

COMMONWEALTH OF MASSACHUSETTS  
DEPARTMENT OF PUBLIC UTILITIES

PROPOSED REGULATIONS BY THE )  
DEPARTMENT OF PUBLIC UTILITIES, )  
PURSUANT TO CHAPTER 465 OF THE )  
ACTS OF 1980, ESTABLISHING THE )  
METHOD BY WHICH EXPENSES OF THE )  
RESIDENTIAL CONSERVATION SERVICE )  
PROGRAM WILL BE RECOVERED. )

D.P.U. 472

TESTIMONY OF PAUL L. CHERNICK  
OF BEHALF OF THE  
ATTORNEY GENERAL

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Q: Mr. Chernick, would you please state your name, position, and office address.

A: My name is Paul Chernick. I am employed by the Attorney General as a Utility Rate Analyst. My office is at One Ashburton Place, 19th Floor, Boston, Massachusetts 02108.

Q: Please describe briefly your professional education and experience.

A: I received a S.B. degree from the Massachusetts Institute of Technology in June, 1974 from the Civil Engineering Department, and a S.M. degree from the same school in February, 1978 in Technology and Policy. I have been elected to membership in the civil engineering honorary society Chi Epsilon, to membership in the engineering honorary society Tau Beta Pi, and to associate membership in the research honorary society Sigma Xi. I am the author of Optimal Pricing for Peak Loads and Joint Production: Theory and Applications to Diverse Conditions, Report 77-1, Technology and Policy Program, Massachusetts Institute of Technology. During my graduate education, I was the teaching assistant for courses in systems analysis. I have served as a consultant to the National Consumer Law Center for two projects:; teaching part of a short course in rate design and time-of-use rates, and assisting in preparation for an electric a time-of-use rate design case.

Q: Have you testified previously as an expert witness?

A: Yes. I have testified jointly with Susan Geller before the Massachusetts Energy Facilities Siting Council and the

Massachusetts Department of Public Utilities in the joint proceeding concerning Boston Edison's forecast, docketed by the E.F.S.C. as 78-12 and by the D.P.U. as 19494, Phase I. I have also testified jointly with Susan Geller in Phase II of D.P.U. 19494, concerning the 1978 forecasts of nine New England Utilities and NEPOOL, and jointly with Susan Finger in Phase II of D.P.U. 19494, concerning Boston Edison's relationship to NEPOOL. I also testified before the E.F.S.C. in proceeding 78-17 on the forecast of Northeast Utilities, in E.F.S.C. 78-33 and 79-33 on Eastern Utilities Associates 1978 and 1979 forecasts, respectively, and in E.F.S.C. 79-1 on the supply plan of the Mass. Municipal Wholesale Electric Company; jointly with Susan Geller before the Atomic Safety and Licensing Board in Boston Edison Co., et. al., Pilgrim Nuclear Generating Station, Unit No. 2, Docket No. 50-471, concerning the "need for power"; in D.P.U. 20055 regarding the 1979 forecasts of EUA and Fitchburg Gas and Electric Company, the cost of power from the Seabrook Nuclear plant, and alternatives to Seabrook purchases; in D.P.U. 20248 on the cost of Seabrook power; in D.P.U. 200 on Massachusetts Electric Company's rate design and conservation initiatives; in D.P.U. 243 on Eastern Edison Company's rate design; and in PUCT 3298, on Gulf States Utilities' Texas retail rate design. I have also submitted prefiled joint testimony with Ms. Geller in the Boston Edison time-of-use rate design case, D.P.U. 19845, but we have not yet testified.

Q: What is the purpose of this testimony?

A: On November 14, 1980 the Department of Public Utilities proposed regulations establishing the method by which gas and electric companies would treat and recover Residential Conservation Service Program expenses. Although I am in general agreement with the proposed regulations, I am specifically opposed to the method by which RCS expenses are proposed to be recovered from firm customers, as set forth in Proposed Regulation 6. The equal charge per bill is the wrong approach for recovery of RCS costs; it is manifestly unfair and unrelated to the costs or benefits of the program.

Q: Would you please explain your objections to the method by which RCS costs are proposed to be recovered and state your proposal for the recovery of RCS costs from rate payers.

A: The costs of the RCS program are primarily determined by the number of residences audited. Therefore, any cost allocation based on where and how the gross costs are incurred can only charge those customers who are audited. Chapter 465 of the Acts of 1980 limits this charge to \$20 for a single family dwelling; the State Plan lowers this fee to \$15. It is not possible to force the allocation of the remaining costs to follow the pattern of cost incursion, even if this were desirable. Certainly, the costs of the program are not proportional to the number of meters on the system, which is the basis for the proposed allocation.

In any case, allocating RCS program costs on the basis of the site of cost incursion would be incorrect and inappropriate, even if it were possible. The RCS program is intended to have net benefits to the utilities, their customers, and the Commonwealth as a whole. In effect, the RCS program is primarily a source of inexpensive energy supply for the utilities; by increasing the efficiency of their customers' energy use, the utilities can reduce their purchases of the most expensive energy sources. Electric utilities can use less of the highest quality fuels, burned in the least efficient units, while gas utilities can buy less of the supplemental fuels, such as liquefied natural gas, propane, and synthetic natural gas. The RCS program is intended to lower fuel clause adjustments and purchased gas adjustments, or at least slow the increases in these adjustments.

In terms of its purposes, the RCS program is much like a fuel procurement program. Essentially, Congress and the General Court have realized that the floor, walls and ceiling of each residence contain a quantity of cheap fuel, and have ordered the utilities to drill for it. The potential of the program is a function of the number of residential customers, just as the potential of a conventional fuel production program is limited by the number of available drilling sites and fuel reservoirs.

The benefits of increased supplies of economical fuel, whether these are obtained from a well in a customer's backyard or from insulating the customer's water heater, are shared by all of the utility's customers, to the extent that they use and pay for the fuel the utility buys. The need for additional fuel supply would decrease considerably if customers' aggregate energy use decreased, so that the utility's fuel supply would be composed entirely of its cheapest current sources: hydro, uranium, and coal burned in existing units for electric utilities, and pipeline gas contracts for gas utilities. Therefore, it is the amount of energy required which determines both the need for the RCS program and the benefits to various customers from the program. It follows that RCS costs should be allocated on the basis of kwh or ccf sales, rather than on the basis of bills or meters.

It may be useful to consider how well the cost allocation would follow the benefits obtained, under the proposed regulation and under a uniform ¢/kwh allocation. The proposed regulation would apply the same monthly charge to each customer, whether that customer is a 2000 kwh/month corner store or a million kwh/month industrial customer. Neither of these customers is eligible for the direct audit service. The benefits in fuel cost savings will be 500 times greater for the industrial customer than for the store, giving the industrial customer 500 times as large a

return on its revenue contribution to the RCS program as that received by the commercial customer. An equal ¢/kwh allocation would equalize the return on each customer's contribution to supporting the RCS program. Similar results would pertain for gas utilities; large customers would be heavily subsidized by the proposed regulation, receiving disproportionate benefits at the expense of smaller customers.

While the major impact of the RCS program will be on fuel costs, which are allocated on an equal ¢/kwh or ¢/ccf basis to all customers, there will be some other benefits which may not be equally shared by all customers on the basis of energy use. Lower sales may allow decreased investment and expenses for storage, transmission, distribution, transformation, and generation capacity. The impact of RCS on energy costs may also vary from one time period to another, both daily and seasonally. About the only costs which will be completely insensitive to the RCS program are customer-related costs (meters, billings, customer relations, services) and fixed administrative and general expenses. It would be reasonable to allocate some portion of the RCS costs in proportion to the non-customer, non-administrative costs, and to allocate the costs on a time-of-use basis. Unfortunately, without updated, uniform and accepted cost-of-service studies, the allocation of costs to customer classes on the basis of time-of-use or

non-fuel savings would necessarily be very arbitrary. An allocation primarily to kwh or ccf sales, with a smaller allocation on the basis of total bills(or any other proxy for non-fuel savings), would not necessarily track benefits better than a straight kwh allocation, and would be somewhat more complex to administer.

Hence, the Department of the Attorney General at this time supports recovery of RCS costs on a uniform ¢/kwh or ¢/ccf basis for all customers, in a manner consistent with allocation of fuel clauses, purchased power adjustment clauses, and purchased gas cost adjustment clauses. In no case should these costs be recovered on the basis of meters or bills.

Q: Does this conclude your testimony?

A: Yes it does.