STATE OF NEW HAMPSHIRE

PUBLIC UTILITIES COMMISSION

DE 09-035, DE 11-150 & DE 14-238

In the Matter of:

2015 Public Service Company of New Hampshire Restructuring and Rate Stabilization Settlement Agreement

Direct Testimony

of

Thomas C. Frantz
Director – Electric Division

July 17, 2015

Q. Please state your name and business address.

A. My name is Thomas C. Frantz. My business address is 21 S. Fruit Street, Concord, New Hampshire.

Q. Please state your position.

A. I am employed as the Director of the Electric Division for the New Hampshire Public Utilities Commission ("Commission").

Q. Please describe your professional experience and educational background.

A. I started work at the Commission in February of 1989 as a staff Economist. My work focused primarily on fuel price forecasting and the analysis of economic forecasts filed before the Commission. In January, 1990, I became a Utility Analyst III. My responsibilities were concentrated on electric utility issues including analyzing and advising the Commission on rate design, special contract pricing, and fuel and purchased power adjustment clause filings.

In January 1996, I was promoted to the position of Chief Economist. As Chief Economist my responsibilities included administering the Department's research and analysis of economic and utility matters, as well as providing the Commission with expert testimony and advice on economic, utility, and public policy issues. In late 2001, the Commission reorganized from one of professional disciplines to one that was organized by industry. As part of that reorganization, I became the Director of the Electric Division. As Director of the Electric Division, I administer and supervise a professional staff that provides analysis, research and testimony on electric utility matters affecting New Hampshire. I also advise the Commission on regulatory policy, provide testimony and analysis to the New Hampshire Legislature and Commission, and communicate Commission policies to the public and press.

I received a Bachelor of Science degree from the Pennsylvania State University in Environmental Resource Management. I completed all course work and research for my Master of Science degree in Resource Economics from the University of New Hampshire. My graduate research involved modeling the structure of the New Hampshire economy using an input-output analysis. I have taught university level courses in microeconomics, macroeconomics, and managerial economics.

I have attended the two-week course in utility regulation sponsored by the National Association of Regulatory Utility Commissions. I have also participated as a discussant and/or panel chair for many years at either the Annual Eastern or Western conferences of the Center for Research in Regulated Industries which, for almost 40 years, has provided scholarly research on regulated industries.

Q. Have you previously testified before the Commission?

A. Yes, I have testified on cost-of-capital, rate design, special contracts, qualifying facilities, fuel and purchased power adjustment clauses, and incentive regulation. Recently, I adopted the pre-filed testimony of Steve Mullen in DE 11-250, the "scrubber" proceeding, and testified before the Commission in that proceeding.

Q. What is the purpose of your testimony?

A. My testimony supports the "2015 Public Service Company of New Hampshire Restructuring and Rate Stabilization Agreement" (Settlement Agreement) filed with the Commission on June 10, 2015. Specifically, my testimony gives a historical context to the Settlement Agreement, the involvement of myself and Anne Ross, the Commission's General Counsel, in the negotiations of the Settlement Agreement, an overview of the key aspects of the Settlement Agreement, and the reasons we, designated Staff, support the Settlement Agreement. My testimony also will describe the results of the economic analysis of the Settlement Agreement done by Regional Economic Models, Inc. (REMI) which I have attached to my testimony as Attachment TCF-1.

Q. Before you continue, could you describe what you mean when you refer to yourself and Ms. Ross as "Designated Staff?"

A. Yes, I am referring to our role at the Commission once we became members of the State negotiating team in early 2015. At that point, Ms. Ross notified the Commission of our involvement in the settlement negotiation process and the Commission determined, pursuant to NH RSA 363:32, that we would no longer be available to advise the Commission on matters related to the scrubber proceeding, DE 11-250, or matters pertaining to the PSNH generation asset proceeding, DE 14-238.

Q. Would you provide some historical context to the Settlement Agreement and restructuring in New Hampshire?

A. Yes, I will. Currently, Public Service Company of New Hampshire (PSNH) is the only regulated public utility in New Hampshire (New England, for that matter) that still owns generation assets; assets which it uses to supply default service to its customers that have not chosen to take their electricity supply from a registered competitive electricity power supplier (CEPS). The approval of the Settlement Agreement and divestiture of PSNH's generating assets will complete the policy objectives of electric restructuring that started almost 20 years ago with passage of RSA 374-F. In passing RSA 374-F, the General Court stated that "The most compelling reason to restructure the New Hampshire electric utility industry is to reduce costs for all consumers of electricity by harnessing the power of competitive markets." It also stated that, "Increased customer choice and the development of competitive markets for wholesale and retail electricity services are key elements in a restructured industry …" The General Court directed the Commission to develop a statewide industry restructuring plan based on the interdependent policy principles of RSA 374-F:3 and to implement the restructuring plan by January 1, 1998 or at the latest, July 1, 1998. The Commission issued its plan, known as "Restructuring New Hampshire's Electric Utility Industry: Final Plan" on February 28, 1997.

The plan, in accordance with RSA 374-F:3, required New Hampshire's vertically integrated electric utilities to unbundle their rates and services and to require generation services to be, "subject to market competition and minimal economic regulation and at least functionally separated from transmission and distribution services which should remain regulated for the foreseeable future." The Commission's plan addressed the divestiture of a utility's generating assets as well as any contractual obligations to purchase power under power purchase agreements (PPAs) and provided a framework to address "stranded costs" which the Commission defined as the net "sunk generation cost (including generation-related regulatory assets) that ordinarily would not be recovered if retail customers were allowed access to alternative generation resources." Final Plan at 47. Divestiture of generation assets and PPAs was a requirement of the plan and served as a way to mitigate stranded costs; however, the Commission's plan resulted in contentious and protracted litigation with New Hampshire's electric utilities and, ultimately, electric restructuring in New Hampshire on a case-by-case basis. For PSNH, a comprehensive settlement agreement was reached between the State and PSNH.

The Agreement to Settle PSNH Restructuring was originally filed August 2, 1999 and later revised and re-dated June 23, 2000, in conformance with Commission Order No. 23,443 (April 19, 2000). The Commission approved the Revised and Conformed Agreement in Order No. 23,549 (Sept. 8, 2000). The Revised and Conformed Agreement included a detailed section on how PSNH was to divest its generating assets and power purchase agreements. A significant aspect of the Revised and Conformed Agreement included the use of securitization through the issuance of rate reduction bonds to reduce the rate impact associated with stranded cost recovery. The Legislature approved the use of securitization and the issuance of rate reduction bonds by passing RSA 369-B, effective June 19, 2000. In RSA 369-B:1, the General Court again made the finding that "[T]he divestiture of electric generation by New Hampshire electric utilities will facilitate the competitive market in generation service."

Q. **What happened next?**

A. Subsequent to the Commission's approval of the Revised and Conformed Agreement, PSNH and the parties to that Agreement initiated divestiture processes for PSNH's generation ownership. PSNH's ownership interests in nuclear generating stations were divested. PSNH began the preparations for divesting its other generating assets – but that process was ultimately put on hold.

Q. **Why?**

A. Due to concerns primarily over high wholesale market prices and the California energy crisis, the General Court passed HB 489 in April 2001, legislation that stated, among other things, that the sale of PSNH's fossil and hydro assets could not take place prior to "33 months after competition day" which meant it couldn't take place prior to February 2004. In April 2003, the Legislature enacted RSA 369-B:3-a, which stated that divestiture of PSNH's fossil and hydro assets "shall not take place before April 30, 2006." The Commission could direct PSNH to divest its fossil and hydro assets after that date only if it found that such divestiture was "in the public interest of retail customers of PSNH to do so, and provides for cost recovery of such divestiture." Ultimately, PSNH ended up divesting only its interest in the Seabrook Nuclear Generating Station, a process administered by the Commission with the resulting proceeds used to reduce stranded costs, as well as its interest in the Vermont Yankee and Millstone 3 nuclear stations.

Q. After over a decade of providing transition and default service to its customers, what changed that resulted in the Company's interest in seeking a settlement related to its continued ownership in generating assets?

A. The pre-filed testimony of Mr. Quinlan, President and Chief Operating Officer of PSNH explains the underlying statutes and Commission proceedings that led him to discuss the possibility of a "negotiation in lieu of litigation" with Senator Bradley back in late December 2014.

My opinion is that many factors make this the right time to complete restructuring. The pressure on PSNH's energy service rate from low natural gas prices and significant migration of load to CEPS, as well as the constant risk of increased environmental compliance costs, make continued ownership of PSNH's generating assets challenging. Those and other factors are discussed in Staff's two studies in IR 13-020, the first with The Liberty Consulting Group, issued June 7, 2013, and the second with La Capra Associates, Inc. and ESS Group, Inc., issued April 1, 2014. Since those reports were released, some changes have occurred in the financial and energy markets, but they don't materially change the overall conclusions of those two reports; specifically, that "there will continue to be a disparity between PSNH's default service rates and market prices going forward." (Staff/La Capra Report at p. 10) In fact, the current low interest rate environment and recent high prices in the Forward Capacity Market auctions reflect the importance of thoroughly, but expeditiously, conducting this proceeding in order to maximize value of the assets and minimize stranded costs.

The Legislature's passage of HB 1602 in 2014 granted the Commission authority to "order PSNH to divest all or some of its generation assets if the commission finds that it is in the economic interest of retail customers of PSNH to do so, and provides for the cost recovery of such divestiture." Based on HB 1602, the Commission opened DE 14-238, Determination Regarding PSNH's Generation Assets, to examine divestiture in the context of maximizing economic value for PSNH's retail customers while minimizing risk to those customers, reducing stranded costs, settling issues associated with stranded costs, and providing for the continued operation of the generating units, if the Commission finds it appropriate to do so.

All these factors provided the regulatory backdrop for the Settlement Agreement. The timing and issues surrounding the lengthy and highly litigated scrubber cost recovery proceeding, DE 11-250, provided the impetus to resolve all these generation-related issues now and in a comprehensive manner.

Q. Why do you believe the uncertainty associated with the outcome of the Scrubber proceeding was important to the timing of the settlement process?

A. Settlements occur when parties face risk. If PSNH had not requested and the Commission had not granted the Motion for Stay in DE 11-250, a Commission order in that proceeding would have changed the perceived balance of risk to the parties involved in that proceeding. Protracted litigation would have ensued no matter what level of cost recovery the Commission had ordered. A comprehensive settlement would have been far more difficult under those circumstances.

Q. Is it Designated Staff's opinion that the Settlement Agreement meets the purposes of HB 1602 and adequately resolves the Commission's prudence review of the scrubber?

A. Yes, though the Commission's order in the scrubber docket was stayed, the Settlement Agreement resolves all the criteria set out in HB 1602 and, in my opinion, adequately addresses the prudence issues in the scrubber proceeding.

Q. Why do you believe it adequately resolves the prudence issues of the scrubber proceeding?

A. The Commission had a record that included well over one hundred exhibits and it heard testimony from witnesses representing a diverse number of stakeholders. A majority of those same parties who were active participants in that proceeding, are signatories to the Settlement Agreement. In my opinion, those parties have not supported the settlement because any one aspect of the Settlement Agreement reflects all their views, or because PSNH is foregoing recovery of $25 million. After all, many of those same parties that are signatories to the Settlement Agreement were active litigants in the scrubber cost-recovery proceeding and sought significant disallowances in DE 11-250. No, I believe their support recognizes the important trade-offs of a settlement and that this Settlement Agreement, specifically, adequately balances all those interests including resolving the issues associated with the scrubber cost recovery proceeding. It is also worth pointing out that once divestiture takes place, PSNH will forego its equity return on its generating assets.

Q. Does that reflect Designated Staff's view?

A. Yes, it does. If approved, this Settlement Agreement will allow the Company, numerous stakeholders, and the Commission to focus on the future and the many challenges that lie ahead and not to continually examine past actions associated with these well maintained, but old generating assets. This Settlement Agreement and SB 221 (2015 N.H. Laws Ch. 221) allow us that opportunity.

Q. What do you believe are the key aspects of the Settlement Agreement?

A. First and perhaps foremost, in my opinion, it completes what New Hampshire started and remains committed to - electric restructuring. Approval of the Settlement Agreement and a successful auction process will move the State's largest electric utility into a regulatory model similar to that of the other New Hampshire electric utilities; a "wires" only utility. It will end the "hybrid" model of the last 15 years which will reduce the risk of "future scrubber cases" and place the risk of generation in the market, where it more appropriately belongs. Moving generation risk to the competitive market was one of the important reasons for restructuring the industry. The Settlement Agreement also provides customer savings over the near-term and long-term as described in detail in Mr. Chung's pre-filed testimony and in the testimony of Senators Bradley and Feltes, reflects an appropriate balance among the rate classes in the amount of stranded costs each class will be responsible to pay, postpones a distribution rate case for two years while maintaining the benefits of the Reliability Enhancement program and the major storm cost recovery fund, provides employee and municipal protections during the transition, and requires PSNH to forego recovery of $25 million related to the Scrubber, as well as the Company's commitment to provide $5 million towards a Clean Energy Fund upon closing of the Rate Reduction Bonds.

Q. Earlier in your pre-filed testimony, you mentioned why this is a good time to divest the assets, but haven't PSNH's generating assets provided value during the past two winter periods and won't that be lost once the units are divested?

A. The generating fleet of PSNH has provided significant benefits to Energy Service customers these past two winters. Their generating facilities, described in detail in the pre-filed testimony of Mr. Smagula, have provided a physical hedge against high winter electricity prices driven by cold temperatures and natural gas constraints these past two winters. It is a hedge not without risk and it is one that is paid for by Energy Service customers, many of whom migrate away from or back to PSNH's Energy Service rate based on market conditions. As was pointed out in the Staff/Liberty Report and again in the Staff/La Capra Report, it is questionable whether this hybrid model of retail competition with PSNH's vertical integration is sustainable going forward.

In effect, it is a costly hedge and one that can be provided by the market. It is also important to note that PSNH's Energy Service rate during these past winter periods did not reflect the full cost of the scrubber. If it had, the benefit of PSNH's default service rate compared to other default service rates during the past two winter periods would have been significantly reduced. For those customers who remain on Energy Service throughout the year, they are paying significantly more during the off-peak seasons for the benefit of paying less during the winter period, a value that could disappear when the constraint on natural gas into New England in the winter is resolved.

Q. The Settlement Agreement does not include divestiture of the Lempster and Burgess Biomass Power Purchase Agreements. Please explain why they aren't proposed to be divested and how those contracts are treated as part of the Settlement Agreement.

A. Divestiture of the two contracts could have been difficult and likely would have added complexity and delay to this proceeding. Though the costs of both PPAs are currently recovered through PSNH's Energy Service rate, the State Team and PSNH thought it would be best to treat both PPAs post-divestiture in the same manner existing Qualifying Facilities (QFs) that sell their power to PSNH under PURPA are treated. The over-market or under-market costs will become part of the annual stranded cost reconciliation process. Under the Settlement Agreement, they will become "Part 2" stranded costs, part of the non-securitized stranded costs. Senate Bill 221 specifically allows the Commission to approve recovery of the net over-market costs associated with purchased power agreements that were approved by the Commission pursuant to RSA 369-F:9 through a stranded cost charge so long as they are part of a comprehensive restructuring of PSNH's generation assets.

Q. Why do you support the inclusion in stranded costs of the over-market or under-market costs of the Lempster and Burgess Biomass PPAs?

A. Doing so would result in all of New Hampshire's regulated electric utilities default energy service pricing be determined on a similar basis from the competitive marketplace. In addition, it is a treatment that the Commission has approved, previously. Specifically, it was how the costs associated with the QFs were recovered in PSNH's 1999 Agreement to Settle PSNH Restructuring (pp. 20-21). The Commission faced this public policy issue more recently in DE 11-184, Joint Petition for Approval of Power Purchase and Sale Agreements and Settlement Agreement. It was a petition to approve a number of contracts with small wood-fired power producers, contracts which I had negotiated with the wood-fired small power producers and PSNH. The Commission approved the contracts (*see* Order No. 25,305, December 20, 2011), but decided to allocate the above-market costs associated with those PPAs to all retail distribution customers of PSNH and not solely to those customers taking Energy Service from the Company. The same sound policy rationale applies here for Lempster and Burgess Biomass. The PPAs were approved because they provided public benefits to the State, including economic and environmental benefits. It is appropriate, therefore, that the above-market costs associated with these two PPAs, post-divestiture, be recovered from all customers of the Company.

Q. What are the expected stranded costs associated with the Lempster and Burgess Biomass PPAs?

A. A detailed estimate of the annual rate impact is contained in Mr. Chung's pre-filed testimony. It is based on the estimate from the Staff/La Capra Report in which La Capra estimated that the over-market net present value of the Burgess Biomass PPA is $125 million and the net market value of the Lempster PPA is a positive $5 million. Mr. Chung estimated the overall impact to stranded costs in the first year following divestiture to be approximately 0.20 cents per kWh. I believe that is a reasonable estimate, though it could vary as market conditions for capacity, energy and Renewable Energy Credits change over time. It is also dependent on how well the plants run during the remaining term of their contracts. It is worth noting that La Capra's valuation had a large range associated with these two PPAs. The Mark-to-Market results for Burgess Biomass ranged from negative $25 million to negative $189 million and Lempster's value ranged from negative $2.8 million to a positive $7.8 million. La Capra estimated the net present value to be negative $120 million, over the remaining life of the contracts.

Q. Can you explain why it was necessary to create a rate design for stranded costs in the Settlement Agreement that allocated smaller percentages to large industrial and commercial customers than to the residential and small commercial customers?

A. Historically, stranded costs were allocated on an equi-proportional basis across the various rate classes, but that was pre-restructuring and before retail choice. Because such small percentages of the largest customers, those on Rate LG and Rate GV, are currently on PSNH default service, very few of the largest customers are paying any costs of the Scrubber or other PSNH generation-related costs. During the past few years, less than 20% of the Rate LG customers and only about 25% of Rate GV customers, approximately, were on PSNH's default service rate. As a result, for most large commercial and industrial customers, divestiture and the creation of stranded costs assessed against all distribution customers would result in added costs. In order to get these two customer group's support for the settlement, their proportion of the overall stranded cost burden had to be reduced. Further, because these two customer groups provide significant benefits to the economy through employment opportunities as well as the production of goods and services, the settling parties reached an agreement to minimize to the extent possible the future stranded costs imposed on these ratepayers. At the same time, the Settlement Agreement balances the increased burden on small residential customers with the increased rate savings they will experience following divestiture.

The rate design proposal contained in the Settlement Agreement was discussed at several Legislative hearings concerning SB 221, and was the basis for that law's provision stating, "the commission may incorporate rate designs that fairly allocate the costs of divestiture of PSNH's generation plants among customer classes." Hence, I believe that the Legislature looked at the rate design proposal contained in the Settlement Agreement favorably.

It is worth noting though that one possible outcome of DE 14-238 could have been a divestiture that reflected an equi-proportional stranded cost allocation among all the rate classes. That rate design is, in fact, used in the REMI status quo model that will be discussed below. The Settlement Agreement and our proposed rate design is better in that regard for the largest commercial and industrial customers.

Q. Can you provide an overview of the economic analysis done by Regional Economic Models, Inc. (REMI) and why you are providing it as an attachment to your testimony?

A. During discussions between the State Team and members of the Legislature, the concern arose for the need of a thorough economic analysis that would take the savings and rate design of the Settlement Agreement and model those rate effects on the New Hampshire economy. That concern became a part of SB 221. SB 221 states that the Commission, as part of its review of the Settlement Agreement " …shall take into account the impact on all PSNH customer classes, and shall consider the impacts on the economy in PSNH's service territory, the ability to attract and retain employment across industries, and whether the proposed rate design fairly allocates the costs of divestiture of PSNH's generation plants among the customer classes."

Although there could be some debate over what that language means in terms of an economic analysis as it relates to the Commission's consideration, the State Team decided that the REMI model, a widely-used and highly-regarded economic model, especially for measuring regional economic effects related to changes in income, output and employment, would provide useful information for the Commission's consideration in regard to SB 221 and the Settlement Agreement. Importantly, analysis under the model could be made available in a timely manner.

REMI incorporated energy cost savings estimates by customer class provided by PSNH into their economic model. The four classes of customers are: residential, commercial, industrial and street lighting. The effects on those four customer classes were modeled over two time frames, a short-term period, 2015-2021, and a long-term time period, 2015-2031, using four scenarios, the Settlement Agreement and two variations of the Settlement Agreement, and a fourth scenario which assumes divestiture on January 1, 2020, after years of litigation associated with the scrubber and the divestiture proceeding. The Settlement Agreement scenario uses the La Capra reconciled value of $225 million as the value of the assets. The high case run (Settlement-High Case) uses $450 million and the low case scenario (Settlement-Low Case) uses $150 million for the value of PSNH's generating assets. For each of these four scenarios, PSNH provided REMI an estimate of energy cost savings by class, with the key modeling assumptions used to differentiate the scenarios shown in Appendix III to the REMI report (p. 28). Table 3 on page 12 shows various economic results from implementing the Settlement Agreement.

Tables 1 and 2 on page 5 of the REMI report provide an overview of the total economic impact of the four scenarios for the long-term period, 2015-2031, and the short-term period, 2015-2021, respectively. As can be seen from both tables, the Settlement Agreement, under all three scenarios, provides greater economic value than the PUC-Ordered Divestiture scenario. All are compared to the status quo baseline, which is today's regulatory environment without a settlement and with litigation. The status quo continues PSNH's ownership and operation of its generation assets with the full cost recovery of the scrubber included in Energy Service rates. It also assumes there is no $25 million of foregone scrubber costs by PSNH as contained in the Settlement Agreement, migration continues and rates increase.

The PUC-Ordered Divestiture scenario uses securitization, but spreads stranded costs equally among the customer classes and, as I stated above, divestiture doesn't occur until 2020. The short-term and long-term results of the PUC-Ordered Divestiture scenario are shown in Table 6: Simulation Results- Difference from Baseline-PUC-Ordered Divestiture on page 18 of the REMI report.

Q. Do you believe the REMI report provides the Commission with the economic impact analysis necessary for its consideration as stated in SB 221?

A. Yes, I believe it does. Moreover, I believe it demonstrates the economic benefits of the Settlement Agreement as compared to the status quo or a divestiture ordered by the Commission after adjudication of DE 14-238.

Q. Does that conclude your testimony?

A. Yes, it does.