

Public Service Company of New Hampshire
Docket No. DE 11-250

Data Request TC-03
Dated: 08/24/2012
Q-TC-014
Page 1 of 31

Witness: Gary A. Long
Request from: TransCanada

Question:

Reference the attached 31 page power point from the legislative history of SB 152 from the 2009 session of the NH Legislature, who produced this document ? By whom was this person or persons employed ? Who testified before the Legislature on this power point ?

Response:

The document was produced through a collaborative effort of several people at PSNH. Gary A. Long testified before the legislature on this topic, although his testimony did not present this document in significant detail; rather, the document was provided to legislators and referred to during Mr. Long's testimony.

Customer Cost Safety Nets

- PSNH has legally binding, firm price contracts in place for major components of project
- When the project is complete, the NH Public Utilities Commission will scrutinize every dollar spent on the project before any money can be recovered from customers through PSNH's rates
- PSNH customers (esp. commercial customers) can switch to a different energy supplier at any time to avoid paying costs associated with the scrubber
- The bottom line:
 - Installation of the scrubber at \$457M continues to be a better option for PSNH customers than purchasing replacement energy in the open market

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Date: March 13, 2009
Time: 9:00 a.m.
Room: Reps Hall

The Senate Committee on Energy, Environment and Economic Development held a hearing on the following:

SB 152 relative to an investigation by the public utilities commission to determine whether the scrubber installation at the Merrimack Station is in the public interest of retail customers.

Members of Committee present: Senator Fuller Clark
 Senator Merrill
 Senator Lasky
 Senator Cilley
 Senator Odell

The Chair, Senator Martha Fuller Clark, opened the hearing on SB 152 and invited the prime sponsor, Senator Janeway, to introduce the legislation.

Senator Harold Janeway, D. 7: I won't begin in 1960, 49 years ago, when the first unit began operations. Rather I'll focus on the legislative history that is relevant to what we're talking about here today.

It begins in 2002 with House Bill 284, which was known as the New Hampshire Clean Power Act. Gary Long was there for that, and has been in attendance at all subsequent issues related to this.

Representative Jeb Bradley presented his bill to this same Committee, one member of which now sits with distinction on the Public Utilities Commission. In Bradley's testimony, he discussed trading pollution credits, energy efficiency initiatives and mercury. And here's what he said.

He said: "...and lastly you will hear discussion that we're not doing enough on mercury control." This was back in 2002. "Mercury is a serious pollutant, it is a potent neurotoxin, has significant adverse health effects, particularly for women of childbearing age and for prospective babies."

Testimony in the House indicated that the likely emissions from these plants range from 30 lbs. of mercury emitted to as much as 330, and it was our DES that estimated the higher number. In an EPA website, the lower number. It is rational, therefore, to do what this bill proposes to do: test PS New Hampshire's facilities for the actual amount of mercury, wait for the EPA regulations on mercury, which are expected to occur in the next several years, and then devise a strategy that would have to come back to this Legislature at some point in time for enactment in the future.

"That," he said "is a rational response, especially in light of what you folks and those of us in the House have done, which is fight for lower mercury levels from the waste to energy facilities."

So, the issue did come back to the Legislature four years later, and it appeared in the form of House Bill 1673, which had subsumed a Senate bill, it was Senate Bill 128, with a similar thrust. And that was the bill that gave Public Service of New Hampshire its marching orders in June 2006.

I want to just quote from the summary of that particular meeting, when Senator Odell brought the bill to the floor on the Senate. He said: "This bill provides for an 80 percent reduction of mercury emissions from coal burning power plants by requiring the installation of scrubber technology no later than July 1, 2013, and provides economic incentives for earlier installation and greater reductions in emissions." Incidentally, Senate Research has compiled a full history of those two bills. It's a rather substantial packet, but certainly you'll want to have that available to you as a reference as you work your way along.

Clearly, the most frequently asked question that I get, in various forms, is essentially "why stir the pot? The company is moving ahead as directed." "Get over it," some of them add. And so I want to try to respond to that question this morning.

First of all, the projected cost has, as I think everyone knows, risen sharply, about 80 percent. I personally don't feel that that's the most important issue, and it's one that I suspect will be answered fairly fully today, but it was one that certainly got everyone's attention. An extra \$200 million plus is a sizeable sum. But I think more important, at least to me, is the fact that there have been major changes in the fundamentals that do bear on this issue since that particular action was taken. And so I would ask, in response to the question of "why stir the pot," I would ask, would you invest today based on what you knew two and a half years ago or what you know now? And to me the answer is, I would want to take into consideration those things that

are known now before making my decision. So I'm essentially firmly in the camp of those who believe that we should be open to new information.

So then the question is, what is new and what is relevant? My answer, I will try to keep it brief, but is fairly detailed. First of all, the industry is undergoing much change, and more in recent years than probably in multiple decades prior, to when it was a fairly simple business and was all regulated. Oversimplified, back in the perhaps good old days, the more power you sold, the more plants you could build, the larger the investment base on which you could earn a return. This was the "live better electrically" era. Then came deregulation and things got messy. But none of that is particularly new.

But there are new things that have developed over the past two and a half years that we really do need to think about. First of all, the environmental pressures have ramped up considerably. Even with the Bush Administration's denial of many environmental issues and climate change, these things have built up during the past few years and it is clear with this change in administration that we now have, we now face considerably more regulation and more pressure to act. Coal plants, the best of them, still emit substantial pollutants of various sorts, as you well know. They're a major source and are going to come under special pressure.

Another issue that's become substantially more of a factor than it was in past years is this whole question of energy independence. Where do we get our energy from? And that brings in the drive towards renewables. As many of you know, we have a goal of 25 percent renewables here in New Hampshire by 2025. We're a fair ways from that now, but that's something that clearly is going to be a factor, and coal definitely is not a renewable. The carbon dioxide, which has been a major force and continues to be a major force in climate change, is going to come under pressure. I think there's, most people would agree, there's a high likelihood that we will see a cap and trade program from, which attempts to deal with that issue. The evidence for climate change, unfortunately, continues to grow.

Efficiency is something that has become more evident over the past few years. Efficiency measures are now paying off, and we're actually seeing a change in the long term growth curve in the demand for electricity as a result of that. But the whole efficiency thing is really just beginning to break through. The potential savings in commercial buildings, in homes, and these aren't efficiencies that mean turning off your heat or turning off your lights, it's just investing in efficiency measures that are going to make a substantial difference and are going to bend the growth curve as we look out into the future.

So the slowdown in demand for electricity that we've seen over the past year or more, while it's been exaggerated by the slowdown in the economy, has more to it than that. Texas Utilities for instance, one of the major utilities in the country, I think reported a six percent decline in sales last year, closing a number of plants. This is something that's going on industry-wide. So we have to think about the effects of efficiencies. The Obama Administration, as I've mentioned, is now pushing incentives for greater sustainability and connected to that, I would say, is the prospect for a substantial number of jobs. Many of the programs that we've seen in the stimulus program that will come to New Hampshire will bring some money to areas where there can be a lot of good jobs and a lot of substantial benefit.

Another thing that we have to factor in is the likelihood of high, increasing standards, higher thresholds for mercury, among other things, that will face us in the period ahead. So I think it's important when we look at this issue that we keep that in mind. I don't see this as really two paths that diverge, one good, one bad. We're still, it's still really one path, but I think the path that we're moving along is moving through a landscape that has changed dramatically.

So the question is, do we adapt and adjust to that changing landscape or do we essentially go ahead without consideration to what's happening all around us? And that is essentially what needs to be studied. I know that it's hard to swallow, even for the short term, because it's a major project and it's been a long time in building and it's underway. But I feel very strongly that what we're seeking here, which is a study, a relatively short study, is necessary. And I think that that's the least that we can do for the ratepayers. I'm reminded of an old musical which was called "The King and I," which was about the king of Siam and he had a governess he brought in to raise his kids. And the governess taught him that most of his views were totally out of line with reality and eventually he was brought around to her way of thinking, and there was a song in that where the refrain was, "I think I want to think it through again." So all I'm asking is that you give us a chance to think this through again. Thank you.

Senator Martha Fuller Clark, D. 24: Thank you very much, Senator Janeway. Are there questions from the Committee? Senator Odell.

Senator Harold Janeway, D. 7: Good morning.

Senator Bob Odell, D. 8: I appreciated very much the history of the background on this legislation, because I think that's very important, about where we've come from. And I was going to ask that question had you not

raised that. But I also want to add a couple of statements and then ask for a response.

And that is that in 2006, the vote on the Senate floor was 22-2 to go forward with the scrubber, and let me put it in the simplest of terms. There was a different party in charge at that time, the Republicans were in the majority. I chaired this Committee, for example. We became convinced, that is some of us, that the public health danger to children and young women of childbearing age was so compelling that we needed to take action right then. Two hundred and fifty million dollars to me sounded like a huge amount of money, huge amount of money. But I think of the child that is born today or a mother about to conceive in Manchester or in some other community east of here, and I say if that child's public health interest, the prevention of cancer, was to be \$1.00, I would be for it. But for each of those children, if the price was \$2.00, I would still be for it. This to me is a public health issue. We fought very, very hard to get consensus within both parties to pass this bill. We understood there would be new technology, new advances, but we didn't want to do exactly what's happening in this room today, consider putting it off one more time, over and over again.

And it's come me not as a debate about public health, but when a lobbyist or the advocates of your bill drive to Lempster, New Hampshire and sit down and say we represent commercial ratepayers. And I say, who ratepayers? Well, 28 ratepayers, commercial ratepayers. And I say okay, I represent 55,000 people here who are worried about jobs, they're worried about public health, they're worried about cancer, they're worried about pollution. And I just have the greatest trouble of going back and looking at what we went through in 2006, which I think was one of the high points of my time in the State Senate, passed this bill, and then come today, have somebody say, oh, but you might have not known enough to go forward.

I know something about young people and children who suffer with cancer. We had a presentation yesterday morning about CHAD. We saw two children with cancer. If I were to be here today and not do everything I can to get this scrubber up, inadequate as it may be, I think I would have failed the mission we adopted as a policy of this State of New Hampshire in 2006. I just come to you today and I would say, Senator, would you consider letting us go ahead with the scrubber, meanwhile, go ahead with the study on the side. Three months, six months, whatever it is. I'd rather have you do a good study, but let's get on to the scrubber from the standpoint of public health, nothing else. Two hundred fifty million, five hundred million dollars, children, women who could be pregnant, cancer, I just can't turn back.

Senator Harold Janeway, D. 7: That's a good statement and I can't disagree. There's nothing in this bill that actually says stop. It says please study. And I agree about mercury. I think, when I think about dealing with this mercury and you think about trying to remove whatever, 80 percent of 140 lbs. out of, I'm not sure of the arithmetic, I think it's a billion pounds of coal, I don't see how it works, but it does take some major action to do it. So, as I say, please, the bill does not require a halt.

Senator Martha Fuller Clark, D. 24: Follow up?

Senator Bob Odell, D. 8: That's fine.

Senator Martha Fuller Clark, D. 24: Are there additional questions from members of the Committee? Thank you very much, Senator Janeway.

Senator Harold Janeway, D. 7: Thank you, Senator Clark.

Senator Martha Fuller Clark, D. 24: I'd now like to call upon Senator Gatsas.

Senator Theodore L. Gatsas, D. 16: Thank you, Madam Chairman, members of the Committee. I'm Senator Ted Gatsas, I represent the towns of Dunbarton, Bow, Hooksett, Candia and Wards 1, 2 and 12 in Manchester. I'm here to speak against both the bill and the amendment. I think the Committee needs to consider some things. You have an amendment before you that says, and we've heard that possibly they could report out in 90 days. There was different testimony that came out in the House hearing a few days ago. At the end of 90 days when you get that report, what do we plan on doing? Calling a special session to close the project? Being here in the same position we are today? We have a project that's going at full force. By October, it's going to be well into the project. So what are we attempting to do at that time?

And Senator Odell, I'd like to, because history is very important. And I think that we need to talk about the history of this bill from the beginning, because in the Senate, House, Senate Bill 128 was before the Senate and I was on Energy, on that committee, and Senator Johnson was the Chairman. We listened to testimony and we saw sheets that were passed out of the red zones in the State of New Hampshire. Those red zones were very apparent in Raymond-Exeter. They were absolutely fire red. I think it's important that we all understand that this is a health issue. This was about taking mercury out of the air, not anything else.

There was an amendment that came out of that committee on Senate Bill 128, and what it said was that the total mercury emissions from all affected sources, burning coal as a fuel, of 50 lbs. per year beginning July 2008. So the amendment that came out of that Senate committee forced Public Service to remove mercury by 2008. Well, that got everybody's attention and it got it pretty quick, because the acceleration that we had in that bill was that all mercury would have been removed by 2011. So that's the true history of the bill, and that's what got the sides together at a table. An environmentalist coming in and saying, that's a great amendment, we're thrilled to death by it.

I think another important issue is that when you talk about history, that there is a committee report on Senate Bill 128. And there were a lot of questions asked and a lot of discussions. I think the most important one, though, is that when you go back, and I'm going to quote, the Conservation Law Foundation came in and they were discussing the legislation. And here's the question:

Senator Gatsas: Thank you, Mr. Chairman. And I quote: "Do you know that a dollar increase is a 15 percent increase on rates? Do you believe that the ratepayers should absorb all of that?"

That was my question to Ms. Gerard.

"Well, right now the law says they would. But I believe the ratepayers have absorbed it in the past and probably should. I will say this, though, after Representative Hennessy's remarks."

So at the time when we heard that it might be a dollar and there was not one question about a \$275 million cost. That was an awful lot of money back in 2005, and nobody raised the question about cost.

So the amendment and the legislation do one thing - kind of look, turn back the history of time and look at Seabrook. Delays there cost an awful lot of money to ratepayers throughout the State of New Hampshire. There is more cost and less study of RGGI. We passed a piece of legislation last year called RGGI. There was less study. This bill, when it came through the Senate about removing mercury, took two years to look at. The cost to the ratepayers in the State of New Hampshire with the cost of RGGI is going to be more than what the scrubber costs us. The difference is, that in the RGGI costs there's no CO² that's coming out of the air, there's no technology that takes CO² out of the air. There is technology to take mercury out of the air and save lives.

I know that people may be a little confused of why I'm standing here and supporting Public Service and their efforts to move forward. I think Gary Long and I have had our discussions in the past about what ratepayers should be paying and what they shouldn't be paying. But there is a time to talk about prudence and that's when the project is done and costs are in. And maybe at that time I say, well wait, the ratepayers shouldn't be paying for all of this, the stockholders should be paying for some of it. But none of us should take a position today to stop the project, until that project is completed and we have an understanding of what the cost is. Because then maybe Gary Long and I will have a difference of opinion. We've done it in the past, but now I stand with him and say that that project needs to be completed because for every home in the Town of Bow, if that project is closed and Public Service closes Merrimack Station, for every home that's assessed \$300,000 in the Town of Bow, it's an increase of \$800 a year in taxes.

Let's not forget the railroad that delivers the coal. My bet is, that's a primary source of income and they may not be going up that railroad much longer.

So we don't need the PUC to look at it. They've looked at it. As a matter of fact, they probably might take 84 sessions like they did with energy efficiency to come out and tell us how to spend the money. It's probably going to take 84 sessions for them to study what to do with the RGGI money. So, we don't need delays. We don't need the closing of the Merrimack Station. We need this project to move forward. Thank you.

Senator Martha Fuller Clark, D. 24: Thank you, Senator Gatsas. Are there questions from the Committee for Senator Gatsas? Seeing none, I'd like to call upon Senator Letourneau.

Senator Robert J. Letourneau, D. 19: Good morning.

Senator Martha Fuller Clark, D. 24: Good morning.

Senator Robert J. Letourneau, D. 19: Good morning, members of the Committee. Senator Odell, I remember very well serving on that committee when you were Chair, and I remember the bill passing and the discussion that took place. Today is a whole different discussion.

Madam Chairman and members of the Committee, for the record, I'm Bob Letourneau and I represent District 19, the towns of Derry, Hampstead and Windham. I believe this legislation poses a great risk to the residents of my district at a time we can least afford it. As you may know, the electric market reliability, ability has been a concern of mine throughout my tenure in the Legislature. That said, I have admired the way the Legislature,

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regardless of political party or ideology, has been able to move New Hampshire forward on energy issues without creating undue risk for our state. While other states have rushed forward with untested policies or ideas, they have many times resulted in drastic results and costs. We have remained steady, determined and cautious in our movement forward.

I believe Senate Bill 152 will take New Hampshire down a new and risky path, where the foundation of our energy infrastructure is left exposed and unstable in a way to force our state in a new and untested and unreliable direction. While the stated purpose of this bill seems harmless, in reality it would create a scenario that will create greater costs for New Hampshire ratepayers, less energy security for our state as a whole, and the elimination of several hundred jobs. I supported creation of renewable energy because I want to see New Hampshire and the United States more reliant on domestic energy sources.

However, as leaders of New Hampshire we need to be honest about the challenges and hurdles that confront the development of renewable energy in our state. Many of the same challenges that confront fossil fuel generation also confront biomass, wind, hydro, solar. Some of the same interests here today opposed to the installation of environmental upgrades at the Merrimack Station are also opposed to the construction of a wind farm in northern New Hampshire. Political, environmental and financial, geographical hurdles all stand in the way of renewable energy.

I have brought along several copies of a column in the Wall Street Journal last week on the development of renewable energy in this country, and you have it there in my testimony. And while there were many issues raised in this piece, the one thing that struck me was the statement that we are tearing down more hydroelectric generation than we are building. Two years ago, this committee had considerable debate over a bill that I brought forward to allow a regulated utility to build one renewable energy project in the North Country. At the time, we were told that a tremendous progress, an opportunity that was happening in that part of that state, and that we should not allow a regulated utility to upset the great progress of the merchant developers - Tamarax' Groveton biomass project, Noble's wind farm, clean energy development, Berlin's biomass project and Laidlaw's Berlin biomass project. There are a variety of reasons why these projects have either died or moved at a very slow pace. But the bottom line is, we have not seen the boom in renewable energy that was predicted four years ago or even two years ago. While the ISO New England lineup may be filled with projects, how many of these projects will actually get built? One in 25? One in 15? Generally, the odds are not that good.

I also want to talk just a little bit about cost. For anyone who deals with construction, the idea that costs have escalated tremendously over the past two years should not be a big surprise. In my capacity as Chair of the Transportation Committee, the issue of construction costs has driven our policy development for the past two years. For example, in 2006 a ton of liquid asphalt cost \$250. Last summer, that cost had risen to approximately \$850 a ton. Cost increase for steel, concrete, gravel and labor are all well known. In the light of these cost increases, the bipartisan approach that we have taken is to make sure that the foundation of our transportation infrastructure is maintained and secure. I would suggest to you making sure that our state's primary base load power plants remain stable, secure and viable. It is the best way that we can protect our energy infrastructure during these difficult times, as well as position our state for economic growth into the future.

We should also view the cost of the environmental upgrades at Merrimack Station in the light of other energy projects that are happening in New Hampshire. Consider that we are talking about spending \$450 million to ensure a 440 watt, megawatt base plant that runs 24/7, remains secure, viable and reduces its environmental impact. In the North Country, developers are talking about spending \$250 million on an intermittent wind project that will produce one-tenth the electrical output of the Merrimack Station. Increases in construction costs are impacting all aspects of construction, even renewable power development. Again, I am in support of renewable energy, and I want to work towards a renewable future in New Hampshire. But those of us in the Legislature need to be realistic about where we are today, the cost of achieving a cleaner future and the hurdles that stand in our way. And I'm sure you will hear from countless experts today what our energy future holds. And I can tell you from my expert opinion, and that was gained from unfortunately from age, is that nobody knows what the future will hold. We don't know what the costs will be, what regulations will be enacted, what new technologies will be developed and I don't know where we will be next year, needless to say, that we will be in 10 years, or where we'll be in 10 years. When it comes to energy, all we can do is try to expose our constituents to as little risk as possible as we progress forward. And we can do that by defeating Senate Bill 152.

Last, but most importantly, we have recently learned that this bill would jeopardize up to 1,200 jobs in New Hampshire, as evidenced by the hearing here today. Considering the economy and almost seven percent unemployment rate, this is exactly the wrong bill at a time when New Hampshire is facing the highest unemployment rate in 15 years, and I respectfully urge the Committee to find Senate Bill 152 inexpedient to legislate. Thank you.

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Please see Attachment #1, Senator Robert Letourneau's testimony.

Senator Martha Fuller Clark, D. 24: Thank you, Senator Letourneau. Are there questions from the Committee for Senator Letourneau? Seeing none, I'd like to call upon Representative Pat Long.

Representative Pat Long: Thank you, Madam Chair, honorable Senators. First, I'd like to publicly thank Public Service Company of New Hampshire. Not for jobs, not for good jobs, but for family sustaining jobs, family sustaining wages, family dignified healthcare in pride and independence with engineers. Not to mention the trainings that are involved with the agreement that they have made with the contractors.

I'm not going to reiterate what has already been said. However, I do have concerns when I read, when I read of reasonable anticipated environmental compliance costs. Reasonable is a tough word. When I read of the investigation shall be completed as expeditiously as possible but give the report within 90 days.

My expertise here today is not on, is not on the energy, energy field. My expertise is on jobs. And I'm not sure if you could put yourself in a position where, for six or seven months, you've been collecting unemployment and then in these tax times, you're looking at paying your taxes on this unemployment. Obviously, you're looking at families that are taking three to four weeks of that unemployment pay to pay their taxes on. By no means, I want you to think that my main focus is on jobs and jobs alone.

However, in this economy, on March 13, 2009, when I have an opportunity, when I have an opportunity to, when I have a choice that I have to make or my constituents have to make, with several of them are here, whether they want to plant a tree or whether they want a job, today I would say that they would like a job. That doesn't demise, that doesn't diminish them as to wanting clean air. The fact is, the reality is, their desperation is for work in these times, and with that I'll let you know that I'm opposed to this Senate bill and I'm sure that you'll do your due diligence in listening to the testimony and execing this bill out as ITL. I thank you very much for your time.

Senator Martha Fuller Clark, D. 24: Thank you very much, Representative Long. Are there questions for the Representative? Seeing none, I'd like to call upon Representative Chris Hamm.

Representative Christine Hamm: Thank you, Madam Chair, and members of the Committee. For the record, I am Christine Hamm and I represent Merrimack District 4, the towns of Hopkinton, Warner and Webster. And I'm here today to ask for your support for Senate Bill 152, which was drafted in an attempt to adhere to the conditions established three years ago with the passage of HB 1673. That bill's slate of sponsors ran the gamut from those with pragmatic business interests to visionary environmentalists, and was hailed at its passage as a bipartisan effort towards reducing mercury emissions in the State of New Hampshire. As a House member, I voted for HB 1673 because I thought it was a necessary step forward. It had required negotiation and compromise. It promised to reduce mercury emissions throughout the state, most significantly at Merrimack Station in Bow, the largest single source of mercury emissions in this state.

Today, three years later, I come to you because I believe that the expectations we had for this bill have changed and that we're now in a different place. In the text of HB 1673, part V, the bill notes that the installation of scrubber technology will not only reduce mercury emissions significantly, but will do so with reasonable costs to consumers. Although the phrase "reasonable costs to consumers" may sound amorphous, for those involved, including the members, some of the members of this Committee, it did in fact have a specific number attached to it. We know this from a letter, which I can provide to the Committee, from Michael P. Nolan, then the Commissioner of the Department of Environmental Sciences, to Senator Bob Odell, then the Chairman of this Committee. That letter, dated April 11, 2006, states: "Based on data shared by PSNH, the total capital cost for this full redesign will not exceed \$250,000,000 in 2013 dollars, or \$197,000,000 in 2005 dollars, a cost that will be fully mitigated by the savings in SO² emission allowances. Commissioner Nolan sent this same letter to Representative Larry Ross, who was the Chairman of the House Committee on Energy, on Science, Technology and Energy, and that letter was dated January 12, 2006.

Today, when the \$197,000,000 2005 figure has already jumped to \$457,000,000 in 2009 dollars, it's clear that the original expectation of \$250,000,000 in 2013 dollars is beyond reach. \$250,000,000 is a big number, and so is \$457,000,000. It's a little taxing for us mere mortals to comprehend it. So it seems useful to try to put these numbers in context. As members of this Committee know too well, New Hampshire's shortfall for the biennium was recently projected to be \$500 million. Yet, as legislators have contemplated what to do about that, taxing our citizens to make up this difference has never seemed a viable option. Why then wouldn't we at least take the time to hesitate before holding our state ratepayers, these same citizens, accountable for a similar sum? Again, to put \$457 million in context, this legislator, Legislature has heard from a group of private

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investors to say they would be willing to invest \$450 million into Rockingham Park, making that project the second largest capital investment ever made in this state. Seabrook was the largest. Yet, \$450 million is still \$7 million shy of the \$457 million projected to install filters at Bow to mitigate only part of the emissions from Merrimack Station.

Additionally troubling is the fact that as these costs have risen, the Legislature has remained in the dark. An annual report, filed by Chairwoman Naida Kaen of the House Science and Technology Committee on behalf of the Electric Utility Restructuring Legislative Oversight Committee, notes that at the Committee's June 18, 2008 meeting, "There was no cost information provided to indicate a significant departure from the projections made in 2006." Again, I can provide this to you. PSNH reported the project costs would be updated with a review of major equipment bids. Despite the cost increase announced six weeks later on August 1, 2008, this report filed on November 1st of that year does not contain the update.

Further, it is important that this committee consider that there has been no review of this cost increase by any state agency. PSNH says that the Public Utilities Commission will review the cost in an after the fact prudency review. But how prudent is that? Why not now instead of later, when it will be too late, too expensive to change course? With no cap on costs, we have to wonder, at what point do we reach our limit? How much is too much to spend to re-jigger a 40 year old coal plant at the end of its life span? Is nearly half a billion dollars the best use of anybody's money to produce 430 megawatts of electricity?

In September of last year, similar questions were brought to the PUC, but it concluded it did not have the authority to determine whether the scrubber project is in the public interest, finding that the Legislature had already made that decision by passing HB 1673. This legislation is being put forward to enable the PUC to go forward with that analysis. As I said earlier, HB 1673 was a major step forward for its time. But now the decision this Committee makes on whether or not PSNH should go on with installing scrubbers that currently cost 83 percent more than anticipated and whose final cost is yet to be determined, will be key to whether that step forward proceeds down the right path.

We live in New Hampshire, famous for Robert Frost's crossroads in the woods. I believe New Hampshire is now at an energy crossroads, at a new place in our understanding of the importance of our energy sources. Since 2006, not only the cost but also technologies have changed, and so have the political realities in the regulatory landscape. We now understand that there are other less expensive alternatives, such as activated carbon

injection, that could address these emissions less expensively. We also understand that we must address other emissions, including CO² emissions. It appears likely that the new administration plans to have a carbon program in place by 2012. In addition, the EPA will likely introduce new mercury rules, which could mean that the emissions reduction provided by this new scrubber will not adequately comply with EPA standards. As we've heard in testimony on a related bill in the House, that would mean additional controls and additional costs for ratepayers.

To go back to HB 1673, I draw your attention to part VI, which notes that the installation of such technology is in the public interests of the citizens of New Hampshire and the customers of the affected sources. Again, I believe that when this was passed, that public interest was served. But now that the balance between cost and results has been skewed and it is clear that additional improvements will have to be made at additional cost, we have to wonder whether or not going forward with the installation remains in the public interest, and that is what we want the PUC to review.

As the bill states, as legislators our first concern should be the citizens of New Hampshire and PSNH's customers. I believe this Legislature, but first this Committee, needs to consider whether the agreement forged in HB 1673 is still in the best interests of New Hampshire's citizens and PSNH's ratepayers. The sponsors of this bill are not alone in thinking it is not. Currently there are more than a dozen pending dockets, cases and permits relating to Merrimack Station, ranging from a Title V permit under the Federal Clean Air Act; to a case before the New Hampshire Supreme Court filed by the commercial ratepayers group; to guidance memorandum from the EPA requiring PSNH to apply maximum achievable control technology retroactively to 2005, something that the scrubbers as currently configured do not achieve; to another case filed jointly by the Conservation Law Foundation and Freedom Energy, questioning the legality of the new turbine which increased the output of the plant and was installed without DES permits in April 2008; to a PUC order requiring a study and economic analysis of retirement for any unit in which the alternative is the investment of significant funds to meet new emissions standards and/or enhance or maintain plant performance; to the Obama Administration's announcement of a new federal CO² program; to a pending report from the Governor's Climate Change Task Force.

Clearly, in the three years since HB 1673 was passed, the ground has shifted and clearly there are many important questions to be answered. Clearly our constituents, the PSNH ratepayers, deserve the same kind of cost benefit analysis for an expenditure of this magnitude that PSNH would undertake for its shareholders. Four years from now, or 15 years from now, as energy

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rates rise into the stratosphere, we simply cannot tell our constituents that although we knew of these coming federal changes, the pending issues with the plant and the 83 percent cost increase that has not yet been reviewed, we did not review our options before going forward. No one is talking about doing nothing. Clearly, it is our job to make certain that the ratepayers of this state are protected, at the same time ensuring that our energy sources have the smallest possible environmental impact.

I urge this Committee to take these responsibilities seriously. Recently, representatives from PSNH reminded us that New Hampshire led the nation by passing the Clean Power Act in 2001. Let's not see that tradition, one that all of us have the right to be proud of, go up in smoke. Thank you very much.

Senator Martha Fuller Clark, D. 24: Thank you very much, Representative Hamm. Are there questions from the Committee? Senator Lasky.

Representative Hamm: Good morning.

Senator Bette R. Lasky, D. 13: We have before us an amendment which replaces the bill, and I forgot to ask Senator Janeway about it. But I wondered if you could point out the significant differences in the amendment, as we were just given it this morning?

Representative Hamm: You should ask Senator Janeway rather than me. Okay. I was involved a little bit at the beginning of this and then he, I have read the amendment as he's shown it to me, but I'm not the one to really talk about the differences.

Senator Bette R. Lasky, D. 13: Thank you.

Senator Martha Fuller Clark, D. 24: Senator Janeway, would you be able to answer that?

Senator Harold Janeway, D. 7: I can't, without the prior bill, give you precise. There were changes that were designed to make sure that the PUC wasn't forced into the longer, sort of more formal process, and other than that, really the thrust of it remains the same. I'll see if I can get for you. Actually there were a series of modest tinkers that were made as we moved along. I'll try to get a full set so you can see how that went, if that's alright.

Senator Martha Fuller Clark, D. 24: I guess I'm elected. Senator Lasky, does that answer your question?

Senator Bette R. Lasky, D. 13: Certainly. Thank you, Senator Janeway.

Senator Martha Fuller Clark, D. 24: Senator Janeway, I do have a question for you, which was raised by Senator Gatsas. Is once, if this bill were to go forward, once this study was finalized, how do you believe that it would be useful to the Legislature and to all of the citizens of New Hampshire and our constituents?

Senator Harold Janeway, D. 7: Well, my first answer to that is that I think we all need more information and so that shining a light on the issue would be helpful to everybody, whether it goes forward or not. So I think there is, if you will, an educational process that would be part of the outcome here. I can't predict exactly what follow-up measures would take place. It may be something that would come forward in the subsequent sessions, but I don't see how there would be anything immediate or dramatic.

Senator Martha Fuller Clark, D. 24: Follow-up. I know that one of the concerns of many of the people here today are that this bill is a thinly veiled attempt to close down the scrubber. Would you be able to speak to that? And what, I guess that's my question to you.

Senator Harold Janeway, D. 7: I certainly don't see it that way and that wasn't the intent. We're looking for more insight, more information, more perspective. I think there, I'm pretty sure there are people who support this bill who would like to see that happen. I'm not one of them. The sponsors aren't in that position, so it's somewhat, I'm inclined to say, a way of trying to trash it when that is not the intent.

Senator Martha Fuller Clark, D. 24: Thank you. Additional questions?

Senator Bob Odell, D. 8: Thank you, Madam Chair. Representative Hamm (INAUDIBLE), I think Representative, Representative Hamm mentioned this issue of prudent cost. When does this, if this is a, I'm trying to get from a very simple example, the 90 day process, if I'm understanding...

Senator Harold Janeway, D. 7: Correct.

Senator Bob Odell, D. 8: ...but as you go through this prudent cost aspect of this, how do you, what happens if you say it's a little imprudent or not a little imprudent? Where are we at that point, and I do go back to Senator Gatsas as a follow-up to the Chair, so then what do we do when September, October, November of this year, with whatever we have as far as information? How does that ennoble (sic) this body, the Legislature, to do something?

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Senator Harold Janeway, D. 7: Well, I think it's so much, we're all having trouble, it's not so much focused on the costs of the scrubber project, it's going to be what it's going to be. It's more, what does the commitment to that scrubber imply in terms of future costs if other measures that I referred to as possible, say the EPA decides that the mercury limit should be 90 percent or 95 percent instead of 80 percent? Or if water temperatures require, and other such things, require additional investments? So it's looking beyond the, the hope is that the study will look at the possibilities beyond the scrubber that would lead to substantially higher costs. And you'll hear testimony on that, I think, from others today.

Senator Bob Odell, D. 8: In a practical way, what I've heard from some today is quite speculative about what EPA will do, what this organization is going to do, what the standards are going to be due (sic), what the changes are going to be due (sic). Let's say we go 90 days and we have this study parallel to activity at the site, and then something changes on the 93rd day after the study is going on. And this seems to me as if it's always a moving target, there's going to be dramatic changes as we go forward. I think no one's learned quicker than President Obama that things don't happen on his schedule. There's Congress and there's a lot of other factors at play here, but somebody has picked an arbitrary 90 day period, if I'm correct, to assess this, and I just don't know how you put a deadline on a \$500 million project and say okay, at, in 90 days we're going to be able to tell you that here's some plausible, I think that's the term here, plausible situations that might evolve in the future. And I don't know how far out the future is? Is that one year, two years, twenty-five years? And I guess that's the question.

Senator Harold Janeway, D. 7: Yeah.

Senator Bob Odell, D. 8: How does this really fit in with the reality of a \$450 million project?

Senator Harold Janeway, D. 7: Well, I agree nothing is certain in this life or in this world. But our concern is that there hasn't been any attempt at this point to look at those other potential things, and the EPA, for instance, has already made some, taken some action that points to, you know, stricter standards. There are, it's far less likely that, most of, a number of them relate to new coal plants rather than existing coal plants, but there are, the direction in which the EPA is moving is pretty clear. And 90 days just seemed like enough time to assess what we know now, as opposed to, and look at that, compared to what was known when your bill, which I fully supported from the outside back in '06, did. So it's an update, let's just look at this and be sure we've thought it through.

Senator Martha Fuller Clark, D. 24: Senator Lasky. Thank you.

Senator Bette R. Lasky, D. 13: Thank you, Madam Chair. Senator Janeway, as I see in the amendment and as I've seen all along in looking at this project, is one of the major questions I believe that's still out there, is the projected costs of supplying customers with purchases in the wholesale power market. And that is one of the things that you want to analyze. Do you have any projected figures as to what that might be now, as opposed to, you know, going ahead with the scrubber?

Senator Harold Janeway, D. 7: Thank you for the question. There are current costs in the purchase power market which others will be able to speak to. They've come down quite substantially with, in line with the surplus of capacity that has developed. ISO New England, which is the outfit that collects all the data on New England's power pool, has estimated that there are, there is the equivalent of perhaps seven Merrimack Stations surplus capacity right now. And even future, projected out, I think three years or so, so that has pushed down the price, but others who you will hear from later can provide more detail on that.

Senator Bette R. Lasky, D. 13: Thank you, I will ask them. Thank you.

Senator Martha Fuller Clark, D. 24: Thank you. Other questions? Let us move forward. Representative Walz.

Representative Mary Beth Walz: Thank you, Madam Chair.

Senator Martha Fuller Clark, D. 24: INAUDIBLE

Representative Walz: I will not, although I do intend to answer some of the inaccurate information that my predecessor had stated. So to that end, I would like to thank the Committee. I am Representative Mary Beth Walz. I represent Merrimack County District 13, which includes the towns of Bow and Dunbarton, so the plant is in my district.

And with that, I might add that this is a plant I've been familiar with since well before I was elected to the Legislature. I probably had my first tour of the plant about 15 or 16 years ago, and over time I have followed that plant and come to understand a lot about it, including how the darn thing runs. And so I'm more than a little familiar with the plant and how it fits into PSNH's plan for power in New England. So I do not come at this as green as perhaps some of my fellow representatives.

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Well, I'd like to start off and say that I am quite alarmed by the fact that we have this bill before us at all. I find this incredibly disingenuous of the environmentalists to be bringing this bill forward at this time. I, too, remember, as was testified before, that three years ago this bill was touted as a huge success, because we brought the environmentalists, we brought the company and we brought the Legislature to the table and we all came to an agreement. We all looked at all those factors and came to this agreement that allowed the company to move forward at what was going to be great expense to them, but it also cleaned up the air of mercury. This plant's going to take 85 percent of the mercury out of the air. It's twice as good as any carbon injection system, that has been referenced earlier. I know Representative Hamm suggested carbon injection. This reduces twice the mercury any carbon injection system can. The company worked with EPA on carbon injection systems and this is the best way to get mercury out of the air. So this was a great plan that moved this forward after carbon injection systems, and said this is the way that we can get the most mercury out of the air.

So, then I looked at this bill, and this bill, the original bill said what is in the best interests of the retail customers? So I looked at the bill initially in that respect, and we know that we need reliable, economical base load power in this state. And I heard testimony up here from Senator Janeway before, that we have an excess of power in this state. I sat there stunned! Stunned! Does he understand this winter how close we came to not meeting our load need? There are jet engines at the Merrimack power plant. I didn't know this until recently. There are jet engines that have been there since the 1960s, and when the plant itself, and when all the plants that are fired up in New England can't meet the base load, they turn those jet engines on, and somehow beyond my knowledge, they can generate electricity using those jet engines. This winter, they were running those jet engines! We didn't have enough power on some of those cold mornings to meet the power needs of New England. They had to turn the jet engines on! Where does (inaudible (1:01:20) we've got seven times the load of Merrimack excess in New England comes is well beyond me, because the experience of this very winter contradicts that.

One thing that the proponents of this bill keep talking about is that we need renewables, and they talk about wind and they talk about solar. What we need here is base load power. You need power that you can call up when you need it and have constantly running. Renewable power, like wind and solar, is intermittent power. You can't just call on it, you're the victim of the weather. Does the wind blow, does the sun shine? And what happens at night? When you replace the Merrimack Station, which we are going to have to do, you're going to have to replace it with some sort of long term viable

base load power, not intermittent power. And that difference seems to have been lost on the people talking about this bill. But it's an important distinction. You can't replace base load power with intermittent power.

They also talk about the economy here. We all have heard endlessly about, because of the increased cost here, about how this needs to be looked at. The reality is, as I stand here today, PSNH has the cheapest utility rates of any utility in all of New England, the cheapest rates, not just in New Hampshire — in all of New England. If you take and you put that scrubber on at \$250 million, they're still the cheapest power. If you take it and you put it on at \$450 million, maybe we're not the cheapest anymore, but we are still below market. And the power coming out of the Bow power plant is still below market. So if you shut down that plant and you try and replace that power at market rate, my understanding is it's going cost you, today, \$30 million a year to replace it at market rates. That's more than it would cost just to pull that power out of the plant with the scrubbers.

Now, I can stand here and do that as a back of the envelope computation. You don't need a 90 day study from the PUC to run that simple calculation. So I would suggest that you need to be looking at that factor as well.

Now if, it's not clear me that this study calls for delay. But if there is a delay due to this study, if you take a three month delay, because of the work season here, because of our winters, a three month delay means a nine to twelve month delay in the construction on that plant. What does a nine to twelve month delay do? Well, for one thing, we get all that extra time of mercury spewing in the air. I am troubled and confused with how the environmentalists think it's a good thing to keep the mercury spewing in the air while we slow down doing this.

Secondly, it increases the cost even more. So they're coming at you and are screaming about the cost of this plant, but what they're proposing is going to increase the cost even more. Why would we want to take a course of action that's going to make the scrubber even more expensive than what the market costs have made it already?

Now, what will the study show? I know you asked Senator Harold Janeway that. That was a really mushy answer, from my point of view. What are they going to do with that information? Even if you have the study, what do you do with the information? You got two choices: either you go forward or you shut down the plant. Shutting down the plant doesn't seem like a viable alternative. We've got, I think, about \$200 or \$250 million already invested in the scrubber which PSNH, under current law, would be allowed to recover. And I think if you didn't allow them to recover, it would be unconstitutional.

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So we're already into this for a couple hundred million dollars. So we're going to stop? We're not going to, we're going to let them recover the \$200 million because you have to, and then do what? Then start all over with a new plant that's likely to cost in excess of \$500 million? I mean, I don't understand where we're going to go with this information.

We hear things have been changed. I have not heard from any of the proponents any new technology here. What has changed? In a short period of time, what has changed? There is no major earth shattering thing going on. We don't hear changes going on around the country. We don't hear power plants across the country changing what they're doing and putting in some newfound technology. This is the state of the art technology. So the costs have gone up. That happens. It happens on all kinds of things, you know. We'll deal with it and that's what the prudence review is there for.

Businesses need business certainty. Who are we as the Legislature to come in there and say, well, two years ago we thought this was a great idea so we passed this bill and we told you, PSNH, you have to do this and now you've spent a couple hundred million dollars on it. But, now we've changed our mind. What businesses want to stay here, when we've got a legislature like this that two years later is coming back and changing the rules of the game? You can't come back and do that to businesses. That is hardly a business friendly approach to anything in this state.

So I also looked at the amendment on this, which I saw a few minutes ago sitting down here. I had not seen it until somebody referenced it. I didn't even know there was an amendment. I've only had a moment to review the amendment, but if I look at the amendment, what you're doing is putting in a pre-instruction (sic) prudence review. So basically you're telling the Commission ahead of time what they have to do in this prudence review and you're telling the company ahead of time what you have to do, kind of regardless of the realities and regardless of the cost. I don't know how you can do that, and I don't know that that's a good approach to policy, particularly when we have a prudence review in state. Representative Hamm referenced that the prudence review comes too late to do anything. That's malarkey! The prudence review is there to make sure that the company's been honest in what they do, and if they're not honest, then the prudence review, under the prudence review the PUC has an obligation to disallow inappropriate costs. It's not discretionary, it's an obligation, and if they don't disallow it, you can bet the Consumer Advocate's going to take them to court and fight them for not disallowing inappropriate costs. So the prudence review that's in place now is more than adequate to deal with the increased costs of this plant.

So let's look at the situation. I maintain it's in the best interests of New Hampshire to go forward with this scrubber in a timely fashion. It's the most environmentally friendly approach, okay. We stop the mercury. We are, it's the least harmful to the ratepayers. In the long run, it's going to get power at the cheapest rate and it's going to get the mercury out of the air at the cheapest rate. And consistent with the first bill, I pulled the state energy policy that it references, and I've got to tell you, it's a home run. It's consistent with the state energy policy. I looked at this and I was frankly confused why the proponents bothered putting it in the bill, because this scrubber's so clearly consistent with the state energy policy.

So I would suggest that we as a legislator (sic) have an obligation here to approve this scrubber, then to look at ways we're going to meet our renewable goals that we have to do. We're going to look at fixing the transmission system in the North Country and coming down from the North Country, so they can put plants in. We're going to look at ways to put renewables out there. We're going to develop other forms of generation. But we can't do that now and still meet the power needs of the state. So let's put the scrubber in place, meet the power needs of the state, and use that time that the scrubber buys us in extending the safe life of the plant, to do what we need to do to put reliable, safe, environmentally friendly power in state and the transmission to carry that power to our ratepayers. Thank you.

Senator Martha Fuller Clark, D. 24: Are there questions for the Representative? Seeing none, INAUDIBLE

Representative Walz: Thank you.

Senator Martha Fuller Clark, D. 24: INAUDIBLE Are there any other representatives who want INAUDIBLE

Representative Frank Kotowski: Thank you, Senator Clark, Chairman, esteemed members of this panel. I stand here for the first time on this floor as a Representative, scared to death. My name is Frank Kotowski, District 9 in Hooksett. I stand here scared to death only for having to stand before this mike for the first time in 19 years. I worked for Public Service Company for 33 years of my life. I've not been through the front doors of Public Service Company for the last 18 years to speak with anyone who works there. I want you to know that. I rise here because I saw during my career with Public Service Company exactly what happens when perhaps well meaning people try to impress upon all of us the minority view. I believe that this project is terribly important to the future of the folks who live in my town who work at the Bow power plant, and I believe that I would be wrong if I didn't stand here and tell you that.

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We all know what happened several years ago, at a time when Renny Cushing and myself and others debated these very issues. We took a project then that would have given New Hampshire true energy independence. That was the Seabrook project, I'm not afraid to say it. The company at the time had projected, if you recall, the cost of that plant to be \$998 million for two, 1150 megawatt power plants, base load plants, such as the previous speaker spoke about the need for. And they delayed through these very same kinds of tactics that are being used right now on this bill. They delayed that project to a point where it brought a very good utility to its knees, bankrupted that utility, caused it to cancel one half of the project. Which ultimately, by the way, Florida Light and Power eventually, after having acquired it from Northeast Utilities, who bailed this good company out. I submit to you that you're going to really look carefully at this clearly but thinly veiled attempt to delay this project so that the costs continue to rise, for whatever purposes they have in mind.

Thank you very much.

Please see Attachment #2, Representative Frank Kotowski's testimony.

Senator Martha Fuller Clark, D. 24: Thank you very much. Are there questions for the Representative? Seeing none, are there any other representatives who would like to speak? Seeing none, I would like to call Gary Long.

Mr. Gary Long: Thank you, Madam Chairman, for the opportunity to speak. Thank you, Senators, for the opportunity to speak with you today. I'm Gary Long, I'm the President of Public Service Company of New Hampshire. After I give my remarks, there is another gentleman here named Gary Fortier, who's the Chief Operating Officer of a company called Power Advocates, and he is an expert in scrubber costs and he can show you how these scrubber costs fit in with the rest of the industry, and I hope put your mind to rest on this matter of scrubber costs, and I think he can show you how reasonable they are. And I'll have more to say about that also.

Now, I've been in this business for 33 years. I have spent a considerable amount of time and thought on this, and all the issues that we face. My career started about the time of the Arab oil embargo. I don't know if any of you remember those days and the disruption that that created for our society. Since that time, I've seen fuel prices go up, I've seen fuel prices go down. I've seen oil and gas prices go up and down and they all have gone on a steady upward trend. I've seen the rise and fall of nuclear power in this area.

There still are nuclear power plants, but there's far less now than there was 10 or 15 years ago. I've seen the emergence of energy efficiency as a way of doing business. I've seen a multitude of policies come out of both state and federal government, radical and very different policies in all those times. And I've seen forecast after forecast of what the future yields, what those policies might be, what those fuel costs might be, what the future price of power might be. And I can tell you every one of them's wrong.

So when you're dealing in a situation like that, and certainly we've all experienced that just recently, I will tell you that people did not project, experts that you pay money to, did not project that oil prices would go up to \$145 a barrel. But when it was there, experts were telling us that it will be \$200 a barrel. Three months later, it was \$40 a barrel. Now, I'm not blaming anybody for that because nobody can really forecast the future. If they did, we wouldn't be in a recession. If they did, our 401(k) and our investment, our retirement programs wouldn't have lost 30, 40, 50 percent. We would have taken different actions if we had that perfect picture of the future. Yet when I hear someone say let's do a study, let's spend a million dollars, let's spend two million dollars. And wherever you stand on the study, I can guarantee you, whatever version of the future that that study tells you, you're got to be really careful about believing it and acting on it.

So what do you do in a situation where the rules are changing? What do you do in a situation where the energy costs are changing and policies are changing? As I said, I've lived that for 33 years, and there are ways to deal with it and we're dealing with it very effectively. There's some principles that we follow that have worked and been time proven. One is, you own assets. When you own physical assets, then you control your own fate, and you're not subject to the ups and downs and vagaries of the market. And one of the greatest decisions that this Legislature did was to say, PSNH you should keep your existing assets and generation. That has been hundreds of millions of dollars of value to our customers.

Another thing that people like me do, to ensure that customers are protected, is you have fuel diversity. We've learned time and time again, you cannot depend on one fuel source. As I say, the recent history has certainly showed what would happen if you relied on one fuel source. So the way you address that is to have fuel diversity. In fact, it's a state policy. In fact, it's a regional policy that we should have fuel diversity. PSNH has the most fuel diverse power supply mix in all of New England. We have more renewable power, percentage wise, than any other company in New England. It's not enough. We have coal, we have oil, we have gas, we have hydroelectric power, we have wood power. We buy a small amount of power from Vermont Yankee, there's a little bit of nuclear power. And recently we added to our

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portfolio wind power, from the Lempster, the first wind park, energy park in New Hampshire, and we were part of that and helped make that happen.

So when people talk about Merrimack Station, we currently get very interested in that, and I should have started out by telling you we're strongly opposed to Senate Bill 152, in case you didn't know. Strongly opposed and we're asking every senator to vote against it. It is not a simple, it is not a simple study bill. It is a bill that is designed and geared for closing down Merrimack Station.

Now Merrimack Station provides fuel security, fuel diversity to our mix, it is our most economic power plant, and we have embarked on a multi-year plan to make it one of the cleanest coal plants in the nation. Not only does it do that for us and for our customers from an energy perspective, it also provides huge economic benefit to our state and to our community. You'll hear today about what its impact is on rail service. We are the anchor of rail between Concord, Manchester and Nashua, for those of you who are interested in commuter rail. We're one of those. You need Merrimack Station to help provide the platform for that, and you'll hear more about that today.

So we are, we are obviously strongly opposed and I just want to get into some of the things that are affected. When we look at this bill, and it's been said by others, but you either have a scrubber or you don't. The bill uses the word alternative. The alternative to having the scrubber is not having the scrubber. I don't think there's anybody in this room today who would say, I advocate running that power plant in the future without a scrubber, including Public Service Company. We're way beyond that. We're committed to putting the scrubber in that power plant and that's what everybody wants and that's what we want.

So the alternative to putting the scrubber in is not putting the scrubber in. And if you don't have a scrubber, you don't have a power plant. And that's why we feel so strongly that is really a bill about closing the plant, and Senator Janeway admitted that, although he himself does not claim to want to shut the power plant. He admits that supporters of this bill want to shut the power plant. So I think you need to look at it in those contexts and that's why you should vote against it.

As I said, Merrimack Station provides an incredible economic benefit and a foundation for rail and other things in this state, but more importantly, it provides hundreds of jobs. It provides hundreds of jobs for our own employees. It provides hundreds of indirect jobs for services that are provided to the plant. And right now it's going to provide hundreds of new construction jobs. As one of the reports said, this is not a shovel ready

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project, this is a shovel in the ground project. Employment can start immediately. We have the permits, we're ready to go.

You have a package in front of you, and I'm going to be referring to some of those pages. I won't talk long on each one of them, but just so you can look at later. But one of the things I want to address in the course of talking to you today is some of the myths that have been spread recently in this regard. One of the thoughts that you hear up there is that, gee, if we don't spend money on the scrubber, we have money to spend somewhere else. That's a total myth. We can spend money on a scrubber and we can spend money on energy efficiency, and we can spend money on renewables - we the state, we PSNH. They're not mutually exclusive. It's not an either/or. So I'd really like to put to rest in your mind the idea that if you say no scrubber, that somehow that frees up money. It doesn't. We're capable as a company to do all those things. They're not mutually exclusive.

Transcriber's note: Due to the volume of materials submitted by Public Service of New Hampshire, those documents are not attached to this transcript, but are available in the original bill file.

Another myth that's out there, is this is an old plant. Now if this was a car, I would agree with you, it's an old plant. It's an old car. But it's not an old plant, it's much newer than you think and I'll show you. I'll show you today in areas that it is new, far newer. And when you talk about infrastructure, old has a different kind of meaning than if you talk about a consumable good. You hear people alleging that these costs, the costs are going up. That \$457 million, the costs are going to go up. I'll explain to you today something about construction projects and construction management. Hopefully we'll put that to rest, too. The costs aren't going to go up. If anything, the costs will go down, and it's the way that we execute projects like this is to avoid the costs from going up. And we can talk about that some more, too. So you can think about the 457 as a very good number. If anything, we're already taken steps to make it lower, barring a delay or something else that would add to the costs.

You also hear people on the myth that, gee, for some reason, we're not, won't be able to comply with federal regulations. Well first of all, they don't know what those federal regulations are, and secondly, they can't predict them anymore than anybody else, because we don't decide what those are and no individual decides that. So at best it would be speculative. But the way I look at this is putting a scrubber in and all the other things that we've done over the last 15 years, puts us well ahead of the rest of the nation. As the President of the company, I am so confident that we can comply with any federal law on carbon or mercury and that this project is the right time and

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the right place to do that. I am not concerned in the least about changes in federal law. In fact, I welcome them. I hope that there is federal law, because I think there needs to be national policy on things like carbon. There needs to be national policy on things like mercury emissions. It just happens that New Hampshire is well ahead, well ahead of all that, and I compliment the Legislature and environmental groups in the state, regulators, all who worked to make this happen. For me as the President of the company, that puts us in a very good position, that I don't have to worry about federal regulations like some other utilities were, because we're already well ahead of the curve. So I think that's a myth or scare tactic that you should dismiss.

The other one that I think people didn't realize it or understand it, say well, the project hasn't started yet. I can tell you this project is almost in its fourth year. The project started the day you passed the law that said it was in the public interest. The project started the day you said, you ordered this, you put in the law, put in the scrubber. It started then and like all major construction projects, this is about a six year project. We're about the third year, we're almost in the fourth year of this six year project. The project started a long time ago. What you haven't seen is major construction, and we're right on the edge of starting that. But the project has started, and as mentioned by others, you have to start it, and you have to do your contracting to make things very solid and predictable, and we've done all that. And as you may have seen, we already have contractual commitments where we've spent up to \$230 million and there'll be more as the project moves forward.



On page three, I'll do this very quickly, but I think most people understand that Bow operates 24/7. As one of the representatives mentioned, it's a base load plant. It's very reliable. It's running better now than it did when it was first built.

On slide four, you'll see some of the history of the plant. And like I say, some people call it an old plant. Actually, it's a plant that's run better and set records, set its all time plant operating records in the last four years. If it's an old plant, I'd say it's running better than it's ever run, and it's producing more efficient and economic power than it ever has in its history. So to me, that's not a definition of old, that's a definition of well run. If you were in the control room of our power plant, you would see an array of computers and computer screens. And these are things that didn't exist in 1960. They are not old.

Page six here really gets to the policy that you have set out over the last ten years or so, and we're actually very proud of the collaborative efforts that have gone on with the State over this period of time. We've had a history of

environmental groups, the company, regulators, legislators, working together and we're very proud of being very progressive in that area, as the state and as the company, and that's why we're so bothered by this bill, which does just the opposite. Instead of collaborating, this is putting people apart.

But if you look at page five, you'll see what we've done, as the state and as the company. We've had major, major improvements in environmental qualities of that plant. It's all because, it started in 2002, others have mentioned this, something called the Clean Power Act. Now we embarked on a path to take care of poor emissions. There's nox, tox, mercury and CO². And no one else in the country has ever done this. But we were willing to do it with you, and you were willing to do it with us. And the last two that needed to be addressed were mercury and CO². In 2006, through a long collaborative process where we all came together, very substantial votes, majority, large majority, sometimes unanimous votes out of committee, for this mercury bill - supported by the Governor, supported by the Legislature, supported by environmental groups, supported by the business community, supported by PSNH. That's the bill we're talking about today, that's the thing that brought us up today. And so we accomplished what we set out to do.

Back then, you asked PSNH, "Are you willing to put in a scrubber?" And after having that collaboration, we said "Yes, we are." And we do what we say we will do. We keep our word. You looked at us and said yes, as a state we want you to do this. How do you make sure that you do this, PSNH? And we said, well, our word is good, we will do this. You said, no, we're going to write a law and we're going to tell you to do it. And we said, fine, because we're going to do it. So you wrote a law and told us to do it in law. Then the next question is, we really would like to spend sooner, not later. Yes, we'll do it sooner, we'll do it the best we can, we'll execute this as fast as we can and do this as soon as we can. Well, how do we make sure that you do that? Well, you can always put a provision in law, and you did that. You wrote a provision in law that said that PSNH, if you put the scrubber in sooner than the absolute deadline which has been 2012, then you will create a financial benefit to your customers. Not to your investors. You will create a financial benefit to your customers.

Well, we've been working very diligently to do this as soon as possible, to do what you've asked us to do, which is to do it as soon as possible. So we do what we say we're going to do, and we have done what we said we're going to do, and we have done what you asked us to do. And what I'm asking you is to keep your word. What I'm asking you is to abide by the law that you created.

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One page six here, there's another depiction of the accomplishments that we've collected, that we've done together and you will see, this is another reason why it's not an old plant. Since the plant was first installed, we've reduced particulate matter by over 95 percent. We've reduced nitric oxide by 85 percent. And with the scrubber, we've going to reduce mercury by 80, 85 percent, and we're going to reduce sulfur oxides by 90 percent. I think that's something we should all be cheering about and being proud about, and we should all be working to get this project done as soon as possible. That's what we should be doing. That's what PSNH is doing.

What's the status of the project? And as I mentioned earlier, it's on slide 7, if you're following along. I have no concerns about federal regulations, in fact, I welcome them. And that's one of the points of this slide.

One page 8, is a picture, a diagram of Merrimack Station. It gives you an idea of the footprint of that plant and how much has been added to it, and for, have environmental improvement, and what the scrubber will do as far as the footprint. And of course you'll see it's a rather large and substantial physical structure. And of course to do that, you need people, which will create a lot of jobs, a lot of good work. A lot of quality good work, and we're very pleased with the relationships we have with the unions that will help bring that good work to bear on this. And it couldn't be at a better time, in my opinion, in history. Not that we planned this. Of course, nobody wants a recession, but if we're in a recession like this, what better way to get people employed than to have an environmental project that makes a plant cleaner. So we're very, very proud of that, and we'd certainly like your support in getting that done.

Page nine, and again you know, I could talk to you at length about how one manages construction projects, but I know as legislators you may not have experience in that. But this really gets to the point that this project is not just started, it's been going on since 2006, and this is a typical way that you manage major projects, and you can see we've started. We already have, we did the preliminary engineering, we got a project manager, a program manager, who helps bring it all about. We've done the detailed engineering and we've issued major contracts last year, and we're ready to go on the major construction. We've done site preparation already. If you had, as Representative Walz said, she's been to the site many times. If she'd been to it recently, she'd see it looks much different than it was a year ago, because we've done a lot a site preparation in preparation for the permitting and major construction.

This may be a good time to give you an example of how projects are run. We're very, very proud of our wood burning power plant over on the seacoast.

And that, like the scrubber, is a result of your action, as a result of a law that was created in New Hampshire. As soon as you get a finding of public interest, which you have already done, you've given a finding of public interests in this in 2006. We got a finding of public interest on our wood project, I think it was 2004. But until you've got that finding of public interests, you're doing estimates, you're doing rough estimates, and the world changes. And during that period of time, 2004, '05, '06, prices also were going up during that time, and we had the same interests then that we have now, which is to contract in a way that you minimize and you stop and you lock in the prices so that they won't go up. And so we did that. As soon as we got the finding from the Commissioner of public interests, we issued the same sort of contract that we had with the scrubber, which are fixed price contracts. That means they can't go up. And so that project was a \$75 million project, and we never, ever exceeded that \$75 million throughout the whole construction cycle. In fact, we came in a little bit lower.

That's the same way that we're managing this scrubber project. We issued contracts. We're looking at \$457 million, and now, and we're not going to exceed that. And so now we're looking at ways to bring it down, because we have fixed price contracts for all of our major contracts. They've already been issued. And that's the way you run projects and we've been very successful in that, and that's the way we protect customers. That's the way we make sure that customers are protected against escalation. That's why I say it's a myth for people to say the costs are going to be a lot more than that. They're not. If anything, they'll be less.

One page 11, it's a very important one. As I said, nobody can predict the future, but we are, and that's why we define things. And we know what the costs of the scrubber are going to be. We know that. You don't need a study for that, you don't need anyone to project the future. We know that cost, at least we know the maximum. And we know what the impact on rates are, and that's on page 11. You've heard it before. It's about three-tenths of a cent per kilowatt hour. And of course, you have to pay more if you've installed equipment like that. And it's going to cost more to have a cleaner power plant. But we all accept that. We all accepted that in 2006. We all knew that it costs money to have a cleaner power plant, and we're all willing to do that. But it's very competitive, and the plant will continue to be very competitive. You can see on that chart, that I don't want to trivialize point three cents a kilowatt hour, but it's well, well within the variations that you get in fuel costs, and it's well within the market value, the market differential between our plant and the market. So we feel quite comfortable, even though it is a price increase, the plant will continue to be highly competitive in the marketplace. And it gives us certainty.

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Page 12, for those of you who are interested in more detailed cost estimates or prices and what a project is all about, there's nine or ten or so different elements of this project that all are contracted for separately and all that add up. So, you know, it's far more than putting in a flue gas, you know, de-sulfurization, there's a whole lot of other supporting and other work that goes with it. So just to give you a little idea.

We have very detailed documents on this. I mean the Public Utilities Commission can and will see all of this stuff. They look at all these project things and they do prudence review and they do a very thorough job. So we're not at all concerned with that, because we think we're doing a great job and we know they will do a very thorough job in reviewing what we did. But we don't have any problem with that. That's done in the normal course of business. That's already provided for under current law.

Senator Martha Fuller Clark, D. 24: Mr. Long, I do have one question for you, as it's going to better be

Mr. Long: If it's really pressing. I'd prefer to go through and then answer questions.

Senator Martha Fuller Clark, D. 24: Thank you.

Mr. Long: On page 13, is what some of the rough estimates were in 2005, as compared to 2008. You know, lots of things have gone up, as others have. In fact, everything all around us, all around us, in all the infrastructure projects and construction projects, you see the same sort of thing going on. That's why, when we get into construction projects, we try to lock into the costs as soon as possible, so that we can avoid further increases.

Page 14 just tells you a little bit more about what drives those costs. I think the things that are really interesting, hopefully you will find it interesting, is if you go to page 15, and this is a chart. This is not prepared by Public Service Company, this is prepared by a very renowned firm called Cambridge Energy Research Associates. Okay, we took this directly from their research. And this is just, and this again is not speculation. This is not speculating about the future, this is what actually happened, okay. And so this is what actually happened to power capital costs between 2005 and today, and you can see, you can see that all projects throughout the country were experiencing the same sort of price escalation as we did. So that means that all of our competitors, others had their costs going up too, which means that relative, the whole market went up. So when you see scrubber costs go up, sure they did. But so did everything else and so relative to the market, we're still very good.

And the same sort of thing on page 16, you see iron and steel, cement, and they went up in great amounts from 2005. And of course anybody in the construction business knows that, anybody in the power business knows that. And the same sort of thing, if you go to page 17, copper, nickel, you know increased. They're still all up, very substantial increases. I give this to you only to point out that, you know, obviously a project of this type is very complicated and no one expects you to be experts in project management. Nobody expects you to be experts, but we are, and these are things that really, I think, would indicate to you what drives these costs up and it's not unique to Public Service Company. As I said, Gary Fortier will compare it against other scrubber costs around the nation. You'll see the same sort of thing, that we're very competitive and we're very much in line with what others are experiencing.

And page 18 is a little bit more than that. There's a little more information on the cost differentials that have occurred. And really, you don't need a bill, you don't need legislation to understand this data or to get it. I mean the PUC has access to this data without any law changed, and they certainly will look at it before, as Senator Gatsas says, anything goes in rate. I mean you really should take comfort in that. If they think we did anything wrong, or didn't do anything well, they will certainly let us know, and we will be hearing that one out too. So, I don't, you really don't, there's nothing to do in a future study that will help you understand the costs of the scrubber.

And our whole approach, on page 19 there, and it's been very, very successful and our award winning wood plant, it's gotten, five, six, seven awards, national, international, construction awards, engineering awards. We're using those same practices that we used in that award winning project on this, and that's not, page 19 just tells you a little bit more about what those are.

And page 20 is a really coming a little bit at it from the customer angle, which of course is really a progress INAUDIBLE we use on every decision that we make, but we agreed this a very good project for customers, also. It's going to provide them with energy security, provide them with economic power, and as was said, the Public Utilities Commission will look at this thoroughly as they always do.

And I think we need to remind people sometimes, so it will help you put their allegations in perspective, is New Hampshire has an open access system, and many of you were part of that. Many of you created that law and that policy, and certainly I was part of it. And what that means is that any customer, any customer can choose a power supplier. Now we know on a practical

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level, residential customers don't get that choice because people aren't offering that. But we know on the business side, commercial customers, we know that they can and do choose power suppliers other than PSNH.

Our role, our role as set by state law, our role is to provide power to customers when they haven't chosen a supplier. Some people call that the supplier of last resort. It just so happens that most customers do not choose a supplier. But commercial customers can. So when a commercial customer says, I'm concerned about the cost, you know, I don't want to be flippant about this, but if they really are concerned about the cost and if we really aren't low cost, they can go somewhere else and they can completely avoid the costs of a scrubber. But that's not, you know, what we're trying to do is to have the lowest cost power that we can for the benefit of customers. But if people think that we're out of line, they have recourse. They have recourse through prudence review and they have recourse by, they can make a choice for a different power supplier. And that's just the point that sometimes is lost when people make allegations and ...

It's interesting to me that Senator Janeway says this isn't about cost. And I think he's right. I agree with him. This isn't about cost, this is about people who want to shut down Merrimack Station.

On page 22 is the project benefits and I've mentioned many of them. Of course, jobs right now is always very important to us, and I thank people for complimenting us for how we treat employees. I'm one of those employees, and we always try to treat our employees well, and we always try to treat our contractors well, and we always try to treat people who work on our sites well. And we're looking forward to having many of you on the site and working hard. We know you do good work. We've had lots of experience with contractors doing great work and we're going to do it again. But jobs is very important. The local economy.

I mentioned passenger rail. There will be more and railroad help, we talked about that. I talked about the energy values of this plant already. I mean the values to me are just so overwhelming, just as some people would say a no brainer, that you really want to maintain a plant like that, and you really want it to be as clean as possible.

Regarding Senate Bill 152, I tell you, it's very unusual for me to testify before you these days, so the reason I'm here is because I just think that it is so, it's such a dramatically negative impact and I really need to, really need your vote against this bill. It is not a simple study bill. It is far more serious than that and, you know, my point of view, not a point of view, it's really my experience. As I say, you can spend any amount of money you want on this

study and it won't tell you the future. I think Senator Gatsas had exactly the right question. What are you going to do with it when you get it? Because at best, it's going to be speculative, it's not going to tell you anything. And all it will do is feed the fire and all it will do is cause more fighting and disagreement and people following different agendas.

As I said, as an electric company what we do is we try to provide for certainty in an uncertain world. And one way to provide for certainty in a very uncertain world is to make the power plants as clean as possible and to install the scrubber. As I said, the scrubber is really our hedge against federal regulations. You know, I'd rather do it now when it's less expensive than to do it five years from now, when there's federal regulations, when every other power company in the country is putting in scrubbers. It's better to do it now, and I think it'll do us well.

Senator Martha Fuller Clark, D. 24: Mr. Long?

Mr. Long: Yes, ma'am?

Senator Martha Fuller Clark, D. 24: I wonder if it would be possible to wind this up.

Mr. Long: I'm just about finished, as you can tell. I'm on slide 25, with only a couple other ...

Senator Martha Fuller Clark, D. 24: You've provided a lot of very good information in there and it's not that we don't appreciate and that we don't take your testimony seriously, but you have spoken for 30 minutes.

Mr. Long: Oh, I'm sorry, yup, a little bit longer than I normally go. But if, Senator, you could just bear with me a couple more minutes, I think I can wrap this up.

Senator Martha Fuller Clark, D. 24: Certainly.

Mr. Long: Thank you. On page 25, I guess you can read it at your leisure, but I just want to point out to you, because some people think the study is going to provide answers, and it won't, and I want to tell you what it won't give you. It certainly won't tell you what the cost of the scrubber is or what Merrimack Station's fuel source is. We know that. And it won't tell you what the price of oil, gas or coal, and it won't tell you what future regulations you're going to have. So it really, you can spend money and you can have a study, but to what end? I think the only end is, I guess, give you a platform to say shut the plant down.

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Page 26. I guess I'm done, Senator. With that I can just, I really do want to focus on just one more slide before I leave, and it's slide number 28, and many of you have heard me say this before. And it's just one slide, but I would tell you, Senators, in some ways this is the most important slide in the whole package. Because I really don't think we should be here today talking about Merrimack Station. I think that should simply be going forward in the way that we've all agreed.

What we should be talking about is how can we have more renewables. And what this page is saying is what PSNH is doing and what we think should be done. And you can see we think energy efficiency is a huge part of our future, and that's what we should be talking about. How do we get more of that? How do we do that well? How do we work together on that? You know, how do we keep looking for innovative ways in our power plants? You may have read, you may have heard, that we're going to test burn cocoa beans in our power plant. Those are the kind of things that we do and then invest in renewable energy projects. That is not going as fast as I would have liked, and I personally think that you can never have too much renewable energy power. And you all know my position, that PSNH would like to build an INAUDIBLE and employ some of these people on that front too, doing renewable energy projects. But you know that for three years now, the Senate has said no. But we're not here today to talk about that. But I think that's really the sorts of things that we should be talking about, instead of having to spend so much of our efforts doing something that has already been done, which is put a scrubber at Merrimack Station.

I guess finally I just ask you for your support, for the all these people in this room, for our customers, for our energy future, that you vote against Senate Bill 152. Thank you.

I would like, Senator, to bring Gary Fortier up for just a minute so he can give the scrubber perspective, too.

Senator Martha Fuller Clark, D. 24: Thank you very much. I would like to say that I look forward to working with you on making sure that we can provide the transmission to the North Country so that whatever projects are being, moving forward in the North Country are going to be able to come to fruition. Without transmission, nothing can move forward, so we know that you're a key player in that and we do look forward to working with you to solve that problem.

Mr. Long: And I, too, with you, Senator, am interested. And there are some even more substantial things we can do with transmission than the northern

route, but we certainly want to do that. And I will tell you, there's renewables that we can do now that don't require transmission. So, all those things I think we should pursue together.

Senator Martha Fuller Clark, D. 24: Absolutely. I wanted to ask you one question, which was some concern that I have that when you're looking at the cost of commodities, that your chart ends in 2008. It doesn't show what's happened to commodities since the market of last summer, which we know, the costs were very high. The costs now have come down. Do you have the stability in your contracts? I know that you said ...INAUDIBLE

Mr. Long: Yes, Senator, I would say we're in very good shape, and I really want to compliment the team, the PSNH engineering team and project team. I'm very, very comfortable and very pleased with their, you know, marvelous execution so far. And yes, we provided, we have room in the contract. We provided for escalation of materials and we provided for contingencies. If we don't have to use those escalations because the markets have changed and some prices of some things have gone down, or at least stayed flat, because sometimes we built in escalations in case they didn't stay flat. So, yeah, we are already seeing reductions in costs that we are capturing as we go forward. So, yes, we believe that that's why, as I mentioned earlier, this is like the highest it would ever be, 457, and you know, again, until you run the course you won't know what the final numbers are. But our team feels very confident that there's things that we can exercise along the way.

The bad news is we're in a recession. I mean, nobody wants that. But if you're in that circumstance, you might have some leverage to get some cost savings for materials, but there still is a world demand for scrubbers and there still is, it's still a very vibrant market.

Senator Martha Fuller Clark, D. 24: INAUDIBLE

Senator Jacalyn L. Cilley, D. 6: Thank you, Madam Chair, hold it down, okay. Thank you, Madam Chair. Mr. Long, I have been following this now for weeks, and I have heard evidence on both sides of the fence about, you know, whether that plant is actually an integral part of the, you know, the supply of electricity, and that we really could do without it and have adequate supply. I'm wondering if you could speak to that, and I'm also wondering why, doesn't ISO New England issue, I think it's FERCs, it's been a little while since I've visited those, that suggest a concern about supply in the future?

Mr. Long: Thank you, Senator. I tried to keep things from getting too complicated, because electricity is fairly complicated. But the short answer

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to your question is that plant is absolutely critical to supplying our customers. Okay, now we have to distinguish our customers from the rest of New England. But that plant is clearly used to serve our customers, and we don't have enough power to serve our customers. We're buying power on the wholesale market. We buy 300 to 400 megawatts of power on the wholesale market. So, certainly from the perspective of the economics to our customers, it's critical.

When you look at New England generally, and we are operating as a single region, the recession has resulted in less electric load now than we had earlier. So, I mean, the recession is having a very large impact on everyone. So right now, and I think Senator Janeway, you know, said that prices are low. Prices have gone down, and as I said, I've seen many cycles of up and down. I mean, if you want to bet the farm on the prices today, I certainly wouldn't. But, you know, so prices are low now, which is good. It's kind of an offset to the recession. But no one expects that to hold. And so there's enough power in New England. There's enough power in New England. I should say it this way, on paper, there's enough generating capacity to serve the load. And there isn't any real load growth happening in New England right now.

But that doesn't mean, that doesn't mean that's economic for customers, it doesn't mean that at all. And it doesn't mean that that power is available all the time. We've had two times in the last, I think, three years where there's been a shortage of gas supply, and what happens when there's a shortage of gas supply, is several of the gas plants in New England can't run and I think the mention of our turbines, our combustion turbines running is kind of the result, sometimes the result of plants just not being able to start up. Sometimes it's just the result of plants just not being able to run. And that's what happened. You know, there's destruction in the gas supply and we were called on to run anything and everything we could so New England would have enough power, and that doesn't happen often, but it can happen. And so, in our business, that's why I say, it is so important to have fuel diversity, it's so important to have flexibility, and that's one of the things that Merrimack Station does for us.

Senator Martha Fuller Clark, D. 24: Thank you very much. Senator Carson.

Senator Sharon M. Carson, D. 14: Thank you, Madam Chair. And thank you for your testimony this morning, Mr. Long.

Mr. Long: Thank you, Senator.

Senator Sharon M. Carson, D. 14: I pulled some of the testimony from the original bill that established the scrubber project, and I discovered that not only are we looking to reduce mercury emissions, but we're also looking to reduce the sulfur dioxide emissions. And that is really substantiated in the program that you provided us with this morning. One of the things that I did not know was that we were paying for these sulfur dioxide credits. Are we still paying for those?

Mr. Long: Yes. We, as an emitter of sulfur dioxide, we have, there's a cap and trade system, you know, much like what people talk about for CO². Not the same design but the concept. And it's been in existence for a number of years and it's been proven to work very well, about reducing sulfur. And so, you know, it wasn't required by law to reduce sulfur, you know, that mercury law. It was really focused on mercury, as others have said. But at that time, we did a two-fer, those were the kind of words used back then. We get to have two major reductions with one piece of equipment, because these flu gases, desulfurization are mainly for the purpose of reducing sulfur. So we got a huge reduction in sulfur, which means we avoid having to buy sulfur credits on the market, on the cap and trade market. So that produces economic value, it's an offset to the cost. Not an entire offset, but it helps offset the cost and so, yeah, it's a very good thing for us. And it helps us look at different sources of coal, because if the coal has a little more sulfur in it than the coal we'd normally buy, but we now have a way of getting rid of the sulfur with this device, which means we're open up to more markets, and that affects rail in a positive way as well as cost.

Senator Martha Fuller Clark, D. 24: INAUDIBLE

Senator Sharon M. Carson, D. 14: Thank you, Madam Chair. So if you were to give us some sort of an estimate, what do you think would be the cost benefit to the ratepayer?

Mr. Long: I guess I'd like to do that as a follow-up, because I'm not an expert and I know that two years from now, someone will say, gee, Gary, you said sulfur credits were this, and the market changed and the facts. So, you know, again, it would be an estimate based on today's costs and I think one of our staff can certainly provide that for you, Senator.

Senator Martha Fuller Clark, D. 24: Senator Odell.

Senator Bob Odell, D. 8: Thank you, Madam Chair. A couple, Mr. Long, thank you for your testimony. A couple of times this morning you have mentioned that there's a cost for this study of a \$1 million or \$2 million. Who would be the payer of that?

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Mr. Long: You know, Senator Odell, I didn't mean to imply that this would cost that much. We're not advocating any study, so it costs zero if you ask me. But I'm just saying, I have seen studies where you can pay consultants \$1 million to do a study, and I personally would not use the results of that study because of speculation. And if you spent \$100,000, \$200,000, \$1 million, my point being that money will not buy you an answer. That no matter how much you spend, you can look at what you think is the world's renowned expert, you know, but they can't tell you what an oil price is going to be three years from now, four years from now. There are some markets that you can buy and sell one or two years ahead. You can't buy five, six, ten years ahead. Nobody's foolish enough to believe that they can forecast.

Senator Martha Fuller Clark, D. 24: Follow-up.

Senator Bob Odell, D. 8: Mr. Long, my question was, if it costs a dollar or it costs a \$1 million to do this study, who ultimately pays for the study?

Mr. Long: I don't know. I guess that would be for you to decide, but if you vote the bill down, you don't have to decide. But you know, it's, I would think that it would be a bad use of money from customers, so I certainly hope our customers don't have to pay for it.

Senator Martha Fuller Clark, D. 24: INAUDIBLE

Senator Bob Odell, D. 8: Thank you, Madam Chair. I understand correctly and some of the concern is that you've had 33 years of experience, you must have had projects like this in the past, and I know you mentioned the Shiller Boiler, where you are asked, you are legislatively told to go ahead with the project or you initiate a project. You spend the money and then the Public Utilities Commission looks at that and says, yes, this cost is in, that cost is out. In other words, the Legislature has ennobled (sic) the Public Utilities Commission to fulfill that role. Is that a normal standard, that lookback, in terms of what will go into the rate base?

Mr. Long: It is the normal standard for the Public Utilities Commission to review our actions and our decisions, and it's done in hindsight. So it certainly presents business risk, as you might have a difference of opinion. We might think we made a good decision, somebody else might think we made a bad decision. But I think the Commission has found over and over again that we're making good decisions. But yes, that's normal course. And that's okay, we're totally prepared for that and we're totally used to that.



What is difficult for us because, you know, we're really, whatever we do affects customers. You know, we're a regulated company, we don't get market prices. We don't get the profits that a nuclear plant gets when the market prices go up, you know, or any other plant if it's not regulated. So we have to be very careful. First of all, because we have that scrutiny. Second of all, you know, it affects customers. So we're basically very conservative. We think we're very innovative when it comes to things like wood burning or like cocoa bean shell burning or, you know, renewable power. But financially we have to be very, very conservative and we have to be very sure of what we're doing, because if we're reckless or if we're making bad decisions, it'll hurt, it'll come back on us.

Senator Martha Fuller Clark, D. 24: Thank you very much.

Unknown: My name's Lynn INAUDIBLE and INAUDIBLE for PSNH. And this question was asked of us awhile ago because I think INAUDIBLE question, whether or not INAUDIBLE.

Senator Martha Fuller Clark, D. 24: Could you just wait one minute. We'll be able to get your answer, but it won't INAUDIBLE.

Mr. Long: I must have said something that my staff disagrees with me, so no.

Senator Martha Fuller Clark, D. 24: INAUDIBLE. What I would like to do now. INAUDIBLE to come forward, will not be able to INAUDIBLE this afternoon. It is my intention to break the morning session at noon and reconvene at 12:30. At that time, I will ask the representative INAUDIBLE to come forward. Is that?

Mr. Long: Thank you very much, Senator. That's perfectly acceptable, just as long as you get the information, I think you'll find it useful.

Senator Martha Fuller Clark, D. 24: INAUDIBLE, so wait before the public can INAUDIBLE, we'll hear from Senator D'Allesandro. INAUDIBLE if you could line up, I will call on you.

Senator Lou D'Allesandro, D. 20: Thank you, Madam Chairman, and distinguished members of the Committee. For the record, my name is Senator Lou D'Allesandro, I represent District 20. That's Manchester, Wards 3, 4, 10, 11 and the Town of Goffstown.

I come before you in opposition to Senate Bill 152. I'll be extremely brief. We as the Legislature mandated that PSNH do this. We told them to do this

Public Service Company of New Hampshire
Docket No. DE 11-250

Data Request TC-04
Dated: 08/31/2012
Q-TC-013
Page 1 of 5

Witness: William H. Smagula
Request from: TransCanada

Question:

Reference page 16, line 10, of Mr. Smagula's June 15, 2012 prefiled testimony in this docket, please provide copies of any and all "published cost statements" that have been issued in connection with the scrubber project since its inception.

Response:

The Clean Air Project Team published three cost estimates. These updated estimates are presented in the company's Form 10-Q quarterly filings attached below. The Clean Air Project Team presented a site specific cost estimate of \$457 million in May 2008 which was approved by NU's Board of Trustees in July 2008. The Clean Air Project Team updated the estimated project cost to \$430 million in the second half of 2010. A third and final update in the first half of 2011 estimated a project cost of \$420 million.

Public Service Company of New
Hampshire
Docket No. DE 11-250

Data Request STAFF-01

Dated: 12/30/2011
Q-STAFF-012
Page 1 of 75

Witness: William H. Smagula
Request from: New Hampshire Public Utilities Commission Staff

Question:
Please provide copies of all reports to the Legislative Oversight Committee on Electric Restructuring and other persons pursuant to the requirements of RSA 125-O:13,IX.

Response:
The requested information is attached.

PSNH Legislative Update- June 18, 2008*

Update relative to the reduction of mercury emissions at PSNH Coal Fired power plants as outlined in HB1673.

As required by HB 1673 (RSA 125-O:13 Compliance- Paragraph IX) PSNH shall report by June 30, 2007 to the legislative oversight committee on electric utility restructuring, and the chairpersons of the house science, technology and energy committee and the senate energy and economic development committee, on the progress and status of:

1) Achieving early reductions in mercury emissions:

DOE Mercury Reduction Project at Merrimack Unit 2

- **Program Schedule Fall 06 – Spring 08**
 - Completed Parametric Testing Nov 2006
 - Completed Long Term Testing April 1, 2008
 - Used various combinations of sorbents to assess effectiveness
 - Varied rates of injections
 - Varied location of injection points
- **Long term Test Evaluations**
 - Long term test – Fall 2007 thru March 2008
 - Equipment performance
 - Balance of Plant Issues
 - Mercury Removal Performance
- **Measurement tools and methods**
 - Completed sorbent trap measurements
 - Installed and monitored Hg CEMs
- **Results of Parametric tests**
 - Initial injection plan 10 – 30%
 - Enhanced injection resulted in a wide variation of results
 - Sustainable results will depend on the ability to resolve balance of plant issues

2) Installing and operating the scrubber technology:

CLEAN AIR PROJECT UPDATE

- **Engineering**
 - Projects defined in 5 major components
 - Specifications developed for 4 key components
- **Commercial and Purchasing**
 - Program Manager Hired Sept 2007
 - Scrubber Island and Chimney proposals are in negotiations
 - Vendor Proposals requested and received for Wastewater Treatment Facility and Material Handling System
- **Review, Permits and Approvals**
 - NHDES – May 12 presentation
 - Temporary Permit expected October 2008
 - Town of Bow –Local permitting
 - Regional Planning Commission
- **Site work**
 - Existing oil tank removed
 - Site surveys and studies completed
 - Warehouse construction underway
 - On-site engineering facilities completed
- **Schedule and Costs**
 - Tie-ins: MK#1 Fall 2012, MK#2 Spring 2013
 - Project Costs will be updated with review of major equipment bids

*year corrected to reflect June 2008 update