INTERIM REPORT OF THE ENERGY STUDY COMMISSION

TO THE GOVERNOR

AND THE GENERAL ASSEMBLY OF VIRGINIA



Senate Document No. 22

COMMONWEALTH OF VIRGINIA
Richmond
1975

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Richmond, Virginia

December 1975

TO: Honorable Mills E. Godwin, Jr., Governor of Virginia and

The General Assembly of Virginia

I. INTRODUCTION

The Energy Study Commission was established pursuant to Senate Joint Resolution No. 128 of 1973. Senate Joint Resolution No. 97 of 1975 continued the Commission and increased its membership from eleven to fourteen.

SENATE JOINT RESOLUTION NO. 97

Continuing the Commission to study the energy problems of the Commonwealth.

WHEREAS, the Commonwealth and the nation experienced an energy crisis in the winter of 1973-1974; and

WHEREAS, this crisis precipitated a study that was set out in Senate Joint Resolution No. 128 by the General Assembly in 1973 which led to an interim report (SD #6, 1974) and a final report (January 1975) by the Energy Crisis Study Commission; and

WHEREAS, the energy crisis has become an energy problem predicted to be of long-term duration; and

WHEREAS, although the Commission worked diligently, work remains to be done; now, therefore, be it

RESOLVED by the Senate, the House of Delegates concurring, That the Commission to Study the Energy Crisis in the Commonwealth is hereby continued and renamed the Energy Study Commission. The Commission shall study ways in which the State can take action on energy problems, including specific suggestions and legislative recommendations on the State setting the example for increasing energy supply and decreasing energy consumption, requesting and encouraging voluntary conservation, requesting or requiring localities to enact energy and conservation measures, and requiring State energy conservation measures. Along with the recommendations the Commission shall submit means for implementation and note expected benefits.

The present eleven members of the Commission shall continue to serve, and the Commission shall be increased to fourteen members, five appointed by the Speaker of the House of Delegates from the membership thereof, three appointed by the Committee on Privileges and Elections of the Senate from the membership of the Senate and six appointed by the Governor, to include: one from an established Virginia environmental group; one from Virginia industry; two from local government, including one from a rural area and one from an urban area of the State; and two from the State at large. If a vacancy occurs for any reason, the appropriate above named person or persons shall appoint a successor.

Members of the Commission shall serve without compensation but shall be reimbursed for the expenses incurred by them in the performance of their duties in the work of the Commission. For such other expenses as may be required, including secretarial and other professional assistance, the balance of the funds previously allocated to the Commission from the contingent fund of the General Assembly are hereby reallocated for the purposes of this study. All State agencies shall assist the Commission in its work.

The Commission shall submit to the Governor and the General Assemby an interim report no later than November one, nineteen hundred seventy-five, and a final report no later than November one, ninteen hundred seventy-six, of its findings along with recommendations to be considered in establishing an energy policy for the Commonwealth designed to meet the energy problem.

The eleven members of the present Commission who have served since 1973 are: Senator George F. Barnes, Tazewell, Chairman; Delegate C. D. Dunford, Tazewell, Vice-Chairman; Senator Leslie D. Campbell, Jr., Ashland; Claiborne D. Gregory, Doswell, (State at large); Senator William B. Hopkins, Roanoke; Delegate George W. Jones, Bon Air; Delegate Glenn B. McClanan, Virginia Beach; Delegate John L. Melnick, Arlington; Delegate Lewis W. Parker, Jr., South Hill; Stanley Ragone, Richmond, (Industry); and Eugene M. Scheel, Waterford, (Environmental).

The three new members who were appointed to the Commission by the Governor in 1975 are: Honorable W. S. Kerr, Appomattox, (Rural local government); Honorable Frank R. Pancake, Staunton, (Urban local government); and Frank T. Sutton, III, Richmond, (State at large).

II. WORK OF THE COMMISSION

In the first two years of its existence, the Commission directed its attention principally, although not exclusively, to energy conservation and to those aspects of the energy crisis relating to fossil fuels.

Summaries of their activities and findings in these first two years can be found in Senate Document 6, 1974 and Senate Document 23, 1975. It should also be noted that the Commission did not address itself to the directive to examine the existing and future energy demands of the Commonwealth, the amounts and types of fuel supplies that will be available, and the likely cost and environmental consequences. These directives have been under consideration by the State Energy Office and will be examined in an Energy Survey of the State to be published in early 1976. During 1975, the Commission turned its consideration primarily to solar energy and its future role in Virginia. In an effort to learn more about the subject and gather data, the Commission spent one day at NASA's Langley Research Center, Hampton, Virginia. The staff at Langley Research Center made presentations to the members on NASA's current and projected experiments involving solar heating and cooling and energy conservation. Among these projects are a large office building totally heated and partially cooled by solar energy; a residence designed to reduce energy consumption by twothirds and water usage by one-half; a low-cost domestic solar collector which can be easily installed by home owners to provide a portion of their heating and hot water needs. The goal was to keep all costs (excluding labor) under \$2,000. The residence was also to have a furnace that burns refuse to fire a steam generator; and various other energy-projects which could reduce other energy requirements such as coal, oil, gas and electricity.

The Commission also co-sponsored and participated in the Science Museum of Virginia's conference-workshop on solar energy. The conference-workshop, held August 19-20, 1975, at Virginia Commmonwealth University, Richmond, featured talks, workshops, exhibitions, films, and addresses by public officials and noted businessmen, builders, and scholars in the solar energy field. Senator Barnes, Commission Chairman, and Delegate Dunford, Commission Vice-Chairman, participated on workshop panels.

The Conference drew approximately 1100 contractors, designers, architects, businessmen, scientists, lawyers, environmentalists, government officials, homeowners, and other interested citizens throughout the nation. Ideas were exchanged concerning the policy, legislative, economic, legal and environmental aspects of solar-energy utilization. Also considered were the implications of expanded use of solar energy in the fields of architecture, engineering, construction, and agriculture.

A member of the symposium workshop panel on engineering, Mr. John M. Owen, was invited to address the Energy Study Commission at its final meeting of 1975. Mr. Owen is President of Owen Engineering, Lynchburg, a firm engaged in the design of residential solar energy systems. Mr. Owen's presentation to the Commission centered upon the three primary uses of solar energy today: heating space, heating water, and air conditioning.

III. CONCLUSION

In the course of the year, the Commission found that a number of solar energy activities were under way in Virginia. These activities were by no means confined to research and development. Several actual construction projects, applying solar energy technology to school, commercial, and private (homes, swimming pools, etc.) use, have been completed or are nearing completion. These include the Fauquier County High School, Warrenton; a condominium development, Berryville; the Terraset School, Reston; and Madeira School, Great Falls.

Courses in solar energy are now being offered at the Virginia Commonwealth University, in the Virginia Community College System, and at other institutions of higher education in the State. Mr. Eugene M. Scheel, a member of the Energy Study Commission, organized and conducted a solar-energy workshop at the Loudoun Campus of the Northern Virginia Community College on November 1 through November 8. Dr. J. B. Jones of the Department of Mechanical Engineering, Virginia Polytechnic Institute and State University, heads a Virginia solar testing center, its purpose to evaluate the performance capabilities of solar panels. Such energyefforts which could reduce oil, coal, gas and electricity usage should be encouraged and commended; especially since ERDA (U. S. Energy and Research Development Administration) estimates that by 1985, one per cent of all housing starts will be using solar; and by the year 2000, seven per cent of all housing starts will be using solar. In addition, ERDA estimates that 30 per cent of existing residences are retrofitable to solar.

It was the concensus of the members that the dissemination of information concerning the use and development of solar energy facilities is essential to the future well being of the Commonwealth. Therefore, they agreed that the work of the Virginia Solar Energy Center should be continued, but that this responsibility could be better handled by the State Energy Office and should be transferred there. Since the educational role of the Virginia Solar Center is of great importance, this transferral should not be made until the parties and State agencies involved discuss the functions and responsibilities of the Virginia Solar Energy Center.

The Commission intends to present legislation and specific recommendations in its final report to the Governor and the General Assembly.

Respectively submitted,

George F. Barnes, Chairman

C. Don Dunford, Vice-Chairman

Leslie D. Campbell, Jr.

Claiborne D. Gregory

William B. Hopkins

George W. Jones

W. S. Kerr

Glenn B. McClanan

John L. Melnick

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