
Preparing for the Summer – and Beyond

Any among us with a semblance of a social life will know that speaking too much – or too enthusiastically – about our work can be deadly to a polite conversation with “normal people”. Because of this, one can be led into thinking we are in a dull, boring industry. It is complicated stuff and is not readily penetrable to the public, but we know what we do is important – it affects people’s lives and what public officials hope to accomplish.

We all thought California was driving the discussion about how to manage an electric market transition to a lower carbon future while still managing reliability. Then, the largest part of Texas has a weather and energy event to beat anything we experienced last summer.

Public puffery follows all these events in a shallow hunt for easy villains, but we know it is more complicated than the press and politicians often make it sound. Still, we must keep engaging regulators, legislators, the press, and the public to the extent we can because getting the power market to transition reliably toward dramatically lower carbon in a reliable manner affects the entire economy.

The short-term race has been to shore up “resource adequacy” (RA) in California while not foreclosing the CAISO market from also serving the liquidity needs of the neighboring West. Still, the dye is largely cast for this summer. It is probably time to turn our attention to making sure that whatever California does is not at the expense of the region as scarcity lurks over much of the WECC.

So, while we are focused on this summer, I was glad to see that FERC has issued a “save the date” notice for a Technical Conference to be held in June on regional RA in the West. Given the timing of the meeting, the focus will have to be on solutions beyond this summer – happily – because too little attention has been paid to the future.

For example, how can the CAISO system – which is a security constrained economic dispatch (SCED) – continue to work with the needs of the neighboring West to “wheel” power to locations that function under a static “contract path” method of transmission? The need to discuss solutions in a regional context is well past due. Even more so, California needs to recognize the importance of working with its neighbors so that the surrounding states find a comfortable way to engage California. Maybe FERC can help guide us all to a future of regional integration. A naïve hope? Perhaps, but I am an optimist.

In the meantime, please read the rest of this Quarterly Report as the WPTF consultants help us keep up with all that has gone on the past few months. As you are among fellow energy people, enjoy with as much enthusiasm as you like.

Scott Miller

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Save the Date

Check the WPTF website for all the details on the [WPTF 2021 Summer Meeting – July 21 – 23 at The Resort at Coeur d’Alene](#)

CPUC COMMITTEE

Greg Klatt

Greg Klatt coordinates the [CPUC Committee](#). Greg is a practicing attorney with over 20 years of energy industry experience. His practice focuses on state and federal regulation of the electric power and natural gas industries. He has represented clients in numerous ratemaking and rulemaking proceedings before the CPUC. He regularly advises energy companies regarding regulatory requirements applicable to their product and service offerings. He represents marketers and retailers in CPUC licensing, compliance and enforcement matters. He also commonly acts as regulatory counsel in energy-related transactional matters, including procurement contracting, resource development projects, repower projects, major asset acquisitions and related financing arrangements.

Greg received his J.D. from UC Berkeley's School of Law (Boalt Hall). He graduated magna cum laude with a B.A. in History from the University of San Francisco and is a lifetime member of the Alpha Sigma Nu honor society.

Resource Adequacy 2.0

A year ago, I predicted the unwieldy complexity of California's RA program, with its plethora of "qualifying capacity" counting rules and granularized compliance requirements, would trigger a paradigm shift. My premise was the smart kids would come up with something both simpler and more effective at keeping the lights on. Boy was I wrong.

Early last summer, the CPUC established a track of the RA proceeding to explore "the broader RA capacity structure," with the first set of proposals filed in early August. Fast forward six months, and there are now 3.5 major proposals for overhauling the RA program in the mix. While all the proposals seek to address the shortcomings of the existing RA program, none of the proposed program structures is simpler than what we have now. Nor would they make transacting any easier for load serving entities (LSEs) and suppliers or be easier for the CPUC to administer—indeed, the opposite is more likely.

The most radical proposal is sponsored by the CPUC's Energy Division. Staff's proposal – the brainchild of Frank Wolak, a highly respected professor of economics at Stanford University – is to replace the existing RA construct. Currently, LSEs are required to forward contract for sufficient generation capacity to cover their forecast loads during

coincident system peak hours on a year-ahead and month-ahead basis (and suppliers are subject to concomitant CAISO must-offer obligations). This would be replaced with a requirement for LSEs to forward contract for sufficient energy to meet their forecast hourly demand on a multi-year rolling basis.

The core elements of the "Wolak proposal" include (1) the allocation of forecast hourly system demand among LSEs based on their forecast load shares, (2) a standardized fixed-price hourly energy contract/product, (3) annual auctions for said contracts/products in the amounts needed to cover the forecast hourly system needs, (4) and allocation of the resulting costs to LSEs based on their actual load shares. One of the many eyebrow raising implementation "details" of the Wolak proposal is that the initial round of auctions would be for deliveries starting at least four years out (to allow for the transition from the existing capacity-based RA program structure).

Less radical but no less complex is the proposal co-sponsored by SCE and the California Community Choice Association (CalCCA). This proposal aims at ensuring LSEs procure a mix of resources that reliably meets system needs in all hours by requiring LSEs to cover their individual net peak loads and associated energy needs. In simple terms, LSEs would be

required to forward contract for sufficient capacity (from resources other than wind and solar) to cover individualized RA requirements for both capacity and energy. SCE/CalCCA's proposal entails the creation of a new compliance metric—net qualifying energy—and the layering of a half dozen or more additional, data-intensive administrative steps into each RA compliance cycle.

PG&E is championing a third proposal, which it calls the “slice-of-day” concept. As the name implies, PG&E's proposal calls for the creation of RA requirements for multiple periods of the day. The resulting “slices” would be grouped by “seasons” consisting of months that share a characteristic load curve. To count as RA capacity during a particular slice-of-day, a resource must be able to reliably produce a known quantity of energy during the peak load hour in that slice. Thus, the inter-seasonal and intraday variability of solar and wind production are the main drivers of how the hours of the day and the months of the year would be stacked into compliance “days” and “seasons.” PG&E's proposal has the advantage of being relatively easy to understand, but it is the least developed of the three proposals described thus far.

SDG&E is the author of the last proposal, which consists of “revisions to PG&E's proposal that are intended to reduce complexity and simplify implementation”

(and thus accounts for 0.5 of the “3.5 major proposals” now under consideration). To wit, SDG&E proposes that each RA compliance “day” be split in to six four-hour slices, and that the RA requirements for all the slices be aggregated into a single RA requirement for the applicable compliance season. For compliance purposes, the RA capacity of a given resource would be calculated by multiplying the resource's qualifying capacity by the number of slices of the day in which the resource can produce energy. Thus, for example, a contract for 10 MW of capacity from a thermal resource that can operate for 16 hours a day would count as 60 MW toward the contracting LSE's RA requirements, and a contract for 10 MW of capacity from a solar resource that produces energy 8 hours a day would count as 20 MW.

The main complication of SDG&E's proposal is that, to ensure that LSEs do not simply rely on variable-energy resources to meet their RA requirements, those requirements would be broken down into “fixed load” requirements, which are based on the minimum load across all hours of the compliance day, and “dynamic load” requirements, which are based on the difference between the peak load in each slice and the minimum load for that day. Under SDG&E's proposal, LSEs could use any type of resource to meet their dynamic

load requirements but would be required to use 24x7 non-energy-limited resources to meet their fixed load requirements.

The Commission is scheduled to issue its decision on the RA program restructuring proposals in June. We have not gotten any clues from the assigned commissioner about what to expect in the proposed decision. I would be disheartened if the proposed decision does not torpedo the Wolak proposal, which has virtually no support outside the Energy Division. My personal favorite is the PG&E proposal, including SDG&E's proposed modifications thereto. But that may be mostly due to my understanding it better than the others. If I had to handicap things, I would say the smart money is on the SCE/CalCCA proposal being selected for further consideration. But I would not be surprised if both the SCE/CalCCA proposal and the slice-of-day concept make it to the next round. Of course, maintaining the status quo is also an option. At this point, given the messy alternatives, I imagine more than a few stakeholders would be happy with that outcome.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR (CAISO) COMMITTEE

Carrie Bentley

Carrie Bentley is the co-founder and CEO of Gridwell Consulting and has over a decade experience in the energy industry across the ISO/RTO markets. Ms. Bentley currently provides analysis and strategic support on “all things California ISO,” including transmission, interconnection, capacity, storage assets, and the energy markets. Prior to becoming a consultant, Ms. Bentley most recently had been acting as a lead market design and regulatory policy developer at the CAISO, leading design and stakeholder initiatives in critical areas such as flexible ramping, resource adequacy, and renewable integration. Prior to the CAISO, Ms. Bentley was a consultant for GDS Associates, an engineering and economics consulting firm where she specialized in power supply contracting, natural gas hedging, and energy market design for a large range of clients in ERCOT, PJM, MISO, and SPP.

Time for a Vacation

It has been a challenge these last three months to keep up with CAISO matters. While it was not the regulatory (and personal) struggle our friends in Texas faced, it certainly has not been easy. The Market Enhancements for Summer 2021 Readiness initiative, FERC Order 831 tariff delays, waivers, and additional filings, gas price spikes, and intertie deviation settlement implementation errors have left stakeholders in whirlwind. And to those poor stakeholders that cover CAISO and the CPUC and live in Texas? All I can say is, go ahead, you have earned a strong drink and a long vacation.

Market Enhancements for Summer 2021

As I have presented on numerous times in the past two months to the CAISO Committee, the CAISO started off proposing seven new enhancements to prepare for a tight capacity summer. Some are much more contentious than others, but in a great show of rational decision making, the CAISO postponed the seventh and most contentious item – System Market Power Mitigation – until Fall 2021. As we noted in our prior report, the CAISO’s data has yet to show the exercise of system market power. Even worse, the design would have inherently over-identified hours to be tested for uncompetitive conditions, leading to over-mitigation and

suppressed market prices during periods when the CAISO needed price signals the most.

The remaining six items include revising export and load priorities (wheel-through priorities are being negotiated as of drafting); improved EIM coordination and resource sufficiency test calculation; improved reliability demand response resources impact on real-time pricing; additional constraints on storage so that they are sufficiently charged in real-time to meet their day-ahead schedule; additional make-whole payments for real-time hourly block economic imports; and a real-time scarcity pricing enhancement that will release reserves at the bid cap when the CAISO is short on contingency reserves and drops load in order to meet their NERC requirement. Got all that?

I think the key take-aways are that the energy market will be a little bit better at sending real-time price signals, storage will have an additional restriction, and everyone will understand how the CAISO prioritizes load, exports, and wheels. That is, they will once the CAISO finalizes this policy.

FERC Order 831 Roller Coaster

It pains me to write about FERC Order 831, so I will simply describe the CAISO filings this quarter. Recall this order was issued by FERC on November 17, 2016. The CAISO responded with two filings that together (1) established a

soft energy bid cap of \$1,000/MWh, a hard energy bid cap of \$2,000/MWh, and scaled penalty parameters in the market based on the hard energy bid cap; and (2) established a process by which suppliers can submit cost-based bids above \$1,000/MWh and the CAISO can cost verify such offers. This was supposed to be implemented on March 21, 2021.

Meanwhile, since May 2019 the CAISO has been working on an amendment to their FERC Order 831 Compliance policy, which was supposed to have been filed at the end of 2020. In late January – less than two months before the original FERC Order 831 Compliance Filing was going to be implemented – the CAISO filed a petition to delay implementation because they had not yet filed the amendment. Then, because of gas price spikes, around 3-weeks later, the CAISO withdrew the petition to delay.

Are you still with me? So finally, on February 22 the CAISO filed the amendment to its initial FERC Order 831 compliance filing policy. In this filing, the CAISO now seeks to (1) continue to use the prior \$1,000/MWh energy offer cap as the penalty price except where market participants have submitted, and the CAISO has accepted, a cost-justified energy offer above \$1,000/MWh, or when the CAISO's maximum import bid price exceeds \$1,000/MWh; and (2) where an offer cap above \$1,000/MWh has been

established, use \$2,000/MWh as the penalty price setting the market clearing price when it must relax its power balance constraint (“PBC”) only when the power balance deficiency exceeds a pre-determined megawatt threshold (e.g., 233.7 MW for the CAISO balancing authority area). Otherwise, the CAISO will set the market clearing price based on the last accepted economic bid.

Obviously, each of these filings have a huge impact on what load will expect to pay this summer, how much supply will be paid, congestion revenue rights settlements, hedges, contract-for-difference risks, and the list goes on. It is a big deal when the price cap of the CAISO doubles. Yet, it has felt like pulling teeth to get consistent, transparent communication from the CAISO on this matter to the stakeholder community. I am still getting emails from folks that say things like, “wait can I offer \$1,500 for my virtual or no...?”

Intertie Deviation Settlement Implementation Error

The intertie deviation settlement implementation on February 1 did not go as planned. The CAISO has identified six separate issues that are leading to erroneous fifteen-minute and five-minute imbalance charges as well as erroneous (and high) intertie deviation settlement charges. As of writing this four out of six have been resolved, but two are still being worked on. It is still

unclear exactly what went wrong during the implementation. The settlements subject matter experts described one of the errors as “random data coming in as a final tag” and while this matter is fixed, it is hard from the outside to understand why so many issues were not caught during testing. Hopefully this will be a red flag for the CAISO that testing these new complex policies is incredibly important. Many of the Market Enhancements for Summer 2021 interact with the real-time market and the summer is not the time to start having real-time market errors and settlement issues that may deter imports.

With all these moving pieces to figure out, and the specter of another challenging summer for reliability, here's to well deserved vacations!

CALIFORNIA LEGISLATIVE COMMITTEE

Jesus Arredondo

WPTF Legislative Committee

consultant is Jesus Arredondo.

Jesus is the principal and founder of Advantage Government Consulting LLC and has over 19 years of experience in media and government relations, including concentrated experience in energy policy. Prior to launching Advantage Consulting, Jesus worked as a senior advisor for two major public relations firms in the United States and Mexico. Jesus also served as a policy advisor to a major California transmission project, principal advisor on an education effort in California concerning natural gas and on a national education campaign concerning the FERC's push for standard market design. Before launching Advantage Consulting, Jesus was a bilingual spokesman for two California governors and served five years as director of regulatory and government affairs for a fortune 250 independent power producer and two years at the California Power Exchange, where he served as director of corporate communications.

The 2020 Legislative Year was Pandemic Driven – The 2021 Legislative Year will be Recall Driven

What began in early 2020 as a largely ignored effort to oust Governor Gavin Newsom – amid the haphazard 2020 COVID-19 pandemic response policy that became a maze of inexplicable colors and tiers, resulting economic distress and business closures, vaccine distribution hiccups, distance learning for millions of school-aged children that drove parents mad, and of course rolling blackouts – has culminated this month in more than 2.1 million Californians signing a petition calling for his dismissal. While the effort was originally dismissed by most Democrats, including Newsom himself, he recently told the press that he would “fight like hell” against the recall.

Supporters of the recall targeting California Newsom submitted 2,117,730 signatures, a number that appears to comfortably exceed the legally required threshold under State law. In fact, Newsom himself acknowledged that the recall will likely qualify, and he has already assembled a team that will mount his defense in what's expected to be the nation's biggest election in 2021. Democrats could raise well over \$100 million to defend the governor's seat in one of the bluest states in the country.

The final submissions will keep 58 county elections officials busy verifying the signatures. Already, proponents have registered a validity rate approaching 84 percent, higher than normal for voter-driven campaigns.

For all intents and purposes, however, Newsom's acknowledgment amounted to a campaign kickoff. His team has already launched ads and begun raising hundreds of thousands of dollars. One more Republican, former Rep. Doug Ose, has joined former San Diego Mayor Kevin Faulconer and 2018 GOP gubernatorial candidate John Cox as candidates in the race. Experts are also saying that it's inevitable that a Democrat will jump into the fray.

Newsom's team is seeking to tie the campaign to supporters of former President Donald Trump, who is deeply unpopular in California. Recall proponents, on the other hand, are trying to focus on intense frustration over Newsom's pandemic business closures and California lagging all other states in school reopening.

The petition signatories are coming in at 64.10% Republican; 25.30% No Party Preference; 9.00% Democrat; 1.60% Other. As an aside, signatories are 49.48% Female, which is likely reflective of the disproportionate economic and childcare burdens borne by women due to business closures

and distance learning under Newsom's pandemic response. Under state law, the recall ballot will ask voters two questions: Do they want to recall Newsom, and if so, with whom do they want to replace him. Newsom cannot appear among the recall candidates, which leaves the door open for a Republican to win with a plurality of votes if the GOP can convince a majority of voters to oust the Democratic governor.

If county registrars verify that enough signatures have been submitted, several different electoral processes must take place before the recall is set, according to the Secretary of State Shirley Weber's office. The state elections chief will have until May 9 to notify counties that the election has qualified, then will allow voters to withdraw their signatures from May 10-June 21.

While that rescission process is allowed under state law, Democratic strategists said that it will likely be impossible for Newsom to find enough signatories to withdraw their support, given the number of voters who have backed the recall effort.

The Secretary of State will officially certify signatures for the recall on Sept. 17, the same day the Lt. Gov. Eleni Kounalakis will declare the actual date of the election. Experts expect it will fall somewhere between October and late November.

So, while the 2020 Legislative session was driven by the pandemic, the 2021 Legislative session will be largely driven by the shadow of the recall and the hangover of the pandemic – and anything else that happens...

As far as energy policy being impacted, the aftermath of the August 2020 blackouts drove several legislators to introduce bills on alternative fuels like hydrogen, conservation, wildfire prevention, and energy storage. Perhaps the biggest bill making its way through the process is a bill that would allow for up to 30,000 megawatts of off-shore-wind generation. While it is very early in the legislative process, this is only one of over 140 energy policy legislative proposals being tracked by the Legislative Committee.

MEXICO COMMITTEE

Rajan Vig

The WPTF [Mexico Committee](#)

Consultant is Rajan Vig. Rajan started his career in strategy consulting with FTSE 100 companies, working at WPP Group in London before working at private equity firm, Hamilton Bradshaw, where he began his consulting focus on commodities. He moved to Houston in 2014 to found an energy human capital consultancy within Sir Peter Ogden's portfolio, where he oversaw the build-out of commercial energy businesses across oil, gas and renewables into emerging markets across the Americas, specifically Mexico and the Southern Cone. Most recently, Rajan started and ran BioUrja Trading's office in Mexico City, managing the company's implementation across trading and origination in Mexico across fuels, gas and electricity. Rajan has a BA (Hons) in Modern Languages (Spanish & Italian with Portuguese) from the University of Manchester and an MSc in Latin American Studies (Economics & Politics) from Oxford University.

Lie Reform Update

Discussions about Mexico's electric reliability, its energy security, the economic stability of the Federal Energy Commission (Comisión Federal de Electricidad, CFE), environmental concerns, power bills and high prices have all proved to be an absolute and complete waste of time. President Andrés Manuel López Obrador's proposed reform to Mexico's Electric Industry Law (Ley de la Industria Eléctrica, LIE) seems to be focused on denying private investment in the Mexican power sector. 4T's mantra: private entities are adversaries encouraged by national traitors of past neoliberal administrations.

AMLO's administration is renowned for its incapacity to self-criticize. The President assured the people of Mexico that last month's blackout was irrespective of the bad weather. According to him, the main reason for blackouts is that Mexico is not self-sufficient with its access to natural gas, leaving the country exposed to circumstances north of the border.

As we have said time and time again, the President's efforts to embrace the two giants, CFE and PEMEX, as well as his efforts to cast doubt on the merit of renewables and the need for private company participation in energy markets, is out of touch with economic reality and environmental world trends.

Government officials' simplistic narrative behind the new policy

have pushed an agenda indicating that wind and solar generation – supposedly less stable than oil and gas due to their intermittency – would compromise Mexican energy security. It is now certain that if the LIE passes as a legislation, the legal changes proposed by AMLO will affect energy security in Mexico. The bill would change the incentives from efficiency-based power generation to prioritizing CFE regardless of the increased costs.

In the past, Mexico has been a climate leader. It was the first developing country to deliver its climate action plan ahead of the Paris Agreement, but such ambitions are now treated with crushing lack of interest by the government

Economic Impacts

According to analysts, the proposed law that would overhaul Mexico's electricity market will scare off foreign and domestic investment. Private companies, which generate cleaner and cheaper power than CFE, are currently at the front of the queue, but the lower house approved bill will eliminate this. With that, it would eliminate the confidence about the prevalence of the rule of law in Mexico. The plan of putting CFE in such a privileged position when it has shown that it lacks the resources and capacity to invest in new technology has been long criticized.

[COPARMEX](#) publicly stated that the reform will effectively raise the cost of electricity for consumers by 17% and that this cost will be

absorbed by the users or by the Finance Ministry which means that Mexicans will pay the price either via their monthly bills or via taxes. COPARMEX in its issued public statements mentioned that AMLO's proposed reform will increase generation costs and cause international legal challenges. Simply put, the reform will damage Mexicans to ironically favor the state-owned CFE.

Shall be watching the next couple of months closely.

Judicial System Battle

MORENA's most controversial power plan to date came to a sudden halt this past week, just at a time when the tide seemed to be turning its way. The federal Mexican judicial courts momentarily came through for the private sector, stopping an unprecedented act of arbitrary law reform. A Mexican Federal Judge ordered to suspend the effects of the LIE's recent reform ruling that it could harm free competition and cause irreparable damage to the environment since it favors traditional energy generation sources over renewable ones.

The President has responded by explicitly stating that he will go to the Supreme Court if necessary to defend these changes. He is threatening to review and appeal the proceedings of any judges who grant the suspensions of these modifications, creating a witch hunt-like environment for the Judiciary Power. AMLO has actively demanded an

investigation against the judges who have temporarily blocked the implementation of his plan. He practically accused judges of being on the payroll of private energy companies.

Texas Polar Vortex

Natural gas imports into Mexico from the U.S. averaged an approximate of 165,809 million cubic feet per month in the first 11 months of last year. Mexico decided to increase its import from the neighboring country and upscale its gas infrastructure after the surge that American oil industry had by introducing horizontal perforation that gave the U.S. access to non-conventional reserves.

It is true that power generation in Mexico is tied to gas supply from Texas, but the current government has done extraordinarily little to allow the market to develop. Since AMLO took office, his government has ordered the suspension of tendering for gas deposits exploration and canceled Pemex associations with private companies.

Instead of blaming American gas companies for the blackouts in Mexico, the government should be rethinking about the energy policy they are currently supporting.

Mexico always has and continues to be a gas-driven power market. It has the fortune of access to cheap gas from the United States. Where Mexico has

fallen short is in developing the relevant infrastructure to take full advantage of its enviable position. The pipeline system is in desperate need of expansion and additional capacity. There is a profound need for natural gas storage too as well as engagement in natural gas exploration – none of which have come to fruition over recent years. Had Mexico developed such infrastructure, the country would be less exposed to the recent bad weather causing grave consequences across the ERCOT grid. In AMLO's eyes though, this is all the fault of previous presidencies and the United States.

NATURAL GAS

Foreign Natural Gas Dependency

Mexico's dependence on foreign gas gets worse by the day. According to the Ministry of Energy, between 70 % and 90% of the total gas the country needs comes from abroad, specifically from the United States as of February 2021.

This data was exposed by the gas crisis that the country went through a few weeks ago, caused mainly by the precipitous drop in Pemex's gas production in recent years. According to data, Pemex's domestic production between January and November 2020 was only enough to cover 30 percent of the total demand of 8 thousand 197 million cubic feet of gas per day.

In Mexico's case, energy is one sector for which lofty ambitions

are actually attainable, but AMLO must reverse course on energy storage investment and fracking to improve the country's energy situation. For instance, floating regasification units or underground gas storage facilities are a feasible, short-term approach to improve the energy sector's resiliency. Government efforts to promote shale development, such as AMLO's predecessor's ending of a monopoly on oil by state-owned petroleum enterprise, Pemex, foster private and foreign investment and long-term energy development. Such policies could inject much-needed capital into Mexico's economy and increase energy diversification.

AMLO will struggle to accomplish all his ambitious campaign promises during his tenure, but the energy sector offers an arena for AMLO

to build a sustainable strategy that includes economic gains and greater autonomy if he alters course. Mexico desperately needs more storage facilities to weather energy crises like the one in February. Apart from more blackouts, a fracking ban's only legacy would be a greater dependence on energy imports and stalled domestic energy diversification, at least until AMLO's successor inevitably removes the ban.

CARBON AND CLEAN ENERGY COMMITTEE

Clare Breidenich

Clare Breidenich coordinates [WPTF's Carbon and Clean Energy Committee](#). In this role, Clare has been actively involved in the development of California's cap and trade program since its inception and has particular expertise on issues related to the treatment of electricity imports under the program and the interactions of the carbon market and the markets operated by the CAISO. Clare also represents WPTF on matters related to carbon and clean energy policies in other western states.

Prior to joining WPTF, Clare worked on international climate issues at the Environmental Protection Agency, the US Department of State and the United Nations Framework Convention on Climate Change Secretariat. Clare has extensive knowledge of the technical and policy options for greenhouse gas mitigation, including market mechanisms, and methodologies and protocols for estimation, reporting and verification of greenhouse gas emissions and reductions. She has served on the Washington Governor's Climate Action Team, the Washington Carbon and Electricity Markets Workgroup and on a National Academy of Sciences' Committee on monitoring of greenhouse gas emissions. Clare is a graduate of the University of Michigan and has a Master of Public Affairs and a Master of Science in Environmental Science from Indiana University School of Public and Environmental Affairs.

Another year, another kerfuffle of Carbon and Clean Energy legislation in Washington and Oregon

The 2021 legislative session in Washington is off to a roaring start, with several climate and clean energy bills introduced. Among them are a legislation that would establish a cap-and-trade program (the Climate Commitment Act), a clean fuels standard, and a carbon tax. The cap-and-trade legislation and clean fuels legislation seem to have more traction than the carbon tax. Compared to previous legislative attempts, the politics around adoption of a cap-and-trade program and clean fuels standard in Washington have shifted markedly.

Within the legislature, the cap-and-trade and fuel standards bills are being characterized as a “grand bargain” in conjunction with a third bill addressing transportation infrastructure funding. Particularly for cap-and-trade, this packaging seems to have helped pick up some Senate votes who see dollar signs for the state transportation fund. The other shifting dynamic has been the petroleum industry. Many refiners and fuel suppliers have supported cap-and-trade previously, but only in lieu of a clean fuel standard. This year, opposition to the fuel standard seems more muted, while active support for cap-and-trade remains. While both bills have a

long way to go, one key milestone has been passed – for the first time, cap-and-trade legislation was successfully voted out of the Senate Energy, Environment and Technology Committee.

From WPTF's perspective, there are a several problems in the current draft of the legislation. Although the program is clearly intended to enable linkage with that of California (and Quebec), several provisions would prevent such linkage. The most significant is the provision that emissions associated with electricity imports will not be regulated until the second compliance period, which would cause emissions leakage and undermine program's environmental intent. Other provisions of the proposed legislation create rules for access to allowances that differ from those of the California program: holding limits, the price-containment reserve, and an emissions containment reserve that would be unique to the Washington program.

The cap-and-trade legislation now sits in the Senate Rules Committee. The bill saw two modifications in the Ways and Means Committee designed to grease its passage: changes to the allocation provisions for energy-intensive, trade-exposed industries, and addition of a provision that explicitly ties implementation of the bill to new state transportation funding. Not coincidentally, the Democrats also

released proposed transportation budgets in both chambers at the same time. Given this movement, the bill now looks likely to pass the full Senate. As passage in the House is pretty much a given (the House has already passed the more controversial clean fuel standard), this may be the year that we finally see Washington pass a cap-and-trade and a clean fuel standard. In which case, repeal referendums will undoubtedly follow...

In Oregon, the focus has been on a 100% Clean Electricity bill. Although multiple different bills – including and enhanced Renewable Portfolio Standard (RPS) – were introduced, the action has occurred within a stakeholder group convened by one of the state Environmental Justice organizations. The stakeholder group was attempting to develop a clean energy concept to be turned into a substitute for one of the RPS style bills in the legislature. Despite what has been uniformly characterized by participants as a fairly chaotic process, as recently as three weeks ago, consensus seemed to be emerging around the concept of 100% clean bill measured on the basis of greenhouse gas emissions, rather than Renewable Energy Credit procurement.

That all changed with the introduction of the substitute bill in mid-March. The substitute

creates an emissions-based 100% clean standard as discussed in the stakeholder group but has added several new and contentious provisions that would impact retail access in Oregon. These include new charges for energy service supplies, a new green tariff, and elimination of a requirement for the Public Utilities Commission to mitigate utility market power. It is unclear whether opposition to these new provisions will be successful in either modifying the bill or undermining Democratic support. If Democrats continue to move the bill forward, we may see a repeat of the Oregon Republican Legislators favorite tactic when confronted with legislation they don't like – going AWOL.

And some speculation about what is going to happen at the Federal level

The December newsletter expressed skepticism about the feasibility of President Biden's domestic climate change agenda in light of the expected continued Republican Majority in the Senate. Despite now having Democratic control of the Senate agenda, the likelihood of passing targeted federal climate legislation – such as a clean energy standard or carbon tax – in the divided chamber remains extremely slim. (Although a clean energy friendly infrastructure package is not outside the realm of feasibility.) The question is then this: what can the combined efforts of the

Environmental Protection Agency (EPA) and the Department of Energy (DOE) do?

An important signal will come next month. The Administration has announced that it will submit its pledge under the Paris Agreement of the climate convention by Earth Day. Gina McCarthy, Biden's domestic climate policy czar, has said that the United States will commit to ambitious 2030 greenhouse gas reductions, focused on the power and transportation sectors. EPA has signaled that it will not attempt to reinstate the Obama Administration's Clean Power Plan for the electricity sector. Rather, its message is that all options – including the possibility of using a multipollutant rule or National Ambient Air Quality Standard for carbon dioxide as well as the more traditional new source performance standards – are on the table.

DOE lacks EPA's emission regulatory authority but could still be influential given its ability to tighten (or stop the rollback) of energy efficiency standards and help drive innovation. This month, the agency announced millions of dollars in new research and development funding for electric vehicles, grid storage, decarbonization of natural gas with renewable hydrogen, and other clean energy technologies.

WIDER WEST COMMITTEE (2WC)

Caitlin Liotiris

Caitlin Liotiris coordinates WPTF's [Wider West Committee \(2WC\)](#), which engages on market, policy, reliability and technical developments in the "wider West," generally outside of California. The 2WC is active in advocating for broader western energy markets, especially the EIM and other regional market expansion opportunities. The 2WC also follows important developments at Peak Reliability and the Western Electricity Coordinating Council. Caitlin has over a decade of experience in energy issues in the West and has spent most of those years actively engaged on market development efforts across the Western Interconnection footprint, including a major role in developing the policies for implementing the EIM. She is skilled in understanding and distilling the interaction of energy policy and energy market dynamics. In addition to her work with WPTF, Caitlin has worked on various energy policy and market related issues throughout the county. Caitlin is currently a member of Peak Reliability's Member Advisory Committee (MAC) and has also co-authored various reports exploring the benefits of proposed transmission facilities in the West.

Western Assessment of Resource Adequacy Raises Concerns about the Potential for Loss of Load Across the West, while others Wonder About Regional Transmission Organizations

With the two high-profile loss-of-load events the country experienced over the last year, discussions surrounding load shedding events and resource adequacy (RA) have clearly intensified and entered the public sphere. It was timely, therefore, when in late 2020, WECC released the "[Western Assessment of Resource Adequacy](#)." This western focused assessment was conceived after the WECC Member Advisory Committee (MAC) raised concerns regarding the findings and assumptions used in the WECC portion of the NERC Long-Term Reliability Assessment (LTRA) in 2019. The MAC pointed out that the LTRA's findings seemed too rosy with respect to future reliability in the region.

Specifically, MAC members called out that the retirement assumptions were out of sync with the announced plans of utilities across the West. In response, WECC explained to the MAC that the NERC LTRA must follow NERC's rather rigid rules regarding resource assumptions, which results in most announced retirements not being assumed to be offline in the LTRA framework. Many MAC members cautioned that the LTRA framework wasn't

painting a realistic picture of future reliability in the Western Interconnection. In response to this, WECC worked with the MAC, the Western Interconnection Regional Advisory Body (WIRAB) and other stakeholders to develop the Western Assessment of RA which provides an assessment not bound by the same rules as the LTRA and which complements and enhances the LTRA.

WECC's Western Assessment of RA includes several scenarios which are intended to reflect a range of potential outcomes on future generation capacity and import availability in each region. The assessment factors in announced and expected generation retirements (which are clearly detailed in Appendix B of the report). WECC's assessment reviews the risk of unserved demand across five subregions and six different scenarios. Through these scenarios, they determine whether existing and planned resources are expected to meet forecast demand plus a reserve margin. Importantly, their analysis considers planned retirements and uncertainties regarding how much generation will be built and the future level of demand.

WECC's findings point to significant potential for unserved demand over the 2021-2024 period, especially in the scenarios which do not allow the subregions to rely on imports from other areas. The results show a better picture for reliability when imports are allowed and more

optimistic assumptions about planned generation coming online are utilized. Adequacy concerns are most acute in the Desert Southwest (DSW), Northwest Power Pool-Central (NWPP-C) and California and Mexico (CAMX) regions. Unfortunately, these regions all remain at a heightened risk of experiencing unserved load even under more optimistic assumptions according to the assessment. These results are expanded on in the “subregional spotlights” WECC has released: [DSW](#), [CAMX](#), [NWPP-Northwest](#), [NWPP-Northeast](#), and [NWPP-Central](#).

While WECC’s assessment may raise alarm bells, WECC has doesn’t have the authority to order changes to address these longer-term concerns. Instead, WECC has made a number of recommendations for planning entities and their regulators to consider, including that (1) planning entities and regulatory authorities should consider moving towards a dynamic, probabilistically determined reserve margin; (2) planning entities should consider how much additional capacity is needed to mitigate variability – taking into account the expected availability of the resource; and (3) planning entities should coordinate their resource planning efforts on an interconnection-wide basis each year.

These recommendations may ultimately be taken up, but WECC

itself does not have jurisdiction or authority to order or require their implementation. Rather, it is up to state Commissions and other venues to implement changes to address the potential for loss of load that WECC has highlighted through this effort. WIRAB, which represents states and provinces on reliability related matters, has requested further clarification from WECC on how to regulators should interpret the high number of at-risk hours in a year and on the recommendation around dynamic reserve margins. This could be a sign that states are paying attention to WECC’s analysis and may begin considering these recommendations in their own regulatory venues. In fact, several states are already addressing RA-related issues.

For instance, in Nevada, NV Energy recently agreed to increase its Summer 2021 Planning Reserve Margin to 18% for both its utilities and to update the Planning Reserve Margin for 2022-2024 in its next Energy Supply Plan filing, which is set to be filed on or before June 1st. Oregon’s Public Utility Commission has opened an investigation into RA in the state, which is intended to complement the RA program the NWPP is developing, perhaps by making participation in the NWPP program mandatory for Load Serving Entities in Oregon. NWPP’s program design efforts continue and FERC recently

[announced](#) a technical conference on Resource Adequacy in the West to take place later this year. In other words, RA discussions continue across the region, but given the sense of urgency created by events in Texas and California, progress on these critical issues still feels slow.

Despite this important – if slow – progress, some wonder if addressing RA will be sufficient to meet the needs of the region. In releasing its “Big Three” priorities earlier this year, PNGC Power called for development of a northwest Regional transmission Organization (RTO). PNGC stated that it supports the NWPP’s RA efforts, but that RA cannot “stand alone” unless it is supported by open and fair transmission access and effective markets. Interestingly, PNGC stated that it “does not support further steps towards the CAISO.” Instead, PNGC is advocating for an RTO/ISO that starts with the northwest and extends from there. Of course, SPP would be expected to be a contender in any RTO discussions that may result from this. However, at this time, it is unclear how much this push by PNGC will move the needle with others in the region, especially given the strong focus on RA. It remains to be seen whether the RA discussions will converge with market formation discussions or not. But, either way, discussions around maintaining reliability and expanding wholesale market options in the West appear poised to stay in the spotlight for the coming years.