TRANSCRIPT OF QUESTIONS FROM THE HOUSE ENERGY & DI COMMITTEE

AND ROB NORTH'S ANSWERS IN HIS WALK THROUGH OF THE RES REPEAL BILL

FROM FRIDAY, FEB 28, 2025

[ADDITIONS TO THE TRANSCRIPT ARE IN ITALICS]

Question from Rep. Campbell: I'm wondering what your alternative is? Just keep burning fossil fuels?

Answer from Rob North: I am perfectly happy with people continuing to buy solar panels and windmills. In fact, I am right now looking into putting some solar panels on my house. But what I don't want to happen or continue to happen is pouring state money into purchasing all of that with all the incentives that we currently have, including net metering, from the Renewable Energy Standard. If people want to do it on their own, like I may do, that's perfectly fine. I have a friend who lives completely off grid and, yes, he has solar panels. But he's not looking at the net metering reasons why he just wants to be independent and collect his own energy. And that's great! I think we Vermonters are really good at doing that. We're really good at being environmentally conscious.

Question from Rep. Campbell: On an individual level, that seems like that's a great thing, but I wonder what we do as a society, as an economy?

Answer from Rob North: In Vermont and in New England power is expensive, not just because of renewables. It's an expensive region because of the lack of cheap reliable generation. I think one of the reasons why it's so expensive is we have gotten out of the nuclear business. I think we should bring nuclear back. That's a very inexpensive way of generating electricity.

> *[**Additional Response:** A better question to ask is "What is the most efficient way to reduce carbon?" That's the important question to discuss. The use of natural gas to generate electricity must be weighed against the spectrum of carbon reduction methods at your disposal. By any measure net metered solar is a poor choice. The money could be much better spent reducing carbon emissions while recognizing that natural gas generation is not going to go away. According to EIA the world will be using more fossil fuels in 2050 than it does today, because fossil fuels allow humans to flourish, rise out of poverty, and use low cost energy to solve the most difficult problems. Are solar, wind and batteries going to make steel or aluminum or mine and process raw materials for the products that we consume? Will the airplane cease to exist? Today there are more than 10,000 jets in the air at any given time in the world, moving people and goods. The priority should be to use fossil fuels because they are cheap and use the enormous savings to solve the world's problems. In Vermont that means stop subsidizing renewables and concentrate on resilience, conservation, efficiency, using more natural gas and more nuclear to accompany the growth of the grid with lowest cost energy.]*

Question from Rep. Kleppner: Reconciling the numbers, there are a couple things I believe to be true. One is that the PUC testified that the RES is increasing our electricity price by about four percent now. So the fifty percent gap between median and where we are, like, only four percent of that is the RES.

And so I was curious, well, what are the other reasons? And from the analysis that I read, New England in general is high, and, you know, New Hampshire's RES was rather less demanding than ours, the one they're getting rid of. And so, presumably, that had an even smaller effect on their prices, presumably. I don't know that. But, you know, the energy industry analysts suggest that New England's prices in general are high because we rely on expensive imported fossil fuels. And in other parts of the country, you know, Texas has a huge amount of solar, and they produce their own natural gas and their own oil and all that stuff. And Wyoming mines its own coal and uses that. So I think we can't attribute much of our prices to the RES. Again, the PUC said it was four percent. And as we go to a hundred, it may be as much as eight percent on our electric bills. The other bit of quick math I did, you know, again, not at all questioning the number that we have spent five hundred and forty four million dollars more than we would have without it. But on a per person per month basis, it's like six bucks a month. And I'm not saying, you know, for family of four, that's twenty four dollars a month. That's real money. But its just a different way of looking at what sounds like a very big number.

Answer from Rob North: It [$544M] is a very big number. And I think if you heard TJ [Poor] all the way out, you would have understood that that small four percent number is just the price of the RECs, the Renewable Energy Credits we have to buy to check the boxes on our Renewable Energy Standard, which is a small fraction of that five hundred and forty four million dollars. That 4% is not the over market price that we're paying for the solar energy we're generating. That $544M is the net metering over market price we're paying because of the RES.

> [***Additional Response:*** *As the graph on chart 6 shows, the total amount paid over market price for electricity increases each year by about $4M with the annually increasing installed solar base. So we can't just calculate a flat average from the cumulative number. In 2025 the projection is $64M over market price. That's about $8.33/person/mo, or for a family of 4, about $33/mo which is about about 25% of the average electric bill. So it's not trivial and, along with the additional 4% paid for RECs, accounts for most of the 50% above median we're paying for electricity in Vermont compared to the rest of the US.*
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> *The question we should ask is, "What have we accomplished with this spending and what better ways could we have spent it?" We know that net metered solar is a very expensive way to reduce carbon emissions. At the outset of the solar subsidy scheme the dollars were small, but now they are large and growing massively larger as we install more and more solar panels aiming for 100% renewable. Hence the growing annual chart of renewable solar cost. From the outset our regulators have argued <u>against</u> subsidizing renewables, not only because it is unfair to the ratepayers, but because the money could be better spent to achieve the same objective that would benefit Vermonters as a whole, not just those who are able to afford it and elect to take advantage of the economics of solar subsidies. It has turned into a wealth redistribution from the poorer to the wealthy, making only the solar and wind providers wealthier.]*
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> *Analyzing Cost Differences in Carbon Reduction Strategies:*
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> *https://grok.com/share/bGVnYWN5_ef13403f-5b87-41b3-b168-c1fefd5d503e*
>
> *Costs and Benefits of Efficiency Vermont Since 2010:*
>
> *https://grok.com/share/bGVnYWN5_3abb68c9-8482-4b8b-ae43-53ce480c2295*

Question from Rep. Sibilia: Just two questions I had for you. You're aware that the h.289, the governor's proposal, does not in fact call for the repeal of the RES?

Answer from Rob North: Yes.

Question from Rep. Sibilia: Okay. And then the other is if you have had the opportunity to look at the ISO New England app, which allows us to see what the resources are on the grid at this time as representative Kleppner noted. We get a pretty high amount of natural gas, although lower than it typically is right now. We're running about thirty three percent natural gas in New England, thirty two percent nuclear, and twenty two percent renewables. Have you had the opportunity to log on to that? It's pretty cool.

Answer from Rob North: Yeah. Yes, I have. And which is one of the points I was trying to make earlier that just comparing ourselves to all of the New England states is not a valid comparison. Granted, it's the grid we're on and we don't have a whole lot of choice to go outside of that grid.

Question from Rep. Sibilia: So, you know, other states [outside of New England] have more abundant renewable fracked gas, which I think is pretty opposite what we have seen in terms of what we would expect Vermonters to support and probably New Englanders to support. We've seen expansions of natural gas lines defeated in our state to the south and also have much more renewables for wind out in the Midwest and solar. And so our reliance on imported fossil fuels contributes greatly to our volatility for sure in our pricing. So I thank you for the detailed presentation.

> [***Additional Response:*** *The failure to expand natural gas lines in the past is no reason not to pursue it now. More natural gas is essential to energy reliability and security in the future. As people turn to heat pumps and EVs, electricity demand will increase. If data centers, chip makers (Global Foundries uses 8% of all VT electricity) or bitcoin miners are part of the picture, the grid will need much more reliable 24/7/365 generation capacity.*
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> *The federal government is pushing for more gas pipeline capacity from PA to New York and New England. NE governors and policy makers should get behind this effort. We also need more nuclear baseload capacity. Vernon, VT and Wiscasset, ME are ideal locations for new nuclear plants. Transmission infrastructure is already in place, the sites are previously permitted for nuclear plants, construction jobs would be created, and the people in those towns know the benefits of the high paying operations jobs that would bolster the local economy. We would not have to worry about unreliable weather-dependent renewables not being available through the winter.*
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> *A new bipartisan bill to investigate new nuclear has been offered, H.287. It is a no-brainer as long as affordability considerations reduce the subsidies for Net Metering and remove RECs as a requirement for utilities. RECs are not a win/win. They are an arbitrage game for which we pay for nothing but a checkmark on our RES checklist, gamble on future events, and take advantage of neighboring states with different RES strategies (which is not very neighborly), none of which reduces any carbon!*]

Question from Rep. Kleppner: This may all be rendered moot…. I just pulled up the ISO-NE website, and it shows the price of electricity in all the New England states right now is zero. So I think we're in good shape! Laughter.

[*Additional Response: Rep. Kleppner may have been joking, but the issue is not simple and needs to be examined. Here is a deep dive into zero and negative energy pricing :*

https://grok.com/chat/1852109b-c687-4ab5-b96a-e02beecdb6ea

Real-time prices in ISO New England can become negative at times due to several factors:

1. *Oversupply of electricity: When there is more power generation than demand, especially from renewable sources like wind farms, prices can drop below zero[1][2].*
2. *Transmission constraints: In areas with limited transmission capacity, excess power generation can get "locked in," causing negative prices as generators are willing to pay to keep operating rather than shut down[2].*
3. *Seasonal maintenance: During spring and fall, when demand is typically lower, generators and transmission owners schedule maintenance. This can lead to mismatches between supply and demand if unexpected weather events occur[2].*
4. *Inflexible generation: Some power plants, particularly nuclear and older thermal units, may prefer to pay to stay online rather than incur the costs of shutting down and restarting[1].*
5. *Renewable energy incentives: Subsidies or tax credits for renewable energy can allow these generators to offer power at negative prices while still making a profit[1].*

Negative prices serve as a market signal, indicating an oversupply of electricity and encouraging flexible resources to reduce output or increase consumption. This phenomenon may become more common with the increasing integration of renewable energy sources into the grid[1].

Citations:

1. Winter 2022/2023 recap: Wholesale prices drop during warm season marked by cold snaps - ISO Newswire

2. Significant price variation on May 18 highlights operational challenges of operating the grid during spring and fall - ISO Newswire

3. https://www.iso-ne.com/static-assets/documents/100012/iso-ne-2023-emm-report-final.pdf

4. https://www.iso-ne.com/static-assets/documents/2023/06/imm-markets-primer.pdf

5. https://www.iso-ne.com/static-assets/documents/2023/09/iso-ne-2022-emm-report-final.pdf

6. FAQs: Using eMarket

7. FAQs: Locational Marginal Pricing

8. *ISO New England Massachusetts Hub Real-Time Peak Daily Fixed Price Future]*