the existing transmission network serving the Commonwealth.

The FERC Notice of Proposed Rulemaking has significant implications for the oversight of generation as well as transmission reliability. The NOPR essentially envisions an "Independent Transmission Provider" operating a regional generation market. Reserve margins would ultimately be subject to FERC jurisdiction and, a Market Monitor, also under FERC jurisdiction, would be charged with monitoring market power and imposing pricing constraints when deemed appropriate. The policies implicit in the FERC's NOPR represent a radical departure from previously held beliefs that the market would establish reliability levels and competition would control pricing with little regulatory intervention. The NOPR not only proposes significant new federal regulation over both the pricing and reliability of electric service but also shifts regulation from the state to the federal level.

Should Virginia's utilities join an RTO such as PJM that operates a regional market or should the FERC proposal be implemented, jurisdiction relative to generation reliability will be shifted to the federal government. Should Virginia, for example, require its utilities to maintain a higher generation reserve than required by the RTO, those reserves would apparently be shared with customers within the footprint of the RTO which is likely to span multiple states. During periods of generation shortage, customer load would be shed on a pro rata basis without an explicit dedication of excess reserves to Virginia consumers who would ultimately bear the costs of such reserves.[2]

As a result, the possible impact of the FERC Notice of Proposed Rulemaking must be considered when evaluating the *"feasibility, effectiveness and value"* of collecting the data outlined in Senate Bill 684. It should be noted, however, that both PJM and the FERC envision, at least theoretically, a model that allows states that do not deregulate generation or that impose generation price caps to continue to dedicate generation from an economic perspective to their native load.

Gas Utilities

Senate Bill 684 also references the collection of data for gas transmission companies operating within the Commonwealth. Those data elements include such information as: the location of inter/intra-state transmission lines; the transmission capabilities of such facilities; the dedication of transmission capabilities of such loads within and without Virginia; projected loadings on those facilities, projected available capacities; flows into and out of Virginia; gas

[2] Another reliability related issue that was not discussed in the context of the stakeholder meetings but arose in bilateral discussions between the SCC Staff and PJM relates to the increasing dependence on natural gas as a fuel for incremental generation. Should that dependence reach an unacceptable level, there may be implications for the reliability as well as the price of generation serving the Commonwealth.

storage facilities within and without Virginia dedicated to load in Virginia; operational flow orders issued, expansion projects planned and capacity enhancements within Virginia resulting from such expansion. The Bill also envisions the potential collection of information from LDCs in Virginia relative to requests for load curtailments and the factors driving such curtailments.

As noted earlier in this report, with some exceptions the gas transmission companies and local distribution companies providing service in Virginia appear willing and able to provide the bulk of the data outlined in Senate Bill 684. As with the data relative to the electric infrastructure serving Virginia, the collection of gas infrastructure information certainly appears *"feasible."*

A discussion of the *"effectiveness and value"* of such a data collection effort necessarily entails the presentation of some background information. It is important to note, for example, that the gas transmission industry is a contract-based industry. As such, the level of firm service available in a specified geographic area is ultimately determined by firm contractual commitments. Thus, even though physical facilities may exist in an area, firm gas delivery service may or may not be available. Currently, the FERC requires pipelines to post available capacity on the Internet. Two types of available capacity are posted: "operationally available capacity" which is defined as non-firm capacity that is available on a daily basis and "unsubscribed capacity" which is capacity that may be obtained on a firm basis under contract.

In spite of this readily available information, measuring the adequacy of capacity to serve new gas fired facilities is problematic. Such facilities may enhance the efficient use of the pipeline grid during the summer which has traditionally been the off-peak period. However, during the winter months, gas-fired generation facilities may compete with existing transportation customers for limited space on the pipelines. Those pipeline customers have

historically opted for less expensive interruptible capacity to fuel industrial processes. Generally, customers with firm capacity have a regulatory right of first refusal and should not see firm services interrupted absent an unexpectedly high peak load. Virginia distribution companies typically contract for firm capacity to serve residential and small commercial load. To the extent that capacity is not needed for specified periods, LDCs will "release" such capacity to other users of the system such as large industrial customers. This released capacity is generally available until LDC load grows into their contracted capacity.

As capacity becomes scarce because of load growth, pipelines hold "open season" offerings. This is a process wherein pipelines explore the market's interest in subscribing to additional pipeline capacity. Assuming the "open season" process demonstrates a need for new capacity, pipeline companies pursue firm contractual commitments, obtain regulatory approval from the FERC, and design/construct the needed facilities. This process can take several years; as a result capacity can often become constrained during the interval between the initiation of an open season process and the commercialization of new facilities.

Historically, new capacity expansions have been driven by the needs of traditional firm loads such as those imposed by LDCs. As generation capacity and transportation customers compete for interruptible and/or released capacity in the future, these customers will need to weigh the possibility of significant interruptions against the cost of underwriting expansion costs.

It should be emphasized that the process associated with certificating new interstate pipeline capacity, overseeing the capacity release programs and regulating the price of capacity (to the extent it is regulated) is totally under the domain of the FERC.

FINDINGS

Senate Bill 684 requires that the Commission generate a report as to the *"feasibility, effectiveness, and value"* of collecting specific data relative to the energy infrastructure supporting Virginia. As indicated in the "Discussion" section of this report, the August 7, 2002, stakeholder meeting and the written responses to the Staff letter drafted in preparation for that meeting yielded considerable information relative to the availability of the data outlined in Senate Bill 684. In general, it appears that the bulk of the data referenced in the legislation is in fact available or can be produced. Several commenters noted concerns relative to the confidential nature of such information from both security and competitive perspectives. In short, however, one can conclude that, with some exceptions, the provision of significant infrastructure data for a recent historical period and for the future is in fact *"feasible."*

With regard to the *"effectiveness"* and *"value"* of collecting detailed energy infrastructure data, current utility practices as well as the existing and continued jurisdiction of the Commonwealth relative to electric utility reliability must be considered. In recent years, in response to an evolution of a market driven paradigm, our utilities have shortened their planning horizon, reduced planned reserve margins and increased reliance on purchased power. In some instances, Virginia utilities with virtually all their generation outside the Commonwealth have sold or transferred such generation to an affiliate and have entered into long-term contracts to fulfill power needs for native load. Such contracts are typically not backed by "iron in the ground" or physical resources.

For example, two Virginia utilities now rely exclusively on long-term purchased power contracts to service load in Virginia. The Potomac Edison Company,[3] a subsidiary of the Allegheny Power System (APS), has transferred its generating units to an unregulated affiliate and has entered into a purchased power agreement to supply its power supply needs. This agreement is subject to FERC jurisdiction and does not dedicate specific resources to Potomac Edison's Virginia customers. Likewise, Delmarva Power and Light Company[4] has divested its coal and nuclear generating units and has transferred ownership of its gas and oil units to an unregulated affiliate.

The Appalachian Power Company ("AEP-Virginia" or "Apco") has historically relied on an inter-connection agreement with four of its AEP affiliates to augment its own generation for the provision of electricity service in Virginia.[5] Due to utility restructuring in Ohio, two AEP affiliates transferred generation to an unregulated generation company. A settlement process at the FERC resulted in a purchased power agreement between the generation company and Apco. As a result, AEP has agreed to contractually provide capacity and reserves to Apco through July 2007. As a result, currently a portion of Apco's capacity resources cannot be attributed to specified generating units.

As is obvious, in recent years there has been a movement away from reliance on actual "iron in the ground" in terms of maintaining reliability for a number of Virginia electric utilities. This is consistent with a philosophy of relying on the market to generate reliability levels in response to price signals. As noted earlier, however, this concept now appears to be losing

[3] Three MW of approximately 1791 MW once owned by Potomac Edison are located in Virginia; 15 MW of approximately 2776 MW owned or once owned by Delmarva are located in Virginia.

[4] Ibid.

[5] Virginia consumers have historically funded generation provided by affiliates via payments made by Apco to those affiliates and included in retail rates.

momentum. For example, PJM requires load serving entities to maintain specific reserve levels with attribution to specified generating units. Likewise, this concept is embodied in the FERC Notice of Proposed Rulemaking related to Standard Market Design. It is noteworthy, however, that both the PJM model and the FERC Standard Market Design model effectively shift oversight responsibility for transmission and generation reliability from the states to the FERC. The NOPR largely adopts the PJM model and that model is currently in a state of evolution. It appears that should our utilities join PJM as it is currently structured or an RTO envisioned by the FERC NOPR, Virginia would not retain jurisdiction over the reliability of the bulk power system (generation and transmission) serving the Commonwealth. While the economic dedication of units may continue for those states that have not deregulated or have maintained rate caps, reliability will reflect the reliability of a broad geographic region encompassed by the RTO.

As was indicated in the "Introduction" section of this report a final stakeholder meeting was held on October 25, 2002. The purpose of that meeting was, among other things, to gauge whether views had changed relative to the *effectiveness* and *value of* collecting the data outlined in Senate Bill 684. The potential jurisdictional transfer of bulk power system reliability oversight received considerable attention. PJM indicated, for example, that should Virginia have concerns relative to infrastructure adequacy, those concerns would be addressed by PJM, the National Electric Reliability Council or by the FERC,[6] the implication being the Commonwealth could not exercise direct control to address reliability concerns should one or more of our utilities join PJM. PJM also acknowledged that should one or more of Virginia's utilities join

[6] FERC is currently exploring the issue of "Information Availability" (Docket No. RM02-4-000) and proposes to permit state agencies to have broad access to such information with the caveat that federal law preempts state law in terms of further disclosure by states.

PJM, it would be difficult for the Commonwealth to specifically monitor the adequacy of the infrastructure serving Virginia. Any such analysis must include all facilities (generation and transmission) located within the geographic footprints of the RTOs serving Virginia and any concerns relative to generation and/or transmission reliability within that footprint would be addressed on a federal level.

APS indicated that with a purchased power contract in place and APS' current participation in PJM West, the collection of any extensive data by Virginia relative to transmission/generation adequacy is no longer meaningful. Likewise, other participants in that meeting acknowledged that the *value* and *effectiveness* of extensive data collection relative to infrastructure adequacy is difficult to gauge at this point in time.

The ultimate status of the FERC NOPR is unknown and the impact of that NOPR on existing RTOs, including PJM, cannot be determined. Virginia's major utilities have not yet filed applications in Virginia for membership in a specific RTO and, as a result, the Commission has not formally considered the matter and any conditions that the Commission might require for such membership have not been established. At this point, the Commission cannot determine whether any RTO that our utilities may join will exercise (under FERC jurisdiction) control only over transmission operation, planning and pricing or whether such control will also extend to generation dispatch, reserve requirements and market power control. In short, the electric utility industry is in a state of extreme uncertainty and will likely remain so for the foreseeable future. This fact must be recognized when responding to the directives of Senate Bill 684.

With regard to the collection of data relative to the gas infrastructure serving Virginia, the final stakeholder meeting focused on the fact that information relative to the availability of pipeline capacity is posted on the Internet and is currently available to all customers with a

potential capacity need. There was also a discussion relative to expanding the annual LDC/SCC conference to include interstate pipeline companies, merchant power plant owners and an array of interested LDC transportation customers. This concept was explored in the interest of providing a regular forum to explore infrastructure needs and to generate a dialogue among stakeholders. While this idea was not enthusiastically embraced by all participants, there was a general consensus that the idea has merit. It was also suggested that the SCC regularly monitor, for informational purposes, pipeline capacity data posted on the Internet.

CONCLUSIONS

The feasibility of collecting most of the data outlined in Senate Bill 684 does not appear to be an issue. However, given the ongoing evolution of the electric utility industry and the potential for significant jurisdictional shifts relative to the oversight of Virginia's generation/transmission reliability, it is difficult to make absolute statements as to the *value/effectiveness* of collecting this information. This fact was acknowledged by a number of participants in the October 25, 2002, stakeholder meeting. Given the dynamic nature of the electric utility industry, a number of approaches could be considered when responding to Senate Bill 684. For example, the Commonwealth could collect the bulk of Senate Bill 684 data on a historical and on a prospective basis and then gauge the value of that data at some later date. Determinations could then be made as to the value of continued data collection. On the other hand, the Commonwealth could wait until the industry stabilizes and then begin data collection taking into account Virginia's jurisdiction at that point in time relative to bulk power system reliability.

A more practical approach might be to collect some basic data that could provide significant information as to infrastructure adequacy. For example, each load serving entity[7] providing service in Virginia could be required to provide, for a designated historical period, annual peak load information and basic information relative to generating units servicing those loads. Such unit specific information could include unit name/location; design and seasonal capacity; capacity dedicated to Virginia; fuel type(s); and basic historical operating data such as heat rates, equivalent availabilities, equivalent forced outage rates, and capacity factors.[8] Dedicated generation could be applied to historical peak loads to monitor actual reserve margins.

For a designated forecast period, forecast load and planned reserve margins could be provided. Information relative to specific units expected to serve load and provide reserves could also be furnished along with the projected operating parameters detailed above. To the extent purchased power contracts are expected to be utilized, the specific units supporting those contracts could be designated. If, as APS indicated, there are no specific units dedicated to the provision of service within the Commonwealth, that fact can be noted for the LTTF's consideration. This basic information relative to generation adequacy could be collected until such time as it is determined that either more or less information is necessary. Data relative to transmission facilities could also be provided if the need for more detailed information arises. This flexible approach may be more practical in the current environment and would certainly be less burdensome to those entities providing the information.

With regard to merchant generators, to the extent load serving entities are relying on merchant generation located within Virginia, that reliance would be reported by load serving

[7] Load serving entities would currently include utilities and competitive service providers (CSPs). Historical data for CSPs is obviously limited given the current levels of retail customer choice in the Commonwealth.

[8] Collecting such data for very small units (i.e., hydro) might be impractical and be unnecessarily burdensome.

entities. One can assume that to the extent merchant generation is not included in the load servers' portfolios, the output of those facilities is dedicated to service outside the Commonwealth.

With regard to the gas infrastructure supporting service in Virginia, the Commission can certainly monitor the pipeline capacity data posted on the Internet. The Commission can also facilitate a dialogue among stakeholders by expanding the annual LDC/SCC conference to include a broader array of stakeholders. It must be recognized, however, that jurisdiction relative to gas interstate pipelines ultimately lies with the FERC and not the Commonwealth of Virginia.