

NARUC

Remarks of FERC Chairman Neil Chatterjee

Feb. 13, 2019

NARUC President Nick Wagner: I'm very pleased to introduce a man who is, we all know there's a lot going on at the FERC right now, and we're very pleased to have FERC Chairman Neil Chatterjee with us today. Chairman Chatterjee joined FERC in 2017, and served as the Chairman from August 2017 to December 2017, and then again was named Chairman on October 24, 2018. Prior to going to the Commission he was energy policy advisor to U.S. Senate Majority Leader Mitch McConnell, and over the years Chairman Chatterjee has played an integral role in the passage of major energy, highway and agricultural legislation. So we are very fortunate, and very happy to have with us this morning Chairman Neil Chatterjee. Welcome.

Chairman Chatterjee: Good morning. Everybody see me OK? Kind of a high podium. Thank you, Nick for that warm welcome, and I have to say – this is definitely the first time in my professional career that I've had walk-up music like that for a speaking engagement. I've been trying to convince my kids that my job is really quite cool, but so far I haven't been too successful. Maybe, just maybe, I can tell them about this part of my day, and they will start to believe me.

It's a real pleasure to be with you today. Thanks to NARUC President Nick Wagner for the warm introduction, and the entire team here at NARUC for the opportunity to speak today.

It's wonderful to see so many familiar faces in the room, I see my colleague Commissioner Rich Glick and his team, how are you Rich?

But before I get into the substance of my remarks today, I have to give the usual disclaimers. The views I express here are my own opinions and don't necessarily reflect those of my fellow Commissioners or FERC staff. Although, Rich, I think you agree I can speak for you and it's totally fine. And of course, our ex parte rules prevent me from discussing any contested proceedings currently before the Commission.

Now with those formalities completed, I will turn to the topics I came to speak about today.

When I was first nominated and confirmed to the Commission, I got a lot of advice from former Commissioners and industry leaders – a lot of advice. But by far, some of the most insightful guidance I received was that I should spend time with and get to know the people here at NARUC. Maintaining a rich dialogue with my state-level counterparts is something that's important to me, and something that I'm committed to doing. So I again thank you for the opportunity to be speak to you now, and have enjoyed the fruitful conversations I've had with many of you during my time as a Commissioner and as Chairman.

As Nick mentioned, it's an exciting time to be at the Commission. It's almost become a cliché, but I'll still go ahead and say it: the energy landscape in United States is currently undergoing a dramatic and historic transformation. This, of course, is not news to anyone here. I'll bet many speeches and panels over the last few days have touched on that transformation. In order to shape our policies in a manner that most benefits

consumers during this transformative time, it will require collaboration and focus from energy regulators at both the state and federal level.

There are numerous forces driving our current energy transformation including: the shale revolution, the rise in the deployment of renewable energy resources and new technologies, the evolution of competitive markets, and changes in consumer preferences. These forces show no signs of slowing down, which promises to be a very good thing for Americans.

To put it in perspective, since 1990, annual average real electricity costs for residential end users have dropped by a total of nearly 12 percent. Although a number of variables contributed to these dramatic savings, I want to underscore the important role the cost discipline imposed by competition within wholesale electric markets has played. Markets not only have resulted in lower monthly electric bills for residential customers, but they've also fostered more vibrant commercial and industrial sectors within our economy. My guess is that we've all seen these effects in our states and cities.

But, as with any transformative period, this transition in our energy landscape brings new regulatory challenges. To me, the key challenges facing the Commission today relate to adapting our markets to accommodate changes to the generation resource mix and ensuring the security of energy infrastructure, including defending against cyber-threats. But if we successfully tackle these challenges, I think the end result will be a robust grid of the future that maximizes value for consumers. That idea – maximizing value for consumers – has become a touchstone for me as we navigate this transition.

Now, what do I mean when I say that? It's pretty simple. It means ensuring that our policies provide lower prices and more reliable service for customers.

At this critical inflection point, we all have to remain clear-eyed: the policies we put in place *today* at both the federal and state levels will have a huge impact on the consumers of *tomorrow*. Transformational initiatives work best when we put our heads together.

So today I'd like to share my views on key opportunities where state and federal regulators can work together to maximize value for consumers.

I could talk all day about these opportunities. I really can. But I hope to be invited back next year.

So I'll try to stay within my time and focus on a few policy areas that are particularly important to me...

Let's start off with PURPA. Bringing PURPA into the modern era has been one of my top priorities since coming to the Commission. Given the front-line role states play in implementing PURPA, I know this is an important subject to many in this room and one that many of you have reached out to me about most frequently.

Revisiting PURPA was also a very important issue to my friend and colleague, Chairman Kevin McIntyre, who I know we all wish could be here with us today. Kevin made such an impact on so many of us in this room — both personally and professionally — and we continue to feel his loss. But, we also continue to reap the benefits of his leadership and guidance.

Kevin was committed to taking a hard look at our PURPA policies. We discussed ways that, working within our statutory framework, the Commission can continue to promote the development of renewable

resources and cogeneration while protecting customers and competition. I enjoyed working closely with Kevin on this issue, and look forward to continuing, with my colleagues, the work we started together.

Congress enacted PURPA in 1978, to promote energy conservation and create opportunities for domestic energy sources, like renewables, to help them to flourish. To put that in perspective, it wasn't until the year *after* PURPA was enacted that Sony released the first Walkman.

At the time, wind and solar generation were fledgling technologies. So policymakers wanted to level the playing field. But fast-forwarding to today, just as we've seen numerous changes in how we consume music — for example, the Walkman was followed by the Discman, MP3 players and the iPod, and now streaming services — we've similarly seen the rise of renewable resources. They've become better able to compete in the marketplace, and those marketplaces themselves have evolved significantly. But notably, our PURPA policy hasn't seen the same sort of evolution.

So we're well-overdue for some updates to bring these policies in line with the realities of today. That's a concept that many of us would agree on, but of course the hard questions relate to just how we approach bringing about the needed change.

We now face new questions like...

Are there steps we could or should take to introduce more flexibility and market-driven pricing?

Could our PURPA policies do a better job of creating an incentive for resources to locate where they are most needed by consumers?

And of course, how can we address some of the administrative burdens and costs associated with PURPA?

As my colleagues and I grapple with these questions, I've appreciated the engagement of state regulators and their first-hand knowledge of PURPA implementation. Moreover, I fully recognize that aligning PURPA with our modern energy landscape won't be complete once FERC issues a final rule – states must then take those changes and decide how to implement them. So updating our nation's PURPA policies is a collaborative exercise that will take the efforts of both state and federal policy makers. But based on my interactions with NARUC members on this topic I have no doubt we're all up for the challenge.

The next policy opportunity I want to highlight is the integration of renewables, energy storage and Distributed Energy Resources into our wholesale markets. I'm really pleased with the recent strides the Commission has made to help ensure that renewable energy resources, as well as storage and DERs, can participate and compete in organized markets. When it comes to lowering prices for consumers and adding the flexibility and resilience to our grid that consumers demand, this is some of the most important work in front of us.

I'm also cognizant of how we got here. Because of the hard work from previous Commissions and FERC staff to create a culture that integrates innovation, we've made real progress in this space. I credit my colleague Commissioner Cheryl LaFleur for being a big part of creating that culture.

Since I've been at the Commission, we've issued several rulemakings requiring all new generators, including renewable resources, to provide essential reliability services such as voltage support and frequency response. We've also adopted revisions to the generator interconnection procedures to improve

certainty for customers and enhance the process, allowing developers to bring new generation online faster.

Energy storage, of course, is another big part of this story. The co-location of storage technologies with solar and wind has the potential to fundamentally alter the way that we generate, distribute and consume energy. We took a significant step forward about a year ago, with the Commission's issuance of Order 841. That final rule required regional market operators to facilitate the participation of energy storage. And we're currently considering rehearing requests on that final rule, as well as compliance filings that have come in.

As with any worthwhile and fundamental shift, implementation complexities arise, and these require focus and collaboration to make sure things work as intended. To share just one small example, in order to eliminate barriers to participation, the Commission in Order 841 acknowledged that organized wholesale markets may need to work with the distribution utilities and retail regulatory authorities in their footprints, to help identify workable accounting solutions for storage resources. Accounting complexities are certainly not the type of issues that grab headlines. But it's vital that we work together to get it right for consumers.

We're also looking at how best to remove barriers to participation of DERs in our markets, and we're continuing to make good progress on that front. Last year, we held a technical conference to examine market design, reliability and other challenges associated with increased DER penetration and the participation of DER aggregators in wholesale markets.

In this policy area specifically, it's important that we stay attuned to what's happening at the state and local levels. That's because, as you know, DERs can have a significant impact on the distribution system. We have to remain mindful that the actions we take to promote DER participation in the markets are part of a broader regulatory ecosystem.

I'm confident that if the Commission continues to collaborate with and consider the best ideas from stakeholders across the country, we can continue our progress in removing barriers to the integration of renewables, energy storage and DERs. And these efforts will yield significant benefits for consumers in the years ahead.

Now I'd like to spend some time talking about opportunities for the Commission to take a holistic look at our transmission policies. In my experience, this is one of those unique issues in Washington that tends to garner broad support from folks of all backgrounds. That's largely because policymakers at all levels of government can rally around the improved reliability, greater market efficiencies and better integration of new resources that a robust grid can bring.

In this space, we have the opportunity to create the right regulatory environment for the transmission grid of the future. But just what does the grid of the future look like? To me, it means a grid that provides a high degree of reliability in a conventional sense... One that's resilient in the face of natural disasters or bad actors... And one that maintains enough flexibility to accommodate for a fast pace of change.

But it can't stop there. We need a transmission system that can achieve all this while also ensuring that customers continue to pay rates that are just and reasonable. I know that state Commissioners have long been the biggest champions of ensuring that transmission investment is cost-effective and benefits consumers.

Integrating these diverse needs and drivers is a tall task, there's no doubt about it. But I think it's time for the Commission to rise to this challenge. Here's how we can work toward that objective.

First, as I announced about three months ago, the Commission plans to revisit our transmission incentives policy under Order 679. It's been 14 years since Congress passed EAct '05. The time is ripe for the Commission to step back and ask whether we're actually incenting the type of transmission that we need or if there are smart changes we should make to encourage what's needed in light of today's realities.

As many of you may know, Order 679 focuses on providing incentives for investments in projects with demonstrated "risks and challenges." If you've ever actually read one of our orders on transmission incentives – something of a "risk and a challenge" unto itself – you know that the orders often focus on analyzing the risks of each project, such as the difficulty of obtaining state permits, the challenges facing construction and the use of novel technologies.

In my view, it's time for my colleagues and I to ask ourselves: Should we instead focus on fostering transmission projects that provide the greatest benefit to consumers?

I believe thinking in these terms will help us provide incentives for the projects that improve reliability and reduce costs to customers.

A second thing we need to do is revisit Order 1000. I'll just put it to you straight: everyone seems to agree that Order 1000 is not working as intended. But, when it comes to this topic, that's about the *only* thing that stakeholders can agree on. When I ask folks for their views on how the Commission should try to fix Order 1000, I hear everything from "repeal – and don't replace" to "let's make every single transmission project subject to competitive bidding." What's clear to me is that we're going to have to take action on Order 1000 at some point.

The issue of competitive solicitations is what lies at the heart of improving Order 1000. Here's why I say that. I believe wholeheartedly in the principle that competition generally results in better outcomes for consumers. In fact, while not conclusive, data from recent solicitations suggests that competition has brought more cost discipline to transmission construction. For example, in MISO's most recent competitive solicitation, the selected bid from a competitive transmission developer was approximately *16 percent below* MISO's scoping estimate. Sixteen percent. That's significant, to say the least.

And competitive solicitation can benefit consumers in less quantifiable, but still valuable ways, as well. For instance, it can lead to more creative financing that limits risks to customers.

It can promote more technically advanced solutions. And it can even engender new partnerships that broaden participation in addressing transmission needs.

All that being said, I also acknowledge that bringing about competition has been difficult and has, at times, actually affected the transmission planning process in some unintended ways. But as we think about addressing Order 1000, I believe we owe it to consumers to put our best effort forward toward spurring competition to work and getting the scope of competition right.

Even still, as we focus on harnessing the benefits of competition and innovation and how to deliver the greatest benefits to consumers, we cannot take our eyes off the threats that we face . . .

So I'd like to close by giving you all an update on the work we're doing to help protect consumers through improved grid resilience and cybersecurity. When our energy infrastructure is impacted, the effects are felt throughout our economy and communities. That's why, in my view, there's no more important work for the Commission than the work we do on security and reliability-related matters.

Ever since the Commission launched our proceeding on the topic just over a year ago, resilience has become a focus of discussion in energy circles. Secretary Perry started us down an important path, and we now have a forum in which we can carefully consider what threats the grid should be designed to withstand. Given the nation's increasing reliance on electric infrastructure and the expanding threats to the grid, we need to evaluate our historic norms for planning and take a closer look at whether we're doing enough and doing the right things to protect ourselves from these threats.

That means asking tough questions. Questions like:

Should we design the grid to hold up against a cyber-attack that could disable an entire substation?

What about a physical attack on a gas pipeline that could disrupt fuel to multiple generators?

What about an earthquake or superstorm that could disrupt multiple transmission lines and generators?

While we do need to think creatively about what events the grid should be designed to withstand, we must remain mindful of the fact that it may not be possible or cost-effective to design the grid to withstand every single type of extreme event that could occur. Striking the right balance for consumers is undoubtedly a complex undertaking. But I believe it's more than reasonable for us to consider additional transmission investments as an "insurance policy" to help reduce the size of disruptions and enhance the grid's ability to bounce back quickly.

Specifically, I'd like to take a few moments to focus more directly on evolving cyber-threats. If you read the news at all, you know that America's critical infrastructure is increasingly under attack by foreign nations. DHS and the FBI have issued multiple public reports describing cyber-intrusion campaigns by foreign government actors against our critical infrastructure, including the electric grid.

While thankfully none of these intrusions have resulted in an actual power outage on our soil, they do represent an unsettling uptick.

I've been particularly vocal about my concern about cyber-threats targeting our electric system and pipelines.

As many of you know, the Commission works collaboratively on the electricity side, with the North American Electric Reliability Corporation, or NERC, to develop mandatory standards that take a risk-based approach to cybersecurity. The implementation of these standards hasn't always been easy. But they are crucially important and have resulted in significant improvements to the industry's security posture.

On the pipeline side, however, the landscape is different. Last year I joined my colleague Commissioner Glick in a joint op-ed to bring attention to the fact that, although U.S. grid operators have to comply with mandatory standards overseen by FERC, we currently have no comparable set of mandatory standards for our network of pipelines. FERC has the authority to issue certificates for new interstate gas pipelines and to set their rates, but not to regulate their security. That charge falls to the Transportation Security

Administration, or TSA. So think about it: The same agency that oversees 851 million aviation passengers per year, railroad tracks, and the highways is also tasked with securing the more than 2.7 million miles of natural gas, oil, and hazardous liquid pipelines that traverse the country. Moreover, despite having the authority to enforce mandatory cybersecurity standards, the TSA relies on voluntary standards.

Since the publication of that op-ed, I've been pleased to hear from many members of the natural gas pipeline community who have expressed their appreciation for these concerns and willingness to continue taking steps to improve their security posture. In addition, I recently met with TSA Administrator to discuss pipeline cybersecurity and was impressed by his focus on this vital issue as well as his pledge to take further action to improve TSA's oversight of pipeline security. Thank you for that, Administrator.

As I've grappled with these threats, it's become clear to me that one of the most important things we can do for the American public is to collaborate with our government partners in confronting them. We have considerable cybersecurity expertise at FERC, which can be leveraged to engage with other government agencies to help coordinate our response to these emerging threats.

As part of these efforts, the Commission recently announced that next month we'll co-host a technical conference with the Department of Energy to talk about Security Investments for Energy Infrastructure. The conference, which will include participation by our state and industry partners while building upon our partnership with DOE, will address two high-level topics.

First, we'll discuss current and emerging cyber and physical security threats and explore how the private sector takes stock of and addresses them. The second topic will center on investments – specifically, how both federal and state authorities can facilitate investments to improve infrastructure security. I think this conference on March 28th will allow for the kind of rich dialogue needed in this space from a diverse array of federal and state government officials and industry leaders.

Now I think that does about do it for my time today, but before I close, I want to again thank the team here at NARUC for the chance to speak to this group.

I really enjoyed sharing these thoughts, and I meant it when I said that I want keep the lines of communication open with you all during this pivotal time. If we commit to working together on policies that will benefit the consumers of tomorrow, I know we can accomplish great things.

Thank you very much.

###