The Commission, therefore, finds that this matter should be dismissed. Accordingly,

IT IS ORDERED that the Petition of Tellus, Inc. for arbitration of a power purchase agreement with Virginia Electric and Power Company shall be, and hereby is, dismissed.

Commissioner Moore did not participate in the decision of this case.

CASE NO. PUE900066
OCTOBER 28, 1993

APPLICATION OF
COMMONWEALTH GAS PIPELINE CORPORATION

For authority to cancel certificates of public convenience and necessity and gas tariff

DISMISSAL ORDER

On December 11, 1990, Commonwealth Gas Pipeline Corporation ("Commonwealth Pipeline") filed a letter notifying the Commission of the December 7, 1990 Federal Energy Regulatory Commission ("FERC") order in Docket No. CP90-644-0000, authorizing the merger of Commonwealth Pipeline, a Virginia intrastate natural gas pipeline regulated by the Commission, into Columbia Gas Transmission Corporation, an interstate natural gas pipeline regulated by the FERC ("the Merger"). The letter further stated that since the Merger was scheduled to be effective as of December 11, 1990, Commonwealth Pipeline requested that all of its existing certificates of public convenience and necessity issued by the Commission and Commonwealth Pipeline's existing gas tariff on file with the Commission be canceled, effective December 11, 1990.

Several requests for rehearing or clarification of the FERC December 7, 1990 order were subsequently filed. On July 25, 1991, the FERC issued its "Order Denying Rehearing and Clarifying Order" which was further clarified by the FERC's "Order on Reconsideration" dated August 21, 1992. It now appears that the FERC does not intend to revisit its approval of the Merger, therefore, the Commission finds that it is in the public interest to cancel the existing certificates of public convenience and necessity and the existing gas tariff. Accordingly,

IT IS ORDERED that the existing certificates of public convenience and necessity and the gas tariff of Commonwealth Pipeline are hereby canceled. As there is nothing further to be done in this matter, it is further ordered that this case be, and hereby is, dismissed from the docket of active cases.

CASE NO. PUE900070
JUNE 28, 1993

COMMONWEALTH OF VIRGINIA, ex rel.
STATE CORPORATION COMMISSION

Ex Parte: In Re: Investigation of conservation and load management programs

ORDER ISSUING RULES ON COST/BENEFIT MEASURES

On March 27, 1992, the Commission issued an order addressing the role of energy conservation and load management practices by electric and gas utilities. We recognized the importance of conservation and load management as part of the integrated planning strategy necessary to make utility service efficient and affordable. We also reversed our long-standing prohibition against promotional allowances because such promotions, when designed to encourage cost effective conservation and load management programs, could be in the public interest. However, a pivotal question had not been explored in the depth necessary for us to make a reasoned decision at that time. Specifically, what cost/benefit methodology should be used to evaluate proposed programs designed to conserve energy or better balance utilities' loads? At our direction, the Staff organized a task force to analyze the requisite data and recommend an appropriate test, or combination of tests, with which to evaluate conservation and load management proposals. We advised that the effort need not address questions on quantifying environmental externalities. While we believe it is important for the Commission to consider environmental factors in rendering our decisions from a qualitative standpoint, in our opinion, we lack the statutory authority to go beyond such considerations and attempt to quantify the impact of externalities. See Virginia Code §§ 56-235.1 and 56-235.2.

The task force was made up of the Secretary of Natural Resources and representatives from Appalachian Power Company, Potomac Edison, Commonwealth Gas Services, Washington Gas Light, Southern Environmental Law Center, the Office of the Attorney General, Sycon Enterprises, Old Dominion Electric Cooperative, Virginia Electric and Power Company, Virginia Natural Gas, the American Lung Association, the Virginia Committee for Fair Utility Rates, and the State Corporation Commission Staff.

On February 9, 1993, the Staff filed its report providing an overview of current conservation and load management (demand-side management or "DSM") programs of utilities in Virginia and the Commission's policy regarding such programs. The report identified the key concepts and issues that influence the choice and application of cost/benefit tests to DSM programs. It reviewed available tests and discussed their uses, advantages, and disadvantages. Finally, the report addressed the numerous policy and technical issues associated with the use of cost/benefit tests and offered conclusions and recommendations for the Commission's consideration. The report reflected many of the positions discussed by the task force in meetings convened from June 1992 through September 1992, but it did not constitute a consensus of the task force.

The principal goal of the Staff report was to identify the test or tests which should be used to determine the economic costs and benefits of DSM programs. Staff identified five tests in common use across the United States. Those tests included the Participants Test, the Utility Cost Test, the Ratepayer Impact Measure ("RIM") Test, the Total Resource Cost ("TRC") Test, and the Societal Test. Staff identified the uses and goals of each test.

The Participants Test measures the quantifiable benefits and costs of a program to the participating customer. The Utility Cost Test measures the cost of a DSM program incurred by the utility, excluding costs incurred by the participant. The RIM Test measures the difference between the change in total revenues paid to the utility and the change in total costs to a utility resulting from the DSM program. This test is also called the Nonparticipant Test or the No Losers Test. The TRC Test measures the cost of a program as a resource option to the utility and its ratepayers as a whole. This test is also known as the All Ratepayers Test.

The Staff also identified the Societal Test as a measure used in some states. This test attempts to quantify the change in total resource cost to society as a whole. It takes into account external factors such as the environment, health, safety, and local economic effects. As already noted, however, the Commission previously found that existing statutory authority precludes us from quantifying externalities. The Staff, therefore, focused on the first four tests in its report.

Staff concluded that no one cost/benefit test provides all of the information necessary for Virginia utilities, the public, and this Commission to evaluate the impact of a DSM program. Each test has strengths and limitations in the information it provides. Therefore, Staff recommended that Virginia utilities be directed to conduct quantitative cost/benefit analyses from four perspectives: from the perspective of the program participant, the nonparticipant, the utility, and all ratepayers. All the tests identified above, except the Societal Test, provide information that can collectively contribute to a broad understanding of the impact of a particular program. Thus, Staff believed that such a multi-perspective approach would provide information necessary to strike the proper balance among the interests of all parties affected by any proposed program.

Staff also discussed the types of DSM programs to which the tests applied. Staff noted that different utilities will pursue different load shape objectives and thus demand side programs might reduce peak loads, shift load, build off-peak load, or contribute to a general reduction of sales throughout the day. Staff further observed that some DSM programs can contribute to a general increase in sales and greater market share. While recognizing that many programs do not fit neatly into one particular category, Staff identified six general categories of DSM programs: peak clipping, valley filling, load shifting, strategic conservation, strategic load growth, and flexible load shape. Staff observed that a cost/benefit test that provides useful information for one type of program may not provide meaningful information when applied to a different category of DSM program, again highlighting the importance of a multi-perspective approach.

Staff stressed the importance of the use of accurate data in the cost/benefit analysis. It proposed a set of minimum guidelines for data input and modeling assumptions to facilitate the development and use of meaningful data. Minimum standards, Staff asserted, are important to assure thorough analyses are performed and to provide all participants in a proceeding with a basic understanding about how the data are being developed.

Staff made no specific recommendation with regard to the issue of the application of tests to individual programs versus groups of programs. However, the Staff noted that a utility proposing a package of programs should be able to provide cost/benefit analyses of the individual components of the package.

The Staff fully supported the practice of developing experimental or pilot DSM programs prior to applying for full-scale program implementations. Staff suggests that such experimental programs be carefully structured to acquire the data necessary for evaluation. Also, they should be limited in scope so that the number of participants, the program budget, and the time period are appropriate for experimental purposes. Since the purpose of a pilot program is to gather data for evaluation, a full cost/benefit analysis likely will not be possible. The Staff even suggests that experimental programs that do not involve promotional allowances or new rates need not be subjected to a formal Commission approval process.

For many DSM programs, the key stakeholders are the utility initiating the program, the utility's customers likely to participate in the program, and the utility's customers that are not likely to participate in the program. However, some DSM programs have a significant impact on a customer's choice of fuels, and accordingly, another group of potential stakeholders are the alternative energy suppliers that may be affected by the implementation of the DSM program. In its report, the Staff noted that the opinions on whether and how to include the potential impact on alternative energy suppliers in the cost/benefit analysis generated a wide divergence of opinion on the task force.

Staff believed that the assessment of the effects on alternative energy providers may be appropriate in certain instances where the effect is associated with proposed DSM programs that increase sales or involve promotional allowances. Realistically, however, Staff recognized that it may be impractical for an applicant to consider the impact of a DSM program on alternative energy suppliers and that the burden of such an analysis may actually discourage utilities from pursuing programs that may otherwise be viable. Staff, therefore, proposed that the Commission consider the effect on alternative suppliers from proposed promotional allowance programs and any program resulting in increased sales of the sponsoring utility, but only if such programs are likely to have a significant effect on the sales of alternative energy suppliers. Staff further recommended at the hearing that, if the Commission determines such an effect should be considered, the burden be placed on the alternative energy supplier to quantify that impact. Notice to the alternative energy supplier thus becomes crucial.

Finally, Staff discussed the importance of verification of DSM program impacts. The utilities, the public, and the Commission must see the results of programs to determine if the programs are beneficial and should continue. Monitoring should measure both long-term and short-term effects of any programs. Evaluation of program impacts, of course, can be directly measured by calculating changes in energy use and comparing measurements made at different times. Direct measurements might include customer billing, whole building metering, and end-use metering. A second approach to evaluation can be engineering modeling. This approach would rely heavily on measuring the energy consumption characteristics of equipment and appliances. In any event, DSM programs must produce measurable results, particularly as those programs grow in size and cost.

Task force members and other interested participants filed written comments on the Staff's report. Several of those participants also presented oral comment to the Commission on April 15, 1993. The participants generally applauded the Staff's recommendations. Parties generally

agreed with Staff's observation that every one of the tests offers valuable information that can be used in evaluating proposed programs. Some participants unconditionally supported Staff's multi-perspective approach emphasizing the importance of flexible interplay between and among all available tests, particularly the TRC and the RIM Tests. Those participants further cautioned that reliance on one particular method could produce unintended consequences.

Several participants, while supporting a multi-perspective approach, recommended that the Commission establish a threshold test for determining the cost effectiveness of DSM programs. Any program which could not meet the threshold test would be disqualified from further consideration without application of the other tests. Those participants, however, differed on whether the TRC Test or the RIM Test should be used as the primary or threshold test. Those favoring use of the TRC Test as a threshold measure argued that dependence upon the RIM Test virtually guaranteed failure of programs that would improve customer energy efficiency. They asserted that the TRC test offered the broadest view of the costs and benefits of proposed programs and therefore would not result in a premature elimination of potential conservation DSM options. Opponents to use of the TRC Test as a threshold test asserted that the TRC Test ignores the issue of cross subsidies between program participants and nonparticipants and also screens out strategic load building programs.

A number of participants also emphasized that experimental pilot DSM programs, before full-scale implementation, are important aids to utilities and facilitate prudent decisions concerning DSM programs and expenditures for such programs. They provide an important opportunity for the Commission and interested parties to review the program before substantial commitments are made. Information gathered through such pilots are better indicators of full-scale implementation than using national or regional statistics. A number of commenters supported Staff's recommendation that utilities should be allowed to implement some pilot DSM programs without prior Commission approval, recognizing that pilot programs involving promotional allowances or having rate impacts should continue to be subject to mandatory prior Commission approval. They generally agreed that any proposed DSM program that would increase sales also should be reviewed prior to its implementation, even if approved on a pilot basis, and that the approval should be based on a preliminary cost/benefit analysis. Others emphasized the importance of regulatory oversight of DSM programs. They recognized that experimental or pilot programs may, indeed, be necessary to accumulate data, but stressed that some such programs still fall well outside the provision of traditional utility services. They also noted that some experimental programs can be quite extensive.

Several gas companies asserted that the effects on alternative energy suppliers can and should be quantified and considered directly in the cost/benefit analysis. They asserted that the utility proposing the program should conduct that analysis. Representatives from electric utilities, on the other hand, urged the Commission to consider the impacts on alternative fuel suppliers only when a promotional practice was involved and there were significant impacts which could be clearly measured and quantified. Even in those cases, electric representatives emphasized that a procedure for obtaining the relevant data would be necessary and potentially difficult to implement. Electric representatives also expressed concern that their competitors have attempted to use Commission proceedings to discourage effective competition. This competition, they stated, has encouraged beneficial results and is desirable. They cautioned that the boundless extension of considerations of the impact on alternative fuel suppliers to any DSM program that increased sales would tend to diminish competition, dampen proposals for new DSM programs, and encourage arguments by competitors to advance their own marketing agendas. Competition, it was asserted, should be encouraged and not diminished by intervention from the regulators.

Finally, one participant, the Southern Environmental Law Center ("SELC"), while commenting on the specific questions raised in this proceeding, also argued that the Commission must establish clear and firm guidance to move utilities beyond the status quo. SELC believed that the free market would not capture more than a small increment of this important resource due to numerous barriers, foremost of which, it alleged, is the existing regulatory utility rate setting process. That process, in the SELC's judgment, makes efficiency improvements less profitable than building power plants. SELC appeared to want the Commission to set required levels of investment in conservation and load management programs for each utility. It asserted that general statements of support for cost effective DSM, in the absence of firm requirements, accomplishes little. SELC alleged that this Commission had not yet set a specific goal for utilities to pursue efficiency improvements in Virginia that cost less than new power plants. SELC, however, acknowledged that it is appropriate to proceed cautiously in this area.

NOW THE COMMISSION, upon consideration of the Staff Report, the written and oral comments of the participants, and the applicable law, is of the opinion and finds that a multi-perspective approach to evaluating proposed DSM programs is in the public interest. We agree with our Staff and numerous participants that each of the accepted tests identified by the Staff in its report offers valuable information about a proposed program. Analysis of a program using a multi-perspective approach provides the applicant, all stakeholders, and the Commission with information about the projected impact of a program.

The Participant's Test is a good indicator of the attractiveness of a program to a customer and thus provides information useful in estimating likely participation rates. The Utility Cost Test measures the change in a utility's revenue requirement resulting from a program. The Utility Cost Test thus is a good measure of the change in total utility bills due to the program. It also provides a direct comparison to supply-side options since supply-side tests typically measure the change in a utility's cost flowing from a supply-side resource. The RIM Test measures the difference between the change in total revenue paid to a utility and the change in total costs to a utility resulting from the program. The RIM Test offers a measure of the impact of a DSM program on customers who do not participate in the program. The non-participant perspective is important because all ratepayers may be affected by the actions that some take. The TRC Test measures the net costs of a DSM program as a resource option based on the total cost of the program, including the participant's and the utility's cost. It is essentially a measure of the change in the average cost of energy services across all customers.

Each test, however, also has its weaknesses. Program applicants thus should conduct cost/benefit analyses using the Participants Test, the Utility Cost Test, the RIM Test, and the TRC Test. As previously noted, although the Societal Test can also provide valuable information, it need not be conducted at this time.

Although the Commission is sympathetic to the request for us to choose a threshold test, we are concerned that use of a threshold test would prematurely eliminate programs that may ultimately prove to be in the public interest. We concur with the criticism of some commenters that the RIM Test, as a threshold measure, would inappropriately screen out conservation programs. The TRC Test as a threshold measure, on the other hand, would screen out strategic load building programs which, when viewed in relation to a utility's total resource plan and load shape, may prove to be beneficial. Thus, we are unable to establish a threshold test. The information provided by each individual analysis will serve to provide

more comprehensive information about the expected impact, costs, and benefits of a particular program. We agree that a multi-perspective approach strikes the proper balance for all parties affected by a proposed program.

We also agree with our Staff that the usefulness of the analysis is dependent on the quality of the assumptions and input data. Accordingly, we will adopt the minimum guidelines recommended by our Staff.

Utility applicants are certainly free to file packages of programs. A utility, in fact, should assure itself that programs collectively benefit the utility's resource plan. However, it is also critical that a cost/benefit analysis of each individual program be available, even if an application is for approval of a package of programs.

We also agree with Staff's recommendation that certain limited pilot or experimental programs may be conducted without prior Commission approval. Rate experiments require Commission approval pursuant to statute, and programs involving promotional allowances require closer scrutiny, and accordingly, should continue to be approved under our Rules Governing Promotional Allowances. Our utilities must, however, file reports with our Staff that are available to the public that identify all experimental programs at least 30 days prior to implementation and periodic updates on the results of the experiments. Comprehensive reports on the status of all experimental or pilot programs should be filed at least semi-annually with the Commission's Division of Economics and Finance.

It is clear that some DSM programs will have a significant impact on a customer's choice of fuels. Determination of the impact of a proposed DSM program on alternative energy suppliers was one of the more controversial issues in this proceeding. Clearly the Commission, in its assessment of any DSM program that affects alternative fuel suppliers, should consider such effects in making its decision of whether a proposed program is in the public interest.

In the case of DSM programs involving promotional allowances, the Commission requires the utility applicant to consider the effect of the proposed program on alternative energy suppliers, and, if such effects are significant, to demonstrate that the program serves the overall public interest. Such a requirement is appropriate for actively intervening in energy markets through promotional allowance programs. We will not, however, require a utility proposing a DSM program that does not involve promotional allowances to carry the burden of determining the impact of its proposed program on alternative fuel suppliers.

The development of reliable DSM cost and benefit projections for a utility's customers and its own system is a difficult enough task. The complexities involved in conducting such an analysis were well-documented in the Staff's report and the comments of a number of parties to this proceeding. To extend this analytical challenge to require a consideration of the impact of programs on the customers and systems of alternative fuel suppliers in all cases is unnecessary and unduly burdensome.

The Commission, however, must be provided a complete record when assessing DSM programs. We encourage alternative energy suppliers to participate in proceedings that affect their interests. The alternative fuel supplier has access to the information necessary to attempt to quantify the impact of a proposed DSM program on its sales. It therefore should be incumbent upon alternative energy suppliers to present their own estimates of the impact of utility DSM programs on their organizations. We believe this presentation of alternative views will result in a record that will allow us best to determine which programs are in the public interest. To facilitate this participation we will require a program applicant to provide notice to known regulated alternative fuel suppliers in its service territory.

We also agree with the Staff that verification of DSM program savings and load impacts is critical. Utilities will be required to measure on a short-term and long-term basis the effects of DSM programs.

Finally, we want to reiterate our support for the development of cost effective DSM programs in Virginia. Despite the SELC's criticism, it is our intent to establish clear direction to encourage such development and move utilities to cost effective integrated resource plans which include DSM as a resource option. It is not prudent, in our judgment, to establish fixed requirements which our utilities must meet at any cost.

ACCORDINGLY, IT IS ORDERED:

(1) That rules on the proper cost/benefit tests to be conducted on proposed DSM programs as set forth in Attachment A shall be, and are, implemented; and

(2) That there being nothing further to be done in this docket, this case shall be closed and the papers placed in the file for ended causes.

Commissioner Moore took no part in the decision in this case.

NOTE: A copy of the Regulation entitled "Rules Governing Cost/Benefit Measures Required for DSM Programs" is on file and may be examined at the State Corporation Commission, Clerk's Office, Document Control Center, Tyler Building, First Floor, 1300 East Main Street, Richmond, Virginia.