DE 04-072

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

2004 Least Cost Integrated Resource Plan

Order on Request for RSA 378:38-a Waiver

O R D E R N O. 24,435

February 25, 2005

I. INTRODUCTION

This proceeding concerns the biennial Least Cost Integrated Resource Plan filed on April 30, 2004, by Public Service Company of New Hampshire (PSNH) with the New Hampshire Public Utilities Commission (Commission) pursuant to RSA 378:38. Following a duly noticed Pre-Hearing Conference conducted on January 5, 2005, the Commission entered Order No. 24,426 (January 28, 2005). In it, the Commission adopted the proposal of the parties and Commission Staff that the Commission address certain threshold issues at the outset, following the receipt of written comments.

Those issues are (1) the extent to which PSNH is obliged to discuss distribution issues in its Least Cost Integrated Resource Plan, and to take the needs of Unitil Energy Systems, Inc. (Unitil) and the New Hampshire Electric Cooperative (NHEC) into account when creating this aspect of the plan, (2) whether PSNH should be granted the requested RSA 378:38-a waiver of the requirement to discuss generation in its plan, and (3) the extent to which PSNH's participation in the Core Energy Efficiency Programs, funded by the system benefits charge paid by New Hampshire's electric customers, satisfies PSNH's obligation under RSA 378:38 and 378:39 to consider demand-side management efforts in connection with its plan.

The Commission established February 8, 2005 as the deadline for submission of written comments. PSNH, Unitil, NHEC, the Office of Consumer Advocate (OCA) and Granite State Electric Company (GSEC) made timely submissions. On February 24, 2005, PSNH submitted a letter, asserted to by Unitil and NHEC, that the parties were working together productively and requested a two month delay in consideration of the PSNH's Least Plan.

II. POSITIONS OF THE PARTIES

A. Public Service Company of New Hampshire

PSNH noted that RSA 378:38-a, explicitly authorizing waivers of the requirement to include generation in electric utilities' least cost integrated planning documents, became law in June of 1997, only four months after the Commission issued its final statewide restructuring plan.[1] According to PSNH, given the status of the electric industry in New Hampshire at the time of passage, the legislation probably represents an "interim measure."

Conceding that the standard for granting a waiver under RSA 378:38-a is not clear, PSNH proposes that the Commission determine whether it is just and reasonable for PSNH to undertake least cost resource planning in the context of an electric industry that no longer mirrors the vertically integrated model for which the planning statutes were designed. PSNH notes that its generation, transmission and distribution operations are functionally separated and, therefore, that integrated resource planning may no longer be possible or permissible.

PSNH further notes that transmission planning is now conducted at the regional level via the annual Regional Transmission Expansion Plan (RTEP) created by ISO New

[1] PSNH was among the electric utilities that immediately challenged the restructuring plan in federal court, obtaining an emergency injunction. PSNH dropped its lawsuit against the Commission as part of the Agreement to Settle PSNH Restructuring, approved by the Commission and the Legislature in 2000.

England. According to PSNH, the adoption of open access transmission tariffs and the code of conduct mandated by the Federal Energy Regulatory Commission (FERC) prohibit discrimination among transmission users and limit PSNH's ability to disclose certain information about its transmission system. In particular, PSNH points out that it cannot plan its transmission system so as to favor its generation facilities over others.

According to PSNH, generation no longer lends itself to Least cost integrated Resource Planning. PSNH contends that electric restructuring turned generation planning over to the market and to the FERC via its regulation of the regional wholesale electricity markets. Conceding that it is unique in New Hampshire by virtue of legislation allowing it to continue to own generation facilities, PSNH points out that its customers are not obliged to purchase energy from PSNH. It describes this reality as the "wild card" in the resource planning process. PSNH Memorandum at 5. Specifically, PSNH points out that it cannot be certain of the amount of load for which it may be required to supply energy on a long-term basis. Indeed, PSNH notes, there is no certainty that PSNH will remain in the generation business after April 30, 2006 in light of RSA 369-B:3-a (allowing asset divestiture after that date, upon Commission approval).

With respect to demand-side management, PSNH points out that the Commission has adopted an industry-wide approach to this issue by implementing the statewide Core Energy Efficiency Programs as recommended by the Commission's Energy Efficiency Working Group. Noting that the success of the Core programs has been measured by overall kilowatt-hour savings, PSNH nevertheless points out that many of the commonly installed efficiency measures also contribute to reducing peak demand. According to PSNH, if it were required to file a least cost demand-side plan, it would begin by “reaffirming” the Core programs and supplying the assessments already conducted with respect to those programs. PSNH Memorandum at 7.

According to PSNH, in addition to the Core programs, it has retained many of its rate offerings that shift load to off-peak times or reduce on-peak demand. As examples, PSNH refers to its municipal lighting Rate EOL, its load controlled service, its electric space heating option HeatSmart, the Voluntary Interruptible Rate, the Ski Area Interruptible Rate and the Westinghouse special contract. PSNH also refers the Commission to its Retail Energy Service program, which it characterizes as designed to encourage large customers to take service from competitive suppliers in a manner that reduces PSNH’s need to purchase surplus power from the wholesale market.

Finally, PSNH contends that distribution investment does not lend itself to long-term least cost resource planning. According to PSNH, the planning horizon for distribution is shorter than that for other aspects of its operations. PSNH also notes that distribution planning is more localized, responding to near-term changes and customer needs in discrete geographical areas. PSNH points out that its transmission least cost planning document does include those transmission upgrades that were requested by its distribution planners. It also points out that the table listing its transmission and distribution upgrades can be broken out more clearly to reflect which projects are related to the 34.5 kv distribution system and which are solely for transmission. PSNH also reiterates a point it made at the Pre-Hearing Conference: that it has engaged the Stone & Webster consulting firm to conduct a study of PSNH’s distribution reliability and system planning. According to PSNH, it has begun discussions with NHEC and

Unitil to explore "inter-company planning principles so that the mutual expectations of . . . these companies are made clear for each of the companies' system planners." *Id*. at 9.

PSNH points out that although distribution is referenced in RSA 378:38-a, authorizing least cost planning waivers, there is no mention of distribution in the statutes that affirmatively require least cost planning. PSNH also contends that if it is required to address distribution in its least cost planning process then the same requirement would apply to the state's other electric utilities.

B. New Hampshire Electric Cooperative

NHEC takes the position that PSNH's least cost integrated transmission plan should address the relationship between its wholesale delivery service customers (i.e., NHEC and Unitil) and PSNH's transmission planning process. According to NHEC, there is nothing in the PSNH transmission plan that indicates how the load growth, reliability needs or safety concerns of NHEC and Unitil are taken into account in connection with least cost transmission planning, particularly with respect to prioritizing investments in new facilities and upgrades. Though NHEC concedes that electric utilities should not be required to provide a detailed analysis of its distribution system planning, design and operation in connection with the least cost planning document, NHEC contends that PSNH should be required to articulate how the needs of the wholesale customers are incorporated into its planning process.

NHEC supports PSNH's request for an RSA 378:38-a waiver with respect to generation. It also takes the position that dockets specifically addressing the statewide energy efficiency programs are the appropriate forum for assessing PSNH's demand-side efforts.

C. Unitil Energy Systems, Inc.

Unitil contends that PSNH's least cost planning document must include an analysis of the 34.5 kv network and related facilities. In that regard, Unitil invokes the discussion of assessment of transmission options contained in the Commission's 1988 decision in *Public Service Co. of N.H.*, 73 NH PUC 117 (1988) (concerning application of avoided cost methodologies to utilities' relationships with independent power producers). In that order, which antedated the adoption of the least-cost planning statute, the Commission required electric utilities to embark upon least cost planning. With respect to transmission, the Commission required utilities to provide a "detailed assessment of the forecasted transmission requirements, limitations and constraints over the planning period." *Id.* at 128. Specifically, the Commission required "a map indicating load center concentrations, transmission limitations and constraints, and planned and proposed changes to the transmission system within the franchise area during the forecast period." *Id*. The Commission also required "an evaluation of how new generation, regardless of ownership, will be incorporated into the transmission grid and the consequences of additional generating sources for the transmission system." *Id.*

According to Unitil, the Commission should not incorporate distribution planning requirements into the least cost planning process for the transmission grid. However, Unitil contends that there is a "special class" of distribution facilities that is "critical to transmission planning" and therefore "relevant to least cost planning" because these facilities perform both transmission and distribution functions. Unitil Statement of Position at 2.

Unitil notes that all of PSNH's 34.5 kv system is classified as distribution, based on the currently applicable FERC seven-factor test for making such determinations. But, according to Unitil, PSNH's 34.5 kv system comprises dual purpose facilities that perform transmission as well as distribution functions. Unitil further notes that the reclassification of the 34.5 kv system from transmission to distribution for FERC purposes has not changed the manner in which system planners and operators treat this aspect of PSNH's facilities.

According to Unitil, there are numerous ways in which the 34.5 kv system is distinguished from other PSNH distribution facilities. Specifically, (1) the 34.5 kv system may be operated as a looped, as opposed to radial, system; (2) 34.5 kv lines are used to integrate sources of supply and provide service to distribution substations and circuits throughout the service territories of PSNH, NHEC and Unitil; (3) unlike typical distribution facilities, 34.5 kv lines are often constructed in dedicated rights of way rather than along roads; (4) 34.5 kv lines have few if any customer transformers installed on them to step voltage down to secondary levels; (5) analysis and planning of the 34.5 kv system is routinely performed by using transmission load flow software; (6) the methodologies used to plan and analyze the 34.5 kv system, including the evaluation of contingencies and switching solutions to alleviate thermal and voltage constraints, are most akin to transmission planning methods; (7) unlike other distribution facilities, the 34.5 kv system falls under the authority and jurisdiction of PSNH's Electric System Control Center; (8) the 34.5 kv system provides a parallel path to the transmission system and is used to alleviate transmission constraints; and (9) the PSNH and Unitil systems are often operated as an integrated network. According to Unitil, it is the transmission function of the 34.5 kv system that should be considered in the context of least cost transmission planning.

Unitil contends that RSA 378:37 requires PSNH to include in its least cost plan an analysis of the impacts its proposed system additions will have on costs incurred by, and the reliability and operations of, the two distribution utilities that are customers of PSNH (i.e., NHEC and Unitil). According to Unitil, PSNH has not considered such factors to date. This omission, according to Unitil, would result in an incomplete evaluation of PSNH's plan unless corrected, from the standpoint of determining the lowest reasonable cost to meet the energy needs of customers.

According to Unitil, PSNH exercises significant influence over the design and operation of Unitil's own distribution system. Unitil contends that PSNH determines the location and design specification of new substations as well as the delivery points used to provide energy to the Unitil distribution system. Unitil also contends that PSNH may also prescribe how Unitil's internal load is to be allocated between such delivery points. These realities, according to Unitil, constrain the planning, design and operation of the Unitil distribution system. Unitil contends that when it attempts to plan, construct, operate and maintain its own distribution system in a manner that balances least cost and optimal performance for its customers, Unitil is frequently unable to do so because of an inability to influence planning decisions external to the Unitil system.

Unitil further contends that several modifications and additions planned by PSNH in 2006, including the Timber Swamp, Brentwood and Oak Hill substations, will directly impact the long-term design and operation of the Unitil system. According to Unitil, these proposed additions have not been proven to represent an optimum or least cost long-term solution for all customers in these areas. For example, according to Unitil, costs to Unitil potentially in the millions of dollars have not been factored into PSNH's economic evaluation of its Timber Swamp substation. Unitil also contends that other factors, such as reliability and system losses, have similarly not been considered by PSNH. According to Unitil, once such substations are constructed, the Unitil system may be irreversibly harmed and other alternatives that might have been more desirable from Unitil's standpoint will no longer be feasible or cost-effective.

Unitil proposes that PSNH's least cost integrated planning document be required to consider (1) the total cost of planned additions, including the internal costs of each utility associated with such planned additions; (2) the reliability impact, if any, of planned system additions and modifications for all utility customers; and (3) other operational considerations, including line losses and maintenance costs, for all utility customers. Unitil further contends that in order to meet the "least cost" standard, PSNH should consider its transmission system and underlying 34.5 kv system as a single system for purposes of transmission planning. According to Unitil, the planning process should be jointly undertaken any time PSNH plans or constructs facilities for the benefit of more than one distribution company. Finally, Unitil takes the position that PSNH's planning solutions should not favor PSNH's retail customers over any other utility customers simply due to PSNH's ownership and control of the surrounding transmission and distribution system.

D. Office of Consumer Advocate

The OCA contends that RSA 378:38 allows the Commission to require PSNH to address distribution in its least cost planning document. However, noting that PSNH's recent transmission and distribution rate case resulted in PSNH retaining a consultant to address distribution, the OCA suggests the Commission not require PSNH to duplicate that effort in this proceeding. According to the OCA, PSNH's obligation to conduct least cost integrated planning regarding the 34.5 kv system that provides power to Unitil and NHEC may not be adequately addressed by the ongoing PSNH distribution analysis. Thus, OCA asks the Commission to require PSNH to address that aspect of its 34.5 kv system in its least cost integrated plan.

OCA believes PSNH should not receive a waiver of the requirement to address generation in its least cost integrated plan, given that PSNH continues to own and operate its fossil/hydro generation assets. According to the OCA, whether one looks at the issue assuming divestiture or retention of those PSNH generation assets, the Commission must discharge its least cost planning duties regarding PSNH's generation. Further, according to the OCA, if one assumes PSNH may divest shortly after April 30, 2006, the Commission needs to determine if divestiture is in the public interest. The OCA believes that information collected in this docket would be extremely valuable in making that determination. Further, in the view of OCA it would be necessary for the Commission to conduct a full review of PSNH's least cost planning should the Legislature adopt a pending proposal to add new generation facilities to its system.

Finally, the OCA contends that the assessment of the Core Energy Efficiency programs adequately covers PSNH's energy efficiency programs, but not PSNH's load management programs. As to the latter, OCA contends that PSNH should provide additional information as part of the least cost integrated planning process.

III. COMMISSION ANALYSIS

A. Distribution

We begin with the extent to which PSNH is obliged to discuss distribution issues in its Least Cost Integrated Resource Plan. As a general proposition, we agree with PSNH that most issues relating to distribution are not relevant to least cost integrated planning because they relate solely to safety and reliability at a very local level and have little or no relationship to how

PSNH plans other aspects of its business. We also agree with Unitil and NHEC, however, that issues relating to PSNH's 34.5 kv system and, in particular, the use of that system to connect Unitil and NHEC to the transmission grid, are indeed relevant to the process of least cost integrated planning. Unitil's filing lays out in considerable detail, how decisions PSNH makes about its 34.5 kv system can and do affect planning decisions made by distribution companies that depend on PSNH for interconnection.

The written submissions of the parties with an interest in this issue suggest little real disagreement. The parties acknowledge that, as the result of the recent distribution rate case, consultants are evaluating PSNH's distribution planning process and it would make little sense to duplicate any of that effort in the context of this proceeding. We agree. Likewise, it appears that PSNH is cooperating with Unitil and NHEC with respect to distribution planning when that planning will impact Unitil and NHEC.

Accordingly, rather than resolve these issues in the context of PSNH's current Least Cost Integrated Resource Plan, we instruct Staff to work with the parties to address these issues. We will expect PSNH's next Least Cost Integrated Resource Plan to set forth such efforts, and their results, in detail. By leaving the question unresolved here, we do not intend to foreclose the possibility of any party bringing problems to the Commission's attention with respect to the adequacy of PSNH's coordination with Unitil and NHEC with respect to planning the future of the 34.5 kv system.

B. Generation

RSA 378:38-a authorizes the Commission to "waive any requirement to file least cost integrated resource plans by an electric utility under RSA 378:38, except for plans relating to transmission and distribution." Correctly pointing out that the statute specifies no standard for granting such a waiver, PSNH seeks a blanket determination that it need not address issues related to generation.

We are unable to grant such a blanket waiver in the present circumstances. As an initial matter, we note that RSA 378:38 does not require PSNH to address "generation" per se. Rather, RSA 378:38 requires a Least Cost Integrated Resource Plan that, at a minimum, includes nine elements, among them "supply options," "[p]rovisions for diversity of supply sources," the "[i]ntegration of demand-side and supply-side options," assessment of the plan's impact on state compliance with two federal statutes (the Clean Air Act Amendments of 1992 and the National Energy Policy Act of 1992) and "[a]n assessment of the plan's long- and short-term environmental, economic and energy price and supply impact on the state." The ability of a fully restructured electric utility – i.e., one with an energy business limited to the procurement of Transition and Default Service from wholesalers – will have a different and perhaps an attenuated ability to conduct least cost integrated resource planning in a manner that has a meaningful relationship to these elements. However, restructuring does not necessarily mean a distribution company may completely disregard these subjects for planning purposes.

The general question of a fully restructured electric utility's least cost integrated resource planning obligations, is one we specifically opt not to resolve here. The appropriate forum for addressing this question is a proceeding in which the plan mandated of such a utility by RSA 378:38 is under consideration. Here, as we have previously noted, we are confronted with a much different situation: a utility that, while functioning within an industry that has been restructured throughout most of New England, itself continues to function in a manner very similar to that of a traditional, vertically integrated utility.

While PSNH correctly points out that its future as an owner of generation facilities is not certain, nothing in PSNH's memorandum suggests that a company in its position is unable to include generation issues in some form in its least cost integrated resource planning process. Speculating that such planning "*may* no longer be possible or permissible," PSNH Memorandum at 4 (emphasis added), PSNH offers no affirmative reason why such efforts are entirely precluded.[2]

Even before the enactment of RSA 378:38, utilities were required to conduct least cost integrated resource planning in the context of generation options beyond those available to a traditional, vertically integrated utility. *In Public Service Company of New Hampshire*, 73 NH PUC 117 (1988), the Commission conducted a comprehensive review of previously approved avoided cost methodologies that governed the terms of utility purchases of energy from certain independent power producers (referred to as Qualifying Facilities, or QFs) under the New Hampshire Limited Electrical Energy Producers Act (LEEPA), RSA 362-A, and its federal

[2] Later in its memorandum, PSNH points out that the FERC Code of Conduct precludes transmission owners such as PSNH from disclosing "private information about its transmission operation to any competitive affiliate or any individual entity that has generation, including PSNH's generation group." PSNH Memorandum at 4. It also points out that FERC prohibits PSNH from planning its transmission system in a manner that favors its own generation assets. These realities are obviously relevant to the process of least cost integrated resource planning. But, rather than suggesting that generation is not relevant to the process, these factors would tend to support a waiver of the requirement to discuss *transmission* in the planning document – a waiver that RSA 378:38-a explicitly rules out.

counterpart, the Public Utility Regulatory Policies Act (PURPA), 16 U.S.C. § 824a-3 *et seq*. The Commission concluded that "the necessary framework for utility negotiations with QFs" must be "utility long term resource planning." *Id*. at 123. Accordingly, the Commission required utilities "to file an integrated least cost resource plan" to assure that each company would "satisfy future demand with the optimal combination of supply-side resources and demand-side programs." *Id*. at 126. The Legislature codified this requirement in RSA 378:38-a two years later.

To be sure, and as PSNH points out, restructuring has since progressed beyond the mere availability of independently produced wholesale power and mandated purchases of such power. It would be inconsistent with present circumstances, however, to suggest that utilities could no longer incorporate generation into their least cost integrated planning process simply because their monopoly on generation ended.

Nor has the existence of uncertainty about a utility's future justified exemption from least cost integrated resource planning obligations in the past. For example, in 1990 the Commission declined a request from NHEC that it be excused from filing a least cost integrated resource plan on the ground that the cooperative's financial survival, and the future of its wholesale power supply (in light of the recent PSNH bankruptcy) were then in significant doubt. *See New Hampshire Electric Cooperative*, 75 NH PUC 202 (1990).

When the Commission issued its statewide restructuring plan in 1997, it concluded that the goals underlying least cost integrated planning were "likely to be better served through market forces." *Statewide Electric Utility Restructuring Plan,* 82 NH PUC 122, 141 (1997). Noting that in a restructured industry it would still be "appropriate for distribution companies to continue to conduct overall system planning," the Commission expressed an intention to "work with the Legislature to repeal or modify [RSA 378:38] to better reflect the restructured industry." *Id*. The enactment of the waiver statute, RSA 378:38-a, followed less than four months later.

This wait-and-see stance about the future of least cost integrated resource planning is still justified in the context of PSNH. We recently rejected an argument that in seeking approval under RSA 369-B:3-a for a plan to replace an existing coal-fired boiler with one capable of burning wood, PSNH was obliged to demonstrate the proposal's conformity with its most recent least cost integrated resource plan. *See Public Service Co. of N.H.*, Order No. 24,327 (May 14, 2004), slip op. at 20-21. In so concluding, we noted that RSA 369-B:3-a (requiring PSNH to retain its generation portfolio through at least April 30, 2006 and authorizing modification of PSNH generation assets with Commission approval as in the public interest of PSNH's retail customers) is, "in effect, a specific and legislatively mandated resource plan with respect to PSNH generation assets." *Id*. at 20. But it is a short-term plan that, by its terms, ends on April 30, 2006. What occurs thereafter remains an unknown and there is at least a significant possibility that PSNH will remain in the generation business beyond that date.

In these circumstances, it would be inconsistent with the public interest either to require PSNH to conduct least cost integrated resource planning as it did prior to restructuring or to allow PSNH to make no effort to conduct such planning in a manner that takes generation into account. The sensible course is to require PSNH to submit a document that delineates its planning in light of its possible continued ownership of generation and the other realities described in PSNH's memorandum (i.e., the regionalization of transmission planning, the possibility of customer migration to competitive suppliers, the applicable code of conduct and resulting functional separations within PSNH, etc.) We anticipate that such a planning document will be significantly different from, and likely more abbreviated than, the kind of document a traditional, vertically integrated electric utility would produce. PSNH should describe options available to it for assuring that safe and reliable electricity is available to its customers at the lowest possible cost – which is the overall public policy goal of restructuring. *See* RSA 374-F:1, I.

C. Demand-Side Options

Finally, we address the argument that PSNH should be excused from discussing demand-side management efforts in its least cost integrated resource plan on the ground that it participates in the Core Energy Efficiency Programs as approved by the Commission. We are unable to agree for two reasons. First, the range of possible demand-side management efforts is greater than the energy efficiency initiatives covered by the Core programs, which do not include any load management initiatives. Second, our approval and evaluation of the Core programs is more narrowly focused than the review occasioned by the least cost integrated planning process. When we consider the Core programs, our focus is on whether such programs are cost effective, in the sense of reducing customer purchases of kilowatt-hours by an amount sufficient to justify the expenditure of customer funds paid via the System Benefits Charge. In the context of least cost integrated resource planning, the focus is on the extent to which the Core programs, and other demand-side efforts, are viable least-cost alternatives to transmission upgrades, generation projects and other initiatives that PSNH might undertake. Accordingly, the plan should address both Core and non-Core demand-side efforts. In light of the February 24, 2005 request of PSNH to delay consideration of the Plan for at least two months, we direct Staff to work with the parties to recommend a procedural schedule for the completion of the docket.

Based upon the foregoing, it is hereby

ORDERED, that the request of Public Service Company of New Hampshire for a waiver pursuant to RSA 378:38-a of certain otherwise applicable requirements to file a least cost integrated resource plan is DENIED, and it is further

ORDERED, that Public Service Company of New Hampshire submit a revised least cost integrated resource plan, consistent with the determinations made herein.

By order of the Public Utilities Commission of New Hampshire this twenty-fifth day of February, 2005.

Thomas B. Getz Chairman	Graham J. Morrison Commissioner	Michael D. Harrington Commissioner

Attested by:

Lori A. Normand
Assistant Secretary