Bill Loveless: The U.S. electricity system relies on an aging grid mostly laid out decades ago, yet now, with electricity demands changing, new options for supplying power, and increasing pressure to control emission, the consensus is the system needs to be rewired in a big way.

Can the Washington regulator responsible for electricity help drive those changes? Here to discuss those needs is Jon Wellinghoff, the Chairman of the Federal Energy Regulatory Commission. Good morning Chairman.

Chairman Wellinghoff: Good morning Bill. Thank you for having me.

Loveless: You’re welcome. You’ve developed a reputation as someone who is primarily interested in renewable energy and energy efficiency, not traditional forms of energy in the U.S. Some would say that’s unorthodox for a FERC Chairman.

Wellinghoff: Well, I’m interested in those things because I’m interested in saving consumers money, and we can save consumers money if we can make markets more efficient, and markets can be made more efficient if we can drive into those markets additional supplies like renewables and also if we can help consumers participate in those markets on the demand side with energy efficiency and demand response, and we’re having great success, and I think we’ve seen markets improve over the last four to five years significantly by making them more competitive and allowing more supplies on both the demand and the supply side.

Loveless: Well, what’s FERC’s role here?

Wellinghoff: FERC’s role is, ultimately, to oversee those markets and ensure that the rates in those markets are just and reasonable; to ensure that there’s no fraud and manipulation in the markets – and we have a whole market monitoring unit that, in fact, does that; and to ensure that, ultimately, consumers get a fair shake in those wholesale markets. And those wholesale markets, ultimately, then trickle down to set the prices for the retail markets for consumers.

Loveless: But normally you’re dealing with, you think of FERC, you think of regulation of large pipelines, of large power plants on a wholesale basis. You’re talking about having an effect on consumers when it comes to energy efficiency.

Wellinghoff: Well we are. All the way down to consumers who can participate in, say, the Regional Transmission Operators market here in the mid-Atlantic area – they’re called PJM. They can do things – in fact, we have five cars at the University of Delaware right now that are participating in the PJM market by providing something called regulation service on a daily basis.

Loveless: What does that mean?

Wellinghoff: Well, regulation service is something that we need to stabilize the grid. It’s needed 24 hours a day, seven days a week.
Loveless: This is the flow of power back and forth …

Wellinghoff: This is the flow and power as the grid is, during the day, increased by loads that come in. You have to have supplies to meet that or you have to have some way to ensure the grid is balanced. So we do that now with some called regulation services provided usually by large combustion turbines, by gas plants that can ramp up and down rather rapidly.

Loveless: But here you’re talking about cars, five cars.

Wellinghoff: Here we’re talking about, instead, battery powered cars, electric cars, that can get a signal from PJM while they’re being charged – and actually they are charging – but at the same time they’re charging, they’re withdrawing and injecting little amounts of power into the grid that provides regulation stability to that grid. So it provides stability to the grid, it’s a service that we regulate, it’s a service that we provide the structure for the market and for the tariff, and, under that tariff, those cars are now getting paid $7 to $10 a day per car.

Loveless: So you can make money on it.

Wellinghoff: You can make money on it.

Loveless: What you’re … you’re talking five cars here –

Wellinghoff: Right.

Loveless: But some day, do you see enough cars that could replace a coal-fired power plant or nuclear plant?

Wellinghoff: Oh, absolutely. I see enough cars some day that could replace most of the regulation services provided by the generation in this country. And the good thing about it, the good thing about it is if it replaces the regulation services provided by those plants, those plants don’t have to run up and down anymore, so they can run more efficiently.

Loveless: So you’re seeing fewer of the traditional power plants, coal-fired power plants, nuclear power plants?

Wellinghoff: Well, you’re seeing fewer of all kinds of plants that could provide regulation services. It’s not – usually the nuclear plants can’t do that because they can’t run up and down, but some of the coal plants, the steam plants can, and the gas plants can, and what we’ll see is, the need for less of them, number one, and the ones that we have won’t have to provide these services, so they won’t have to run as inefficiently, because when they run up and down rather than running at their optimum heat rate, they have more emissions and they do not produce as much electricity. So they can run more efficiently, the cars can get paid, and consumers can get paid, and the grid will operate more efficiently, it will be more stable, it will be more reliable, and it will be more flexible and resilient.
**Loveless:** Speaking of the grid, there’s been a lot of discussion about the need for much more in the way of transmission capacity around the country for all kinds of reasons.

**Wellinghoff:** Yes, yes.

**Loveless:** This is a big issue. You have some say. States have a lot of say. There’s potential for conflict. How’s this playing out?

**Wellinghoff:** Well right now, there’s a number of bills in Congress primarily on the Senate side. Senator Bingaman has a bill that would provide some additional authorities to FERC in the area of siting and cost allocation. We believe that those authorities are appropriate as long as they’re backstop authorities necessary … The states should retain their primacy in siting. They should maintain their primacy in how, ultimately, their consumers pay for those costs. But we believe that FERC should have the ultimate authority if at some point in time we need to start putting in large lines, which I think we will do, to deliver large amounts of renewable resources from remote locations, whether it be offshore in the Atlantic or whether it be in the Midwest, and ultimately site and pay for those lines.

**Loveless:** But when does FERC – you said should have ultimate authority in some instances—when—cause this has been a big issue with states.

**Wellinghoff:** Right.

**Loveless:** And there’s been at least one court case on this that said FERC was wrong. When does FERC step in and say, “We’re making the decision here guys?”

**Wellinghoff:** FERC needs to step in at the point that they come to an impasse. They come to an impasse …

**Loveless:** “They” being the states?

**Wellinghoff:** “They” being the states. In other words, if you’re taking a line across five states and one state says “No, we can’t put the line across this state,” ultimately FERC needs to step in and say, “This line is in the national interest. This is not simply for one particular state or one particular region. This line is, ultimately, to deliver large amounts of clean, low-carbon energy resources to areas throughout the interconnect,” then we need to move forward.

**Loveless:** One last thing. Do you think that the rules as they stand now discriminate unduly against renewable energy, particularly wind power?

**Wellinghoff:** Well, I think the rules – no question about them – are set up primarily for central station, large fossil and nuclear generators, and we have to ensure that the rules can allow for all types of resources including wind, including solar, and other resources have different characteristics than those central station resources, so we’re trying to do that. Because FERC’s responsibility is to ensure that there is no discrimination, so, as such, we need to make sure that all resources have equal access to the grid.
Loveless: Chairman Wellinghoff, thank you very much.

Wellinghoff: Thank you Bill.