FORTY YEARS OF FERC

Charles Curtis[*]

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Welcome to today's podcast of the Federal Energy Regulatory Commission, or FERC. I'm Craig Cano, your host.

Our goal here is to have a conversation about FERC, what it does and how that can affect you. FERC can get very legal and very technical, so we will strive to keep it simple. FERC is an independent regulatory agency that oversees the interstate transmission of electricity, natural gas and oil. FERC's authority also includes review of proposals to build interstate natural gas pipelines and liquefied natural gas terminals, as well as licensing of nonfederal hydropower projects. FERC protects the reliability of the high-voltage interstate transmission system through mandatory reliability standards and monitors interstate energy markets to ensure that everyone in those markets is playing by the rules.

Today, Mary O'Driscoll of FERC talks with Charles Curtis, who served as the last chairman of the Federal Power Commission and the first Chairman of the Federal Energy Regulatory Commission from 1977 to 1981. Mr. Curtis was later Deputy Secretary of the US Department of Energy, and is currently Vice Chairman of the US Department of State's International Security Advisory Board.

Mary O'Driscoll: Thank you all for joining us today. I'm Mary O'Driscoll and with me today is Charles Curtis, who is not just the last chairman of the Federal Power Commission but the first chairman of the Federal Energy Regulatory Commission. Mr. Curtis is here to talk about the creation of FERC back in 1977 and provide some perspective on where we are today.

I do want to acknowledge, however, that Mr. Curtis' experience extends far beyond FERC, though FERC is what we will be talking back today. Mr. Curtis, it is an honor to have you here, and welcome back to FERC.

I wanted to start at the beginning. You were Chairman of the Federal Power Commission at the time when there was the change. Take us back to, I guess it was 1977, and the Department of Energy Reorganization Act.

Charles Curtis: At the time the stage was set for the consolidation of various agencies and powers in the federal government into a single cabinet-level department. That stage was set by the Yom Kippur War, the ensuing Arab oil embargo and the quadrupling of energy prices. Congress struggled for four years to address a broad suite of issues which had very divisive impact on our society and large transfers of wealth from one section of the country to another section of the coun-

* Charles Curtis was the last Chairman of the Federal Power Commission, and the first Chairman of the Federal Energy Regulatory Commission. He currently serves as Senior Advisor to the Center for Strategic and International Studies, and President Emeritus of the Nuclear Threat Initiative. Previously, he served as the Vice Chair of the U.S. Department of State's International Security Advisory Board from 2011 through 2017. He has received the Energy Bar Association President's Award, the Chairman's Award from the Securities and Exchange Commission, as well as three Distinguished Service Medals by the U.S. Department of Energy.

try. And so, when Jimmy Carter was elected President, he solicited Jim Schlesinger, who had been previously a Department of Defense Secretary, head of the CIA, chairman of the Atomic Energy Commission and Associate Director of the Office of Management and Budget, a man of broad experience and impeccable security credentials, to prepare an energy plan, a part of which was to propose the formation of a cabinet-level Department of Energy. As part of that initiative, the decision was taken to bring the powers of the Federal Power Commission within the Department of Energy, and that brought a fight in the Congress about a cabinet secretary having control over much decisional power over electricity and natural gas production and transmission and various other matters that had been assigned to the Federal Power Commission.

So the Congress did a very unusual thing, unprecedented in our structure of government. It set up the department and at the same time it created a Federal Energy Regulatory Commission in the form of an independent commission within the department. And not only did it have a quasi, or rather significant independence from the department, but it was assigned review powers over secretarial decisions over the allocation and pricing of oil. So it was an enormously powerful department when it was first set up. The Federal Power Commission, before it, was a commission in significant disarray. It had a decisional process that assigned the Commission about 22,000 decisions per year, and it had a backlog of some 20 to 25 years of matters awaiting decision of the Commission.

There are two reasons for that. One is that the Federal Power Commission, unlike other independent regulatory agencies, was denied authority to delegate decisional power. And so everything had to come to the Commission table at that time. And also a Supreme Court decision that decided that the Natural Gas Act of 1938 applied to the facilities and the sale by natural gas producers in interstate commerce, as well as the transmission of natural gas in interstate commerce, and that created a workload that was a mountain of process and decisional conflict that the Commission could never really climb.

Mary O'Driscoll: Twenty-five years of backlog?

Charles Curtis: Yes.

Mary O'Driscoll: That's amazing.

Charles Curtis: There weren't many defenders of the Federal Power Commission's continuance in existence, but there where defenders of the concept of an independent regulatory commission exercising these authorities. So I was the last chairman of the Federal Power Commission. That was for a two-month period, as I had been recruited to come in and be chairman of the to-be-formed Federal Energy Regulatory Commission. So, my tenure as the last chairman of the Federal Power Commission was history, but it's a very short moment in history.

Mary O'Driscoll: Exactly. Well, how was the new FERC then able to clear up 25-year backlog, or did that just fall aside? How did that happen?

Charles Curtis: Well, two things. Primarily, we set about creating a mechanism of blanket certificates to avoid some of the individual necessity of approving very minor additions of compressors and things of that character to the regulated body infrastructure, and then we set up a system of settlement judges that would try to settle cases at the Administrative Law Judge level, so they would not be appealed to the Commission if they were settled. And we provided decisional power in officers that would be final unless it were appealed to the Commission.

And the combination of those three things began the deregulation process of the old model.

The second major thing is the Congress changed the law. It changed federal Natural Gas Act of 1938 to 1978, and that created a lot of implementation responsibility, but it unified the interstate and intrastate market and, over time in the implementation of that during my tenure, it cleared out a lot of that backlog.

Mary O'Driscoll: Wow. That is really amazing. So there was definitely a distinct advantage to changing the Federal Power Commission to the Federal Energy Regulatory Commission.

Charles Curtis: Yeah, I think there was. Part of that was that we had wonderful appointees, and the Federal Power Commission had always been served by really outstanding public servants, and they were still there. It was the decisional process that was broken. And so when that energy and that talent was released to work on the exercise of this jurisdiction in the public interest under a improved decisional model, everybody was on the same page about reducing that backlog and implementing our responsibilities in a way that provided the opportunity for unified decisionmaking with very few dissents and as a consequence, fewer and fewer cases were overturned in the court. When I came to the Commission, the Federal Power Commission was losing 50 percent of its appealed cases in the DC Court of Appeals and, as you could just see from that statistic, everybody was incentivized to never give up. And they didn't. And so by getting the Commission unified in its decisionmaking and improving the decisional rationales, it became very successful in the Court of Appeals and cleared a lot of that backlog out.

Mary O'Driscoll: I think that record is pretty good to this day.

Charles Curtis: I think it's gotten even better. I think the Commission's reputation, the Federal Energy Regulatory Commission's reputation for professional work has improved with each successive Commission. I think it's very highly thought of, it's a sought-after place to work and quite a good spirit, I think, in the Commission staff and the Commission in believing that what they're doing here is important and that they have made the energy world better by their efforts.

Mary O'Driscoll: OK. I want to get onto that but before we go, before we move on from the switch to the Federal Energy Regulatory Commission, I wanted to talk a little bit about the FERC seal, that you actually designed it.

Charles Curtis: Yeah, when you set up a new department or agency they all have to have seals, which is a process controlled in the Department of Defense Office of Heraldry and you have to get it approved there.

Mary O'Driscoll: Office of Heraldry?

Charles Curtis: Yes, in the Department of Defense. If you're using an eagle, what type of eagle you use, and whether it has weapons in its claws, or threatening claws at all, is something that they regulate. When my son and I sat down to work out the seal – he was 8 years old at the time, and I hope that doesn't spawn jokes about it looks like it – what we did is two things. You will see that in the seal, which has its eagle, it's holding palm branches rather than rockets and spears, and in the boxes underneath are the jurisdictional areas of the Commission with pipelines, dams, gas, electricity, and producers.

The interesting thing about this seal is the head of the eagle. The head of the eagle is the CIA's eagle, and that is because Jim Schlesinger, for the Department

of Energy seal, had used that eagle head. As a former chairman of the CIA I guess he got away with that. And so we used that eagle too, just to show a little continuity and solidarity with the department. But after using the head we change the seal completely from what the Department of Energy had used, to show our independence.

Mary O'Driscoll: That's great. It's always kind of a source of confusion for people because FERC is part of the Department of Energy but it's an independent agency. And that always causes quite a bit of confusion, people don't quite understand that distinction.

Charles Curtis: Yeah. And I think the Department has some special petitioning powers. The Secretary can submit a proposed rule within the Commission's jurisdiction and the Commission must act on that. Not affirmatively, but it must consider it and either adopt it or reject it or modify it. And the Secretary can intervene by right in any proceeding before the Commission. And by that device it was intended that the Secretary would be able to represent a broader energy interest in the work of the Commission. But in each instance, the Commission's authority to act independently on those proposals, including the ability to reject them outright, was preserved. And the Congress did that because it wanted a bipartisan decisional process: A commission whose independence was designed by requiring that no more than three members be appointed with identification to a single party. And that is a standard rule for independent regulatory commissions – the SEC, the Federal Trade Commission, etc. And that's worked very well. Over the years, the Secretary of Energy has intruded almost not at all in the work of the Commission, and the Commission and the Secretary have been the better for it.

Mary O'Driscoll: OK. I wanted to move on a little bit. You've been involved in the energy industry in the years since your departure from FERC. Things have changed considerably since then. How do you view some of the changes – there have been technological changes, regulatory changes, Congress has stepped in a couple of times and changed the Federal Power Act, the industry has evolved over the ensuing years.

Charles Curtis: Well, the first major changes occurred in the days of the original commission. The change to the Natural Gas Act was revolutionary, and provided a path for deregulating the supervision of pricing at the wellhead and that structure. Also at that time, the Congress passed the Public Utility Regulatory Policies Act, which began the process of deregulation of power producers in the electric sector. And it started that with qualifying facilities and the obligation of utilities to buy solar, cogeneration and small power produced from renewables, if that power was competitive with the cost of other alternatives that might be available to the utilities. That feature is still in place. It's been expanded to include exempt wholesale generators, which is a broader category of producers, and eventually, when the Commission began under Betsy Moler's chairmanship and Susan Tomasky's leadership as general counsel, to deregulate the markets and electric power markets broadly. That was the chain of evolutionary process.

One of the interesting things that seems to me has been the Federal Power Act was passed in 1935 in the midst of the Depression to plug a gap in the regulation of electricity sales and transmission, which had just begun in those days because the ability to transmit electricity over the long distances did not really exist.

So that ability now exists so that power sold in the Rocky Mountains can be functionally delivered in New England. And part of the aid of the development of these integrated international markets was the development of the transistor and the microprocessor. Because what is characteristic of our markets today and how they operate, managed through Independent System Operators, could only be possible with the high performance computing capability that developed after 1935. Indeed, after almost all of the foundational legislation was laid in electricity including up to 2005, which was the last major revisiting of the foundational laws.

The combination of technology, high-performance computing through the instrument of markets that are designed for and regulated, supervised by the means of high performance computing, which allows dispatch of electricity over multistate regions through Regional Transmission Organizations or Independent System Operator organizations has been only possible in the last 15 to 20 years. It has changed the way electrons move, and the way we think about utilities and the potential for transforming this industry into an increasingly more efficient, more cost-effective infrastructure for the American people.

Mary O'Driscoll: Well, that leads to my next question then because there's a lot of talk about the need to change the Federal Power Act to accommodate all of these developments, that maybe it needs to be revisited. What's your view of that?

Charles Curtis: It challenges that from the very beginning, electricity was local because the loads had to be situated close to generation. Again, as I mentioned, the ability to transmit electricity over long distances did not exist. That's changed fundamentally. What hasn't changed fundamentally is the relationship between state and federal regulation. The state regulation of the utility function has always been a jealously guarded – for good and appropriate reasons – a jealously guarded authority of state power. And so the difficulty is now that we have markets that operate on multistate regional basis. Electrons don't behave political boundaries or divisions and so there's an increasing conflict between state authority and federal authority on supervising these markets on a going-forward basis. The Supreme Court has just ruled in a very important case on this in favor of federal authority, but it's still a messy business. And so I would favor the Congress addressing this issue and trying to balance, or rebalance, state and federal authorities in a way that would allow for a decrease in the jurisdictional conflict that does intrude on these markets today. And these are all circumstances where people are acting in good faith. It's a problem of sorting out authority in a system that has fundamentally changed during the last 50 years.

Mary O'Driscoll: Another large issue that's coming up is the issue of reliability of the grid. Your work through the State Department International Security Board and the National Academies' Intelligence and Technology Experts Group, do you have any thoughts about the security of the grid? This is something that a lot of people talk about on Capitol Hill and around in the industry, about ensuring that intrusions are kept to a minimum so that the grid is safe.

Charles Curtis: This is something I've been following and worked on for many years. Partly, the Congress gave the Commission power by creating statutory frame for the reliability of the bulk power market. The problem with the boundary of the Commission's authority over reliability to the bulk power market is that the bulk power market is infinitely connected to the distribution system.

That introduces a vulnerability to the bulk power market through those interconnections that the Commission has no authority to address. We have over 2,000 entities, I believe still, distributing electricity in the United States. This is a very unusual model worldwide. It doesn't exist anywhere else. And we have 117 or something interstate utilities, investor-owned utilities, we have electric utility co-ops, and we have public power utilities, so we have a very diverse system for addressing the power needs the United States. And what is the reality of the Internet is the reality of our electric system: Is that you're only as strong as your weakest link. And a lot of those players, those individual participants, do not have the technical means or the resources to protect themselves from intrusion by cyberattack or mischief or terrorism.

And as we are becoming more and more diverse through interconnected renewables, solar rooftops, etc., those are IP addresses, if you think of it that way. And as such they all have an interconnection. So it's not just the 2,000 entities engaged in distribution, it's now everybody's solar rooftop has access to the grid. So it's a very significant, challenging problem and this is something we have to figure out how to address jurisdictionally as well as technically, because best practices can be evolved. The biggest problem, though, is resources. How can we pay for the types of safeguarding and strengthening the integrated grid with so many participants, many of whom lack the means of collecting those resource expenditures from ratepayers? None of that has been sorted out and it's an accident waiting to happen.

Mary O'Driscoll: I hate to leave it on that note. But we're going to have to leave that, and I want to thank you so much Mr. Curtis for being here, for joining us for our podcast. We hope to see you again soon. Thank you so much.

Charles Curtis: Thank you. My pleasure, Mary.

Craig Cano: Thank you for listening to today's FERC Podcast. Unless otherwise noted, the views expressed on these podcasts are personal views and do not necessarily express the views of individual Commissioners or of the Commission as a whole. This podcast is a production of the Federal Energy Regulatory Commission, Office of External Affairs, Len Tao, Director. We will be updating our posts when we've got news, so be sure to check out our website, www.FERC.gov, and follow us on Facebook, Twitter and LinkedIn to find out when our next podcast airs.