Illinois Energy Transformation #10, 8/15/16:

Q: When is "permanent reactor closure" not "permanent?"

ANSWER: When the Nuclear Regulatory Commission says so.

For nearly three years now Exelon Corporation has been threatening to close reactors in Illinois. Five times it has set drop-dead dates for the Illinois Legislature to act on its demands for a financial bailout for these uncompetitive reactors; four times it has backed off and kicked the closure can down the road. The current End-Of-The-World date reported in the trade press is now December of 2016 [1].

All of these fake deadlines requiring (from Exelon's perspective) immediate legislative action got NEIS to wonder: what exactly IS "permanent reactor closure?" Who decides? And, how "permanent" is "permanent"? So we decided to ask the one agency that should know: the federal Nuclear Regulatory Commission (NRC). The results surprised us (see attached)

We submitted a series of questions to the NRC, and just recently got their formal reply [2]. The questions and subsequent answers were first submitted to NRC Region III head Cynthia Pedersen, who referred it to NRC's legal staff in Washington, D.C. for formal vetting and response, which we attach.

In summary NEIS found that:

- There is a great deal of regulatory discretion and flexibility that NRC can and historically has exerted on this notion of reactor closure and license termination;
- There is nothing in NRC regulation or federal law prohibiting a utility like Exelon to request a license waiver/variation/exemption at a later date to re-open a closed reactor, even after the operating license has been formally terminated; and
- There is nothing in NRC regulation or federal law prohibiting NRC from granting such a license exemption.

In other words, the notion that legislatures have to give in to utility pressure and grant bailouts by specific dates "or else" is – nonsense. Or at least not driven by any legal mandates. Utilities can (and have) leave reactors in a condition of temporary shutdown, and re-open them at a later date, providing they adhere to existing NRC performance and safety criteria during that shutdown period. This would leave their operating license intact, allowing them to re-open the reactors when the economic climate is better for them to operate – something Exelon top officials have argued is a future they foresee for the Clinton and Quad Cities reactors should natural gas prices go up. They just want in addition guaranteed profits during that economic turndown period, begging the obvious question: what business wouldn't want guaranteed profits during a money-losing period?

Some examples of NRC's flexibility on this issue of impermanent permanency are illustrative:

 The Tennessee Valley Authority (TVA) voluntarily shut down the Unit 1 reactor at its Browns Ferry Nuclear Plant (Alabama) in March 1985 and kept it shut down until June 2007, in a condition TVA termed as "administrative hold." While not an operating license, the recently opened Watts Bar III reactor had been in a state of incomplete construction for several decades before being recently completed and authorized by the NRC to operate.

While there are certainly some legitimate business concerns and decisions that Exelon must confront relating to potential closure – purchase of reactor fuel, decisions about maintenance and upgrades, staff and resource allocations – these are concerns and decisions that *all* businesses must contend with, and without the benefits of legislatively mandated access to the pocketbooks of all Illinois ratepayers that Exelon's reactor bailout would provide.

So in reality, the "urgency" that Exelon continues to foist upon the Legislature is urgent only from the point of view of Exelon's P&L sheets. They have no legal barriers to re-opening reactors at a later date should their corporate bean-counters determine that the market has improved to the point where re-opening would make economic sense.

All of this begs further questions and discussion about what this is all *really* about, since it's not about permanent closure of reactors (which NRC says is not really "permanent"), or meeting climate goals (why obstruct fixing the RPS for four years as Exelon has done if you are concerned about meeting climate-carbon goals?), or jobs (since two studies have confirmed independently of one another that the 32,000 jobs the Clean Jobs Bill would create in renewable energy and energy efficiency fields in most or all Illinois legislative districts is a valid figure, and is roughly 21 times the number of direct reactor jobs that would be lost in only 2+ legislative districts)?

Perhaps the accompanying article, "Subsidizing Nuclear Will Only Make Our Grid Problems Worse," [3] which appeared in Forbes on August 11th sheds some light in this regard.

In response to the then current news that New York had caved into Exelon's demands for a \$7.5+ billion reactor bailout (the topic of our next installment of IL-ET), the author Steve Cicala asks some very serious questions, questions which the Illinois Legislature should also be asking before authorizing picking ratepayers' pockets during an election year:

"Before celebrating New York's approach as a template for low-carbon policy, it's important to ask: Would these plants really shut down in the absence of government support? And supposing they would, if the problem is low prices resulting from an oversupply of power, is there a better solution than a subsidy that encourages more supply?"

He comes up with some startling answers as well:

"...the companies at the center of these negotiations have multiple plants, so they make decisions on a particular plant keeping in mind the impact of that decision on the rest of its fleet. Closing a plant in one state after being denied subsidies is a way of signaling to regulators in other states that they seriously risk suffering the same fate. This means that companies may close profitable plants (and pay the cost), because it maximizes the total subsidy they will receive across all of their plants. It also means that firms may actually be eager to close plants as a means of driving up the price of electricity that their remaining plants will receive. Thus, their demands are less about unprofitability than about market power." (emphasis ours)

"The final strategic consideration in these negotiations is about option value. Firms should be willing to endure periods of losses if keeping the plant open preserves the ability to make it all back and more when times are good.... these negotiations should be

viewed as setting a long-term policy approach. If, in five years, natural gas prices remain low and renewables continue to expand (as there's every reason to believe), we'll be right back at the negotiating table with an industry on proclaimed life support. There are few policies that deliver less innovation than guaranteed payment, no matter the prevailing economics of the industry." (emphasis ours)

Cicala goes on to illustrate that there are "other" means of addressing the lack of profitability of nuclear plants. NEIS mentioned this point – that other alternatives to reactor bailout have not and need to be explored by the Legislature -- in our testimony before the Senate Energy Committee on May 18, 2016 [4]. We have since thought up several other new approaches, which we intend to share shortly.

We stated in our first communications to the Legislature in late 2013 that there was no "crisis" that the Legislature had to respond to. The NRC responses to our detailed inquiry verify our assertion.

The analysis of Steve Cicala would seem to strip away the veneer of many of Exelon's arguments, and get to the core of what the current energy negotiations are really about: *retaining market power*. That has been the thrust of Exelon's nationwide war on renewable energy for the past three years, its obstruction of fixing the IL RPS for the past four years, and its advocacy of "bailout" as a state policy to reward failed corporate energy choices.

SOURCES:

- [1] "Exelon reaffirms long-term commitment," *World Nuclear News*, Aug. 12, 2016. http://www.world-nuclear-news.org/NP-Exelon-reaffirms-long-term-commitment-1208168.html
- [2] "The response of the U.S. Nuclear Regulatory Commission (NRC) to the letter dated June 16, 2016, from [NEIS] to Ms. Cynthia Pederson, Regional Administrator of the NRC Region III Office, "John B. Giessner, Director, Division of Nuclear Materials Safety, Aug. 4, 2016.
- [3] "Subsidizing Nuclear Will Only Make Our Grid Problems Worse," Steve Cicala, *Forbes*, Aug. 11, 2016.
- [4] NEIS testimony before the Senate Energy Committee, May 18th. Begin ~2:43:00 http://livestream.com/blueroomstream/events/5423303/videos/123455381

