US Utilities & Clean Tech

NARUC 2024: Reliability, affordability & re-regulating PJM generation.

Industry Overview

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NARUC: National Association of Regulatory Utility Commissioners
PJM: PJM Interconnection (mid-Atlantic electric grid)
FERC: Federal Energy Regulatory Commission

Reliability the clear focus of regulators – and utilities

We hosted a series of meetings around the National Association of Regulatory Utility Commissioners (NARUC) in Washington D.C. with a variety of stakeholders including current & former state regulators, regional transmission organizations, utility executives, renewable developers, and more. The key themes: (1) resource adequacy and how to address potential load growth; (2) supplemental 'asset condition' transmission projects that receive limited oversight; (3) wildfire risk; (4) continued challenges facing offshore wind projects; (5) interconnect queue reform; and (6) electric/gas coordination.

Who should pay for datacenters? The datacenters.

The US electric utility sector is facing material load growth for the first time in decades as the projected proliferation of datacenters expands. Regulators from across the country are grappling with how to meet the potential load growth and identify the right regulatory construct. Datacenters are unfavorably lack full time employees and the 'multiplier effect' of traditional commercial and industrial users. As a result, most regulators we engaged with at NARUC and in our recent conversations have focused on a tariff structure that forces data centers (many of which are owned by the largest public companies in the world) to pay the full share of the projects without the typical residential subsidization.

The big take: PJM paradigm change back to regulated gen

As NARUC was occurring, a multitude of the PJM regulated utilities were reportedly engaging with substantially all of the thirteen state regulators related to a paradigm shift in the mid-Atlantic generation backdrop. PJM is generally de-regulated with the transmission & distribution ownership separated from generation ownership but some of the de-regulated utilities appear to be pushing a quasi-reregulation of the market. *Initial regulatory feedback has been skeptical but this will be an important theme to watch.*

The biggest change is less resistance to natural gas

Prior years' NARUCs focused heavily on the future of natural gas, decarbonization, and environmental policy/objectives in general. These themes have been fading over the past 12-24 months but are increasingly on the backburner with regulators and stakeholders focused on the near term reliability and affordability pressures for customers.

Company focus: EXC/AEE, PPL, AEP, PNW, & More

Illinois was the most discussed state coming into the conference following the adverse regulatory developments in 4Q23. The backdrop continues to be challenged with high profile sparing television commercials and no clear path for a meaningful improvement. We remain optimistic that Exelon & Ameren can refile their grid plans in the upcoming weeks but we do not anticipate a favorable shift in earnings or capital outlooks. In contrast, we walk away from NARUC more constructive on the outlook for Missouri (Evergy/Ameren) with the potential for favorably legislative reforms and an openness to have additional infrastructure investments. *See the full report for more thoughts.*

Primary takeaways from coast to coast

Are competitive markets working? The debate intensifies: There is a growing view from some that competitive markets are not sending strong enough signals to developers to commit equity capital to build new natural gas generation projects. There is currently limited natural gas in the PJM interconnection queue currently which is dominated by intermittent resources (ie renewables). Further, confidence in the capacity markets is increasingly waning after the multiple rule shifts in PJM: DPL-South and Winter Storm Elliott penalties are high profile examples. Minimum offer price rule (MOPR) and market seller offer cap (MSOC) related volatility have only further complicated the process. As a result, there does at least appear to be some interest in states entertaining forms of re-regulation to have desired generation outcomes, just as New York/New Jersey/Maryland/New England did for offshore wind.

We see multiple hurdles to pursuing new contracted generation in the PJM states, namely involving the need for legislation for many PJM states. We see many of the core PJM states as being open to this debate- as they see a sharp lack of new gas build against an ongoing wave of new data center build. We perceive this is likely led by Ohio given their build needs, with the biggest beneficiaries likely AEP, PPL and FE should this model pivot. We stress it does not appear EXC was a participant in this discussion (not entirely surprising given their former generation affiliate).

While investors were substantially focused yesterday on AEP's CEO development, we see this critically important proposal before regulators could very well shift a tone in how re-regulation is approached across the country. Positive for the three key PJM companies – AEP, PPL, and FE and would be clear upside surprise to extent procurement efforts resulted in some form of adjacent contracted or ratebased eligible assets.

Watch carefully how the discussion evolves – clearly PJM is amenable to new generation being built to address a looming resource adequacy issue.

Texas Energy Fund cited as a good national model: In contrast to the more extreme re-regulation and subsidized generation efforts being pursued for offshore wind and other out-of-market resources, the Texas low-interest loans were touted by developers as an equitable model. The low interest rate loads are still an explicit subsidy but at a seemingly materially lower cost for taxpayers/ratepayers.

While we had early fears that participation would be impaired, several experts in recent weeks have indicated confidence that the fund will be over-subscribed as developers scramble to respond rapidly to tap the fund. We stress this is a turnaround from earlier fears. Counter-intuitively we see over-subscription to this fund as actually a positive to the incumbent IPPs, as a lack of participation in the current fund would likely mean yet further legislative action in the 2025 session. On balance, we remain constructive on the IPP sector.

Is merchant generation even financeable anymore with EPA's 111(d) out there?
Among the other understated risks remains the lingering question of compliance with EPA's 111(d) carbon regulations. While many investors simply look right back EPA's pending regulations on the carbon sector, with rules poised to go final this year anew, we stress this is indeed a potential risk to merchant plant financing. While focus on these rules has been modest at best due to the broader utility-wide financing pursued by many companies, when evaluating project finance options for new gas plants, it's critical to appreciate that the timeline for new units to pursue carbon capture retrofits remains stark.

On balance, watch this issue re-emerge in contracting across the mid-Atlantic. Expect these kinds of considerations to be explicitly address in any new procurement contracts.

IRA Repeal risk is just simply smaller than many investors think.
We note an ongoing bifurcation between investor expectations, which are focused on just what IRA repeal risk entails relative to the realities on the ground of what is actually

likely. We stress the probabilities of an outright repeal or even legislative avenue to reform as likely still *quite low*. This comes directly from our latest DC discussions.

Rather, our focus is on the edges – what can treasury do under a potential new administration has been and remains our principle focus. We think on this front the key angles we would watch are:

1) trade policy around particularly storage credits (move up to 25% on products to harmonize existing policy?),

2) permitting for offshore wind leases, and

3) finally ability to tap additional adders (10% under energy communities, domestic manufacturing, etc).

On balance, we are simply not as concerned as many investors and see an eventual IRA relief rally as quite likely albeit likely only after the election. *We are growing increasingly comfortable in renewable subsidy integrity.*

However, more cautiously. We're less optimistic on IRS improvements to guidance for IRA rules. To the contrary, we see less enthusiasm for domestic contents clarity later this year. This had been our more bullish take on resi solar. We continue to see resi storage as a key avenue for resi solar overall to qualify towards domestic contents for the overall projects.

Transmission - asset condition/'supplemental projects' under increasing focus: There is a continued recognition that the US needs to develop more transmission to interconnect distributed resources and new large load facilities. Seemingly contradictory, there is more regulatory and consumer advocate focus on the proliferation of lower voltage transmission projects in much of the country that are 'asset condition' and more maintenance oriented. **What is the bifurcation?** Many utility and transmission companies (TransCos) operate under Federal (FERC) formula rates with limited or effectively no prudency oversight at the local, state, or Federal levels. Transmission has been a popular investment area for regulated utilities for many years for a variety of reasons but the specter of more oversight could chill this type of spending. One regulator described the practices of some transmission-oriented companies as 'wreck and rebuild'. Active examples of the new pressures are: (1) FERC complaint against the Ohio utilities for these type of projects; (2) Maine consumer advocate has separately filed to highlight the New England transmission owners similar conduct; and (3) Maryland stakeholder filings related to the cost allocation for Dominion Virginia transmission build out. Z

We believe it is increasingly likely that a state regulatory body could file their own FERC challenge related to the supplemental projects, seemingly carrying more weight and shining an even larger light on the practice. This represents among the clearest risks to PJM companies. This would seem to align with reported FERC priorities of transmission planning/queue reforms and cost allocation. Pursuing cost effective newer technologies like dynamic line ratings (DLR) was also a popular topic to more cost effectively support new resources.

Data centers and rate design increasingly not a debate: We have been surprised at how quickly it has become regulatory consensus that data centers should not be overly subsidized by residential ratepayers. Many stakeholders are skeptical of utility load growth projections following a year of declining weather adjusted load in 2023 across the US and given potential advances in artificial intelligence training/inference efficiency. There are certainly examples of data center costs being borne by residential customers across the country but most regulators we have engage with described the topic as more black and white than we anticipated. In contrast, there is much more willingness to support economic development for customers that bring significant employment and economic activity.

Illinois temperatures cool but no clear path forward: The political advertisements being run in the past week related to the utility rate cases and labor impacts (or non-impacts) was a shocking development to the observers we spoke to. The gird modernization/grid plan proceedings are increasingly being politicized as a result although the regulators have emphasized that they were simply working with the limited, deficient information in the dockets.

Our base case remains that new grid plans will be approved later in 2024 with a step-up in revenue requirements and earnings in 2025 for the electric utilities; however, we do not see a material improvement from our base case expectations. The ComEd reputation remains tarnished in the state but was not described as a likely reason for the poor rate case outcomes.

…Illinois' loss is Missouri's gain: The biggest question after Ameren's earnings update was whether Missouri would be comfortable with an increasing rate base growth (and customer bill) as the company shifted capital investment out of Illinois and into Ameren. The preliminary answer appears to be yes, as long as the company can support the investments.

Connecticut regulation challenging but at least stable: Despite the latest and continued rhetoric and concerns about high bills, no major new term changes are expected to the Connecticut regulatory regime or the makeup of the Public Utilities Regulatory Authority (PURA). The large Connecticut regulated utilities have attributed the outsized rate adjustment mechanism (RAM) requests to Dominion Energy's (D) Millstone and NextEra Energy's (NEE) Seabrook assets. There does not appear to be a willingness to consider legislative changes to those contracting regimes.

Missouri investment climate still strong, and potentially improving: There appear to be efforts to enhance the Plant in Service Accounting (PISA) legislation in ways that could further reduce regulatory lag for utilities. It is still early days in the conversations and it is unclear whether this is a 2024 or 2025 effort but this remains an area to watch. More broadly, there does is not vehement pushback to increasing the rate of investment in Missouri, particularly in the Kansas City region to support projected load growth increases. *It remains to be seen if/how the draft Kansas legislation success or failure on emulation of PISA will reflect back in Missouri's legislative session.* Ameren continues to be viewed the most constructively in the state but Spire and Evergy were described as making successful efforts to rebuild and build relationships after historical challenges.

Bottom line we are see Missouri as clearly welcoming the incremental investment: we see Ameren as particularly derisked but Evergy as well.

Arizona regulatory reforms – slow and steady wins the race: Arizona utility regulation is continuing to advance efforts to reduce regulatory lag, albeit it slowly. The recent Arizona Public Service (APS) rate case approval with a customer bill increase drew relatively limited media coverage, a contrast to regulatory decisions in some other states and prior utility actions for the Commission.

Bottom line we are growing substantively more comfortable with the regulatory backdrop in Arizona. We see forward looking rates as quite likely to be implemented in the next couple years with a consistent ACC composition enabling this change. More to the point, we now see a growing window for gas generation investment to materialize. Unfortunately, there appears a protracted timeline for both of these developments making visibility on the underlying changes ongoing likely protracted in nature.

Local control is coveted by regulators: Some state regulators highlighted that local operating and decision making is increasingly important as utilities manage through an increasing number of challenges. American Electric Power (AEP) and PPL Corp (PPL) were cited by stakeholders as cautious examples of more centralized control structures. This is not a unique approach (or critique) for AEP but PPL's shift appears to be a new approach for the company after a new reorganization. PPL does not have significant regulatory activity forthcoming but this will be an important area to monitor. PPL's engagement with stakeholders was described as constructive in its newest Rhode Island service territory with an honest and open approach to proceedings.

Offshore wind topical everywhere – including North Carolina: Many state regulators and industry stakeholders remain skeptical of the ability for offshore wind to be a meaningful contributor to the energy mix and have continued questions around price and ability to hit timelines. The ability for Eversource Energy's (ES) Revolution Wind to achieve its latest delayed timeline and undisclosed cost target will be the most watched near-term indicator for the health of sector. The results of the New York rebid are expected in the next two days (by end of February) where the prices will be closely examined. Eversource Energy (ES)-Orsted joint venture Sunrise Wind is widely expected by investors to secure a new contract for its capacity. While most investor focus is on New England projects, North Carolina will be topical in 2024 as Duke Energy (DUK) navigates a regulatory process to see if a construct can be developed with risk safeguards to support investment.

Offshore wind in NY and New England slated to arrive soon. We anticipate prices for New England to be substantively higher than NY, with new prints likely in the ~$200/MWh mark. Meanwhile NY could be substantively lower not only due to sunk costs on many projects but also due to more inflationary adjustors. Watch for this print in the coming couple weeks to show a relatively more modest price. Expect both states to move forward with projects selected under these procurements despite their elevated prices.

California wildfire resilience is a national model…: Many state regulators we engaged with pointed at California as the best example of operational and financial risk reduction. Our conversations with California wildfire experts allowed a deep dive into the operational improvements that the large investor owned utilities have made and areas for continuous improvement. The forthcoming ten year undergrounding plans will be the next milestone to watch with the evaluation criteria of substantially reducing risk and increasing reliability. Beyond California, regulators across the country have been educating themselves on wildfire risks, even some East coast states.

We stress California's compact and efforts on mitigation continue to accelerate. Watch carefully on next steps.

… as the liabilities cast a large overhang on investment: The Berkshire Hathaway (BRK – Not Covered) Annual report published just before the NARUC Conference being critical of utility investments has been topical with investors and stakeholders. There does seem to be a growing recognition of the above-average risk profile but unfortunately there appears to be little political interest in proactively addressing on a national or state level, excluding Hawaii. Our core view is that it will be extremely difficult for a public utilities commission to grant customer recovery of wildfire costs if a court finds the utility negligent. This view was echoed by a state utility Commissioner in a high wildfire state.

Hydrogen tax credit expectations remaining low: Influential clean energy advocates do not appear overly optimistic that the draft carbon-free tax credits for renewable companies will be relaxed enough to kickstart the industry's development. *This is consistent with our and investor expectations. Any favorable shift such as more seasonal/annual compliance and a longer phase-in/grandfather would be a positive surprise.*

Oregon not stressing about the capital structure: Utility investors generally are leery on the large gap between Portland General Electric's (POR) 50% authorized equity ratio and actual equity ratio that has been below 45% at times (47-48% recently). Oregon stakeholders in contrast do not appear overly concerned about the delta. There remains a general policy that the regulated utilities should wear some of the power/fuel cost risk in the market via the power cost adjustment mechanism.

We see some risks around extent of cost recovery with wildfire risks seemingly crowding out other investments in a backdrop of affordability. Watch ahead. Meanwhile we could yet see further reform of the fuel recovery mechanism (PCAM) as a function of the next steps

Avangrid making strides in Maine: Local stakeholder feedback was constructive on management's efforts to improve relationships with parties. Approximately five years ago the Central Maine Power (CMP) subsidiary suffered from challenging customer billing statistics and service. The operational statistics have improved and there is optimism that the period without rate cases can support more relationship building. Maine has had some of the longest and most significant outages in the US in recent years but there seems to be less blame ascribed to CMP than previously. Due to the demand for mutual assistance from southern New England peers, there is an understanding that restoration times will be more protracted in Maine. CMP's New England Clean Energy Connect (NECEC) project was described as progressing and the stakeholder view is that the project will be completed, consistent with our check-ins throughout 2023.

Battery storage ownership increasingly controversial: One takeaway we were surprised to hear was that more regulators are supportive of third-party ownership of battery resources via effective power purchase agreements (PPA). This is not a universal view but we heard multiple times that perhaps it was better for third parties to own batteries until there was more experience with the asset replacement cycles, fire risk, and other uncertainties. This comes at a time where more utilities are advocating to own storage resources, such as Southern Company (SO).

We see ratebase battery generation ownership as a mixed bag for many regulators and companies. Challenges on asset life and commissioning have reinvigorated the debate of whether to PPA/contract-out this still novel asset class vs placing it in ratebase. Clear concerns from regulators.

FERC Policy: Unclear on future composition and timeline for replacing departing third commissioner. Watch carefully on how this could yet further stymie decisions.

Don't expect much on transmission ROEs – if anything there is clearly a bias higher on returns due to rates that remains underappreciated by many investors.

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