William S. Cohen Papers Forum October 5, 2005 University of Maine

Maine Perspective Transcript of remarks by Dave Wilby Independent Energy Producers of Maine

Transcript:

Norman Vincent Peale, the self-help guru, you've probably heard of him. He said a number of years ago that Americans are so wound up that not even a sermon can put them to sleep anymore, and I don't know if that applies to panels on energy but I'm going to plow forward here. Again, I'm Dave Wilby, executive director of the Independent Energy Producers of Maine. We are a trade association that represents the producers of the state's renewable electricity. Folks that make electricity by biomass, and we've heard a lot about biomass today. Here in Maine to this point in time biomass is typically referred to or thought of as those facilities that take wood residue from sawmills or out of the woods and burn that wood to make electricity. From hydro, from wind, I'm pleased that Harley Lee, one of those wind developers here in the state has joined us today. Waste to energy is another sector, and landfill gas, which a number of folks including Beth have mentioned today. In the expectation that there's at least one person in the room who doesn't know what landfill gas is, I'll just explain real briefly that when you have large landfills they produce a lot of methane and that methane is often released into the atmosphere. Methane is a very harmful greenhouse gas, but if you can capture it, and you can through piping, and you can burn it, you eliminate a lot of that problem and you get some electricity from it.

So, the promise of energy independence, as today's forum is entitled. I guess I'll start by stating what is perhaps the obvious, but to become more energy independent we can either meet more of our energy needs here or we can reduce our overall energy needs. Or really, we probably need to do some of both. We've heard Denis speak a short time ago about the conservation part, and I'm going to focus on meeting our energy needs, or at least our electricity needs, indigenously. But first a couple introductory comments.

I'll begin with just a few thoughts on why I think the Cohen Paper's Forum is an appropriate place for this discussion. I had the pleasure of serving on then Senator Cohen's policy team in Washington for most of his last term in the Senate where I focused a lot on energy and environmental issues. And I can't help but noting that I did contribute some materials that are someplace in the Cohen archives here in the library, and it's a fact that makes more than slightly uncomfortable given the absolute mess my office and files were for five or six years so, Paige, I'm sorry about the mess. And I do want to add a disclaimer that I don't pretend to be an expert on all of Bill Cohen's energy views and policies. A glimpse of daily life in Washington in a Senate office--there's not a lot of sitting around trying to conjure up a detailed, coherent and complete energy, set of energy principles. It's more like trying to figure out what is in this, well, Susan referred to it earlier, the energy bill, a 1,725 page energy bill. Trying to figure out what's in it, how it affects Maine, and making sure the senator understands the salient points of that

with at least thirty seconds to spare before he has to vote on the Senate floor. But that said, I think Bill did manage to adhere to a view general principles that tied together a lot of what he did over thirty-plus years of public life. And these principles are very consistent with what we've been talking about today. And I really want to emphasize, and I think the governor touched on it and some others have a little bit, as well, but in addition to the local Maine constituent issues that Senator Cohen and the rest of the delegation, current and past, have always focused on, I think Bill Cohen looked at a lot of these energy issues with a perspective on global politics and national security. And I just think that that point bears some emphasis. He always saw a strategic importance to energy independence, that went along with the other factors and considerations that we all think about in terms of environment and cost and so on and so forth.

I prefer to think of today's topic of energy independence as moving toward greater energy independence, or at least reducing our dependence, because complete independence, to be quite frank, in my view, isn't really practical or likely to be achievable, and I'll explain why. Globalizing forces are certainly felt in the energy business, perhaps to a greater degree and perhaps for a longer period of years than in many or most other areas of commerce. And similarly, Maine is ever more closely linked with its regional neighbors in New England and the Maritime Provinces, on our energy and especially our electricity issues. So, you know, here today we're talking about the promise of energy independence, about sort of going in the opposite direction of some of these, some of these influences if you will. Or at least, knowing how to cushion ourselves from some of those, those risks. And I don't raise this contradiction, if it is, in fact, a contradiction, because I think that working toward energy independence is a bad thing. In fact, quite the opposite. I think the effort is necessary and important, and certainly in the best interest of Maine-based renewable electricity generators, whom I represent. I just simply raise the issue because I think the forces that pull us toward greater global and regional integration in the energy markets need to be acknowledged and understood as we, as we examine these issues. So, bottom line, Maine is not an island, and I think we probably all know that, but we need to work both locally and regionally, and Denis in fact talked about working at the regional level on the conservation side. We need to work at all these levels if we want to reduce our energy dependence.

I'm going to confine the remainder of my comments really just to the grid scale electricity sector, because that's what I sort of know, and that's what I work in. And again, I mentioned at the outset that one of the ways to reduce our energy dependence is to rely more on indigenous sources. And I want to share at this point sort of how we're doing on that score, both in the region and in Maine, what might be in the works down the road a little bit to change that circumstance, and what barriers or issues exist to making more of our electricity from renewable and other indigenous resources.

So, how successful are we in Maine, and in the region, at generating our own electricity today? Maine has been very successful compared, at least, on a comparative basis, with the rest of the nation. But New England as a whole is still very, very reliant on fossil fuels, natural gas in particular as you've heard many times today. This is a laptop, I'm sure it's a computer that will be turned off tonight. Just a handful of slides, courtesy of our friends at the Independent System Operator of New England, ISO New England. This is the installed capacity. These are, is the breakdown of the plants and

facilities in New England that are available to generate our electricity. As you can see, gas and oil and dual fuel, which means they can do gas or oil, is a very large chunk. And Beth referred to having all of our eggs in one basket. There's the graphic representation of having our eggs in one basket. And also, I think it's been referenced briefly but I just want to reinforce, because of this, because of natural gas's dominance in the way the regional electricity market works, gas sets the price for electricity nearly every day in New England. So if gas prices go up, your electric bill will go up, or vice versa.

Maine is also very dependent on natural gas, but we also have a lot of renewables, more renewables than the rest of New England. And I think some people say, "Well, why do we have renewables?" and just a couple thoughts on that. First, we've got the natural resources that are necessary to make power from water. We've got rivers; we've got lots of wood. Everybody knows that. It's a good place for biomass. And we've got some wind resources on those couple times today you've seen the wind resource charts. The only place in the east, one of the few places in the east, one of the few states that has pretty good wind resources, is Maine. And we've also got places to put these facilities. There are, some of our friends to our south, Connecticut's a good example, they don't have a lot of room anymore to put new facilities. Secondly, federal and state policies were put in place in the late seventies and early eighties that encouraged the development of renewable facilities, and it was at this point that you saw a lot of those biomass plants built, and a lot of the hydro facilities were developed or redeveloped. I think that was one of the peaks on Dr. Chum's, one of her slides earlier. As a result, by the end of the 1990's, about half of Maine's electricity came from renewable resources, although we're down a little bit from that now.

I'm going to skip over this one pretty quickly. This is the Maine version of the slide you just saw. Instead of all of New England, just Maine. But it's a little, it's a little misleading because you see nuclear at zero, and yes, of course, we have no nuclear in Maine today. That doesn't mean you and I may not be getting some of our power from nuclear. This is an example, I guess, of how regional we are, and to reinforce my earlier point. Because when you look at the next slide I'll show you, which is what actually serves our electricity needs. And I apologize that on the left here they're sort of small. But gas, here, is the largest component, with nuclear at 26%. So Maine has zero nuclear plants, but at least, and it's a good example for all of us, it's not really much different, probably in other places, if you get your home power from CMP, through CMP, on the standard offer as most of us in the state do, this last year, this is where your electricity came from. And so you'll see again, gas and nuclear being the largest. And then oil and coal around eight and five percent, and the renewables around 30%. Which, coincidentally, of course, is the renewable portfolio standard level in Maine. So over here on the far right, split down by category. We're about half fueled by fossil fuels. Nuclear about a quarter; renewables, just over a quarter. And just to break this down a little bit further on the renewable side, we have about seven hundred megawatts of hydropower. This is historic hydropower. There aren't new dams coming in. What there may be here and there is some repowering. There are some gained efficiencies in current facilities or adding some turbines in facilities that already exist, but there's really not much new on the hydropower side. Biomass, about two hundred and fifty megawatts. There are about nine stand alone plants in Maine.

There has been, and hopefully will continue to be, ongoing reinvestment, I'll call it, in biomass in Maine. And there have been three factors. One, frankly, energy prices have been high for some time. Two, there's federal policies, Dr. Tierney this morning talked about the production tax credits for renewables. That has an impact. We've extended it to biomass for the first time this past year. And finally, New England state policies. Policies particularly in Massachusetts and Connecticut, through their renewable portfolio standards, have done a lot to encourage biomass reinvestment and, by the way, wind.

We also have about sixty megawatts of waste energy here in the state, four facilities sprinkled around the state. And there's also three hundred and twenty five megawatts of cogeneration, which has been referenced a couple times today. I don't represent to cogeneration facilities but I'll just share with you, because for a long time before I worked in this world and I didn't really know exactly what that meant, I had a general sense. But the cogeneration facilities tend to be at paper mills or adjacent to paper mills in this state. They are typically fueled by a mixture of biomass and fossil fuel, and that probably depends on the fuel cost. If biomass is cheap and oil is expensive, you burn a lot of biomass, or vice versa.

So, and I do want to note too, and I think Beth referenced this at the end of her comments, that while some of this information might leave the impression that we've made a good start toward energy independence on the electricity side in Maine, again it's a regional market and you have to keep that in mind, and also this is just electricity, and if we had the same chart up here for transportation or home heating, it would be virtually all in the fossil fuels side. Again, this is just the ISO summing up what everybody's repeated a couple times today, and Beth's eggs in one basket comment.

So, what does the Independence System Operator, the people who are responsible for making sure that our lights stay on, what are they recommending? Diversify the fuel mix. And that's been discussed a number of times today. So that gives us really three major choices, the way things stand today. You could do some more coal, and that's got some problems. You can do nuclear power, or you can do renewables. So what's going to happen next? Before I shut down this slide I guess I'll note that this last point here is going to be addressed by the last panelist, Rob Gardiner, and that's all I'm going to say about LNG today.

So will Maine and New England diversify, and also become less dependent on foreign sources? I don't know. And if you know, and you absolutely know it cold, you can probably make a lot of money in the energy futures market, so I encourage you to look into that. But the only thing I am comfortable predicting is that there will be continual change in the long run. And that's born out by what's happened in the past thirty years. The resources we get our electricity from have changed every decade or so for the last forty, fifty years. There's no reason to believe that that may not continue to be the case going forward.

But in the near term, more and different renewables are on the way. And the governor ran through these earlier. Wind. Developers like Harley are working on hundreds of megawatts, mostly in Aroostook County in western Maine, plus the Penobscots and the Passamaquoddies both have their own projects looking into wind. Landfill gas, Beth mentioned that. Casella down here in Hamden, close drive, they're going to kick off one facility and I wouldn't be at all surprised if we see at least two more facilities just in the next few years in Maine. Landfill gas, which is a great development. Tidal has been mentioned. I think obviously you're going to see more solar, but my sense is, from what little I know, is that's going to be more of a residential and distributed generation phenomenon rather than a grid phenomenon in Maine in the short term.

So, some of these projects won't get built. Many of these projects will get built, and they'll have a significant positive impact in moving us toward that energy independence we want. And if it's all, you know, if it's that good and if, for all the reasons you've hear today, all the benefits that these provide, why aren't there more projects in the pipeline, and what are the barriers to more projects coming into the pipeline? First, Dr. Chum had a slide up here earlier this morning that answered some of that on a global, national perspective, and I just want to say I think those are, they're about stability of policies and coordination among different levels and such. That's absolutely true. But let me give you a couple close, practical Maine examples and I'll finish up here. One, financing generation of any type in Maine is difficult in the post-Enron environment. It's hard to build electricity plants. And in this region, we've had a large number of large energy companies have come in and frankly have gotten burned. So people are reluctant to come into New England a little bit. And secondly, the other one I'll mention is transmission. We haven't gotten into transmission; it's sometimes not the most interesting of topics, but it can be a significant hurdle. First, if you have a major wind site in northern Maine, you may not have a transmission line close by to get it out to the customers. And even if you do, or you can connect to one, there's a major bottleneck between us and a bulk of customers who really need that power in southern New England. We can make it here, but there has to be an investment in transmission to get it to them. And over time, if this bottleneck is not addressed, it'll be a major disincentive to investing in renewables or any other generation resources here in Maine.

So, with that, I thank you for the chance to share a few comments and look forward to any questions later.