

PART ONE

Chris Newkumet: In the face of new market enforcement challenges, unresolved cyber security issues and an increasingly complicated operational relationship between natural gas suppliers and power generators, the U.S. Federal Energy Regulatory Commission finds itself in the thick of things coming out of the summer doldrums. Flying below the radar, the Commission is taking on several matters of great significance to industry, markets and consumers. Here to talk about it is FERC Chairman Jon Wellinghoff.

Let's start with the enforcement and investigations machine, which has roared into life under your chairmanship. We have in the past year had a \$250 million settlement involving Constellation. Over the past four or five years, I believe, there is upwards of \$500 million in fines and disgorged profits. We have show-cause orders out almost every other week now calling companies on the carpet to explain what they've been doing in electric markets, etc. We've had a series of very high profile pipeline rate investigations telling pipelines to prove why they are making what they are making. What's gotten into you?

Chairman Wellinghoff: What's gotten into us is sort of the natural progression of where we started out back in the Enron era and the 2000-2001 timeframe when we had extensive fraud and manipulation going on in the energy markets and FERC did not have adequate authority, did not have adequate resources to move forward with the types of activity that we have now. Then in 2005, Congress under the Energy Policy Act gave us the authority specifically to go after fraud and manipulation. They also upped our penalty authority from \$10,000 a day, per violation to now \$1 million per day, per violation, which adds up very quickly when you have multiple violations.

Back in the Enron era we had 10 or 12 attorneys working in a small enforcement office with really no authority, no penalty authority, and now we have over 140 attorneys headed by a former U.S. Attorney ...

CN: Norman Bay...

Chairman: Norman Bay. The deputy is a former counsel to the FBI. So we have serious people who understand the landscape in the energy area, both gas and electric, and who have adequate resources, both the statutory authority and the physical resources, to go after people and ensure that the markets operate fair and openly in ways that consumers can be protected.

CN: This reminds me, I remember seven, eight, nine years ago under a different chairman it was announced that all of a sudden FERC was going to be the "cop on the beat." But it occurred to us that the same 1,400 employees were working there and you can't just flip the switch. But what you are saying is, it has taken this amount of time, some budget authority, some statutory authority to really ramp things up. That's fine.

How is this good for regulated industries? Do regulated industries have a sense of certainty about the rules now?

Chairman: Those who do play by the rules know that they can make money in the markets and not be disadvantaged and not be taken advantage of, just like consumers, by those people who are not playing by the rules. So it is important that you have somebody in place who can ensure that those rules are enforced, and enforced in a fair and full manner.

CN: I know cyber security is on your mind and in your worries. The energy industries, the energy sectors are really standing out there with their pants down. There are hundreds of thousands of cyber threats every day; there are threats to physical facilities; there are atmospheric events we worry about. This would seem to be the quintessential bi-partisan issue. The pro-hacker lobby can't be very powerful, and yet Congress has done nothing, it fiddles. You are on the record as saying someone should be given authority to do something here, and you've suggested that it should be FERC. Why?

Chairman: Well, Chris, I've been harping on this issue since I became a Commissioner in August 2006. I've been there for six years and it's an issue that still needs to be resolved. We need authority, or someone needs authority, to address immediate threats and vulnerabilities that could affect the infrastructure of our energy system in this country...

CN: Pretty severely...

Chairman: Very severely. Both the electric system and the natural gas system, and I want to emphasize that, especially given that we are now moving toward more generation from natural gas. It is vulnerable, both systems are vulnerable in a way that we need to have some authority to ensure that with potential known threats or vulnerabilities they can be immediately mitigated and we can in fact address them in ways that those systems can be made secure.

CN: And FERC has the experience and the day-to-day relationships with utilities...

Chairman: We do. We have authority over those jurisdictional entities, but we don't have that immediate type authority that would be necessary to, first, communicate information confidentially and, number two, be able to order specific things to be done and to follow up on those things that needed to be done. That's not there.

CN: Natural gas is now equally responsible for power generation compared to coal. This has revealed some problems. The natural gas suppliers and electric utilities apparently don't play well together. FERC just wrapped up a series of five high-profile conferences on this matter. Pretty quickly, what was your take-away message from the conferences?

Chairman: Well, the take-aways from the five regional meetings that we had were that we have some regional-specific problems. There are some areas that have congestion and difficulties in delivering gas at certain times of the year based upon pipeline infrastructure. Those are regional specific. But we have other issues with respect to scheduling between gas nominations and electric scheduling, and those scheduling systems are not, often, compatible. So we have to look at the compatibilities of those scheduling systems and see if we need to put in place any policies or any nationwide actions.

CN: FERC Chairman Jon Wellinghoff, always interesting talking to you.

PART TWO

Chris Newkumet: Welcome back Chairman Wellinghoff. Demand response and distributed generation, these are near and dear to your heart, these topics, the notion that FERC has taken several steps to provide incentives for power users to either forgo that power or generate it locally. Talk a little bit about what has happened recently, and why is this a good idea?

Chairman Wellinghoff: Well, let me put it first in context. The context is that demand response, or things that happen on the customer side of the meter, are important to incorporate into the overall energy markets because we want those markets to be as vibrant as possible and as competitive as possible. So more competitors that we can bring into that market, it is going to drive down prices for consumers, lower costs and make those markets work better. So if we can have consumers actually participate by modifying their loads, or consumers putting in their own local generation – solar systems and other systems that they can put in on a local basis – then the markets will work better overall.

And yes we have put in a number of initiatives to encourage those types of facilities that should be put in. One is that we've come up with a rule that indicates that if you are going to bid demand response into a market as an energy product then it should get paid the same thing a generator gets paid . . .

CN: locational marginal price...

Chairman: Yes, they call it locational marginal price, and it is an equal price that the generator gets paid because they are providing an equal service. So if you are providing equal services you should get equal value.

The other thing we did is we looked at certain types of local resources that can provide something called regulation service, which is fast-response stabilization of the grid. There are certain things like batteries, flywheels and other sort of local distributed resources that can do it much faster than the traditional resource – a generator. So we put another rule in place that says if you do it faster, you provide more value to the grid, you get paid more. You get paid what the value is that you supply to the grid.

CN: But you've suggested that should be even more than 1 to 1, maybe upwards of a 1.4 factor.

Chairman: That's another thing that we are looking at. We are looking at for capacity, on the capacity side, whether or not you should be paying distributed generation or distributed resources like demand response a higher amount because you are lowering line losses, you are reducing congestion and you are supporting the local distribution grid in a way that a central generator is not. So that is another initiative that we are looking at. We haven't got to a point of deciding how

we are going to move forward with that particular initiative, but we are now investigating that one.

CN: Let's look at a typical situation, maybe in Ohio, all the Walmarts decide on a certain day in August they are going to turn off half of their lights or they are going to turn on their diesel generators. Some people are critical of the fact that it seems that Walmart gets paid twice for this. They get paid to do that, on a megawatt-to-megawatt price basis, but they also don't have to buy the megawatt. How do you respond to that criticism?

Chairman: I respond to it the same way we don't look behind a generator supplying energy to the system. The generator may have a good contract on their coal, a lower rate on their coal. They may have some other special break with respect to the way they are operating. You don't look behind that; you only look at the price that they provide to the system. Similar with the Walmart, if that Walmart can provide an increment of energy reduction to the system that is as valuable as an increment of energy of generation to the system, it should get paid the same amount. There is no need to look behind that because it is a market, and both sides of the market are playing equally so ultimately they should get equal payment.

CN: You mentioned "of value," how do you quantify that? Give me some numbers Jon, let's say in PJM. How do you know this is working, how do you this is benefiting consumers?

Chairman: PJM has over 15,000 MW of demand response under control, ability to bring it into the market. This summer prices in PJM went as high as \$500 to \$600 a megawatt-hour. PJM put in place demand response and within an hour they brought it down to under \$100 a megawatt-hour. So we had some very rapid and very clear indications that demand response provided great value to the system because it brought prices down for the whole system very rapidly.

CN: One [hundred dollars per megawatt-hour] rather than five [hundred dollars per megawatt-hour].

Chairman: That's right.

CN: Diesel generators are responsible for a lot of power generation in PJM, estimates as much as 50% of demand response. These have no pollution controls. Does that worry you?

Chairman: It doesn't in this sense. As long you can make the case that the diesel generator as a very small generator putting a tiny amount of generation in overall in the entire system is lower than the amount that would have to go in if you pulled in a combustion turbine, ultimately the net amount of emissions is going to be lower. In fact there have been some studies done – I know EPA has a rule on this issue that they are looking at – and those studies seem to indicate that the net amount of emissions is still lower even though on a per-unit basis the diesel generators are dirtier. You are using less generation overall to accomplish the same purpose, much less generation.

CN: You have a deep background as a consumer advocate. The Commission's main role is to protect consumers. You've been the Chairman basically since President Obama has been in

office. In this election season I have to ask: Are energy consumers in the US better off now than they were four years ago?

Chairman: I think they absolutely are. Number one, wholesale prices are much lower. Supplies are up. We have also in addition to the supply of natural gas that is up substantially, we also have additional supplies on that demand side, of demand response that I was talking about. So ultimately I think the markets are much more vibrant, they are much more efficient and they are operating better, producing lower costs for consumers and overall protecting consumers.

CN: Jon, you've been a Commissioner since 2006, you've been Chairman since March 2009. Your term expires in June of 2013, and history suggests a year from now we will have a different FERC Chairman. What's next for you?

Chairman: Well, that's to be determined. I'm not going to be seeking anything until I determine at the end of my term exactly what is going to happen. You are right, it is June of 2013 that my current term ends, and that is something that I will have to address when I get there.

CN: Jon Wellinghoff, Chairman of the Federal Energy Regulatory Commission, thanks for joining us.

Chairman: Thank you, Chris.