QUARTERLY REPORT

January 2017

This is the first Quarterly Report of 2017, a year that promises to be full of surprises regarding CAISO grid reliability, the formation (or lack thereof) of a regional CAISO/PacifiCorp organized market, the undertakings of the Mountain West Transmission Group, and the continued evolution of Mexico's competitive electricity and gas markets.

WPTF's consultants are engaged in numerous aspects of these topics, and our report amply demonstrates the depth of their knowledge. In the next edition of the Quarterly Report, anticipate yet another new committee and consultant, broadening the WPTF bookends. The new committee will assist members in tracking county-level requirements related to developing and operating power projects. Initially, the focus will be seven to nine counties in California, selected based on existing and prospective generation. In future years, the list could be expanded to include other states, depending on the interests and priorities of committee members.

Enjoy your Quarterly Report; questions and comments can always be addressed to me.

Gary Ackerman
Executive Director

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Save the Dates

The WPTF Board of Directors will meet in person the evening before the start of the 2017 General Meetings.

WPTF Winter General Meeting
March 2-3, 2017
The Grand Del Mar,
San Diego, California

WPTF Summer General Meeting
June 8-9, 2017
The Meritage Resort & Spa,
Napa, California

LOOKING BACK AT 2016 AND FORWARD TO 2017

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.

Legislative Recap

Last year was mostly about greenhouse gas (GHG) reductions, with the passage of Senate Bill (SB) 32 (requiring the state to reduce GHG emissions to 40% below 1990 levels by 2030) and SB 1383 (regulating GHG emissions tied to short-lived pollutants). The legislation will require steep reductions in a variety of pollutants, including methane, hydrofluorocarbon gases used in aerosols and air-conditioning refrigerants, and soot. Dairy farmers will need to reduce manure methane emissions to 40% below their 2013 levels by 2030. Assembly Bill (AB) 197 also was signed, which among other things gives state lawmakers more authority over the California Air Resources Board (CARB).

Left undone was an extension of the cap-and-trade market beyond the currently established timeframe of 2020. Despite much discussion, the bill failed to gain traction; however, the Democrats now have a supermajority in both houses of the Legislature, making regulation easier to approve.

Also left for 2017 will be the matter of regional integration. SB 350 directed the Legislature to explore creating a West-wide Regional Transmission Organization (RTO), but after a slow start Governor Brown conceded that more time was needed to study the topic. Some environmentalists warned that regionalization could lend support to PacifiCorp's coal-fired plants, and others raised concerns about ratepayer fees, job impacts, and governance of an integrated system. Brown, however, has insisted on working toward "a totally seamless web of interconnection." A longtime champion of environmental causes, he said humanity has a steep "hill to climb if we're going to be able to prevent the worst consequences of a changing climate." Legislation on this matter is sure to come in 2017. More on all these issues is presented below.

Legislative Look Ahead

CAISO Regionalization. A West-wide RTO would make it much easier to interconnect to California from outside the state, and out-of-state generation could provide some significant benefits to California. Aging coal power plant sites or areas nearby should prove lucrative because of their interconnection to the rest of the West and their potential to transmit power to California (the largest energy market in the West). However, with the change in federal administration, there's a big question mark hanging over the

Clean Power Plan (CPP). It could be wiped out or, more likely, redefined. Will the CPP mean the end of coal, or will it represent a transition to "clean coal" or even natural gas development? In the near term, we must wait and see. Regardless, California likely will continue to push aggressive GHG reductions and 50% RPS.

But how will California shape regionalization now? The staffs of two energy legislative committees have effectively said "not so fast" to regionalization, because (according to key legislative staffers) questions crucial to any decision by lawmakers on the subject remain largely unanswered after almost a year and a half of study and discussion. It is still a point of debate whether regionalizing the grid would be in California's best interest, including whether regionalization will hinder achievement of the state's GHG and renewable energy goals, or the attendant economic growth. Labor advocates want to protect jobs, environmentalists want to protect renewables, and some states want to protect coal. And last but not least, there is uncertainty over who would run the regional organization and under what authority decisions would be made. The California Independent System Operator (CAISO) has made a proposal that addresses structural issues; in response, the California Public Utilities Commission (CPUC) has suggested that the regional grid may require a change of California law, but that the CAISO's proposal is "getting very close" to something that would be workable and acceptable. Nevertheless, the bottom line is that although regionalization is in the cards, much work remains.

California's Cap and Trade. As part of Brown's 2017 budget proposal, he asked the Legislature to solidify CARB's cap-and-trade program, the centerpiece of the state's climate change agenda. Brown urged renewed state commitment to climate change action, telling legislators, "Given the fact that the federal government is going in the opposite direction, I would think that Californians want to strengthen their own commitment. We ought to continue and not fall back on our efforts." Democrats can approve cap-and-trade without Republican votes, but it's unlikely to be an easy lift, given divisions among Democrats about how closely to regulate industry and the best way to approach climate change. As an inducement for lawmakers to act, Brown said he doesn't want to spend the estimated $2.2 billion in revenue projected from the cap-and-trade program until it is extended. These funds are tied to programs supported by the Democratic leadership, and Brown himself is counting on some of the money to fund his high-speed train project. Responding to the Governor's call to action, Assembly members Burke and Cooper offered up AB 151 as a placeholder for discussions.

Because the proposed urgency measure to confirm the cap-and-trade extension needs a two-thirds vote, confirmation will also secure the required two-thirds vote for a tax increase; thus, the associated legal challenge to cap-and-trade auction would be moot.

Aliso Canyon. The Division of Oil, Gas & Geothermal Resources (DOGGR) announced this month that its review of Aliso Canyon is complete and that it believes SoCal Gas has met state safety requirements and should be permitted to resume normal operations at Aliso Canyon, contingent on upcoming public hearings. The safety review by DOGGR, the CPUC, and CARB concluded that the utility met the requirements to reopen the field, but at a pressure level 19% below what SoCal Gas requested. Before the leak, Aliso Canyon had a storage capacity of 83 billion cubic feet (BCF) of natural gas. The new pressure limit and other restrictions will allow storage of only 28 BCF. Furthermore, the CPUC indicated that returning to 83 BCF might never be necessary.

How Will New Appointments Shape Energy Policy?

Governor Brown will have some big decisions to make on key appointments. He tapped Congressman Xavier Becerra to serve out the remaining two years of Kamala Harris's term as Attorney General, while she serves as California's new senator. Becerra inherits the CPUC investigations. Brown also has nominated Martha Guzman Aceves and Clifford Rechtschaffen to replace CPUC Commissioners Florio and Sandoval. At the California Energy Commission (CEC), Commissioners Hochschild and McCallister have terms that expire in February and May, respectively. McCallister has been renominated, but no word on Hochschild yet. At CARB, there will be two new appointments based on legislation that passed last year. Lastly, at the CAISO, Board members Bhagwat and Galiteva's terms expired at the end of 2016, but there is no word yet on their successors or renomination.

At the Legislature, the election year shuffle has changed the membership of key energy committees. Additionally, the stated intent of the state Legislature to push back on federal softening of environmental policies could mean a redoubling of California's push for environmental regulation, beyond where it is today. Could we see a new push on RPS?

AND REMIND ME…WHO'S TENDING THE FARM?

REGIONAL EXPANSION SLOWS, EXISTING MARKETS MAY GET SOME TENDING

Ellen Wolfe

Ellen Wolfe coordinates [WPTF's CAISO Committee](). She has more than 25 years' experience with electric utilities and in the energy industry, and has been active with the CAISO since the 1990s, when the CAISO was being formed. Ellen dives in deep on technical issues, sees the "big picture," and works effectively with CAISO staff and other stakeholders.

Ellen has extensive experience in Western markets generally and in the Electric Reliability Council of Texas (ERCOT) in particular. She has performed detailed modeling activities; evaluated benefits and costs associated with the Regional Transmission Organization–West, WestConnect, ERCOT, and Southwest Power Pool; and developed tariffs and implementation processes for ERCOT and other ISOs. She has worked as an industry consultant since 1994, prior to which she had employment engagements with the U.S. Department of Energy's national labs and at the Rancho Seco nuclear power plant.

A year ago January, the CAISO Committee funders dug deep in their wallets to pay an additional $100 per month to allow the Committee to focus deeply on regional issues. Meetings were numerous, as the CAISO market design experts tried to leave no stone unturned on the ultimate expanded market design with respect to governance, transmission cost allocation, transmission planning, resource adequacy, and greenhouse gas policies. The one years' worth of Franklins funded extra efforts to cover these meetings, dissect the proposals, and advocate for rules that would both encourage expansion and avoid disadvantaging participants in the existing markets.

It seems that the expectation of a 12-month effort was nearly spot-on. This January, the added funding will roll off at about the same time that the CAISO's regional efforts unceremoniously roll to a halt. Many of the design elements have been left for the regional board—a board that may never be seated.

In fact, PacifiCorp quietly but notably let its Memorandum of Understanding regarding joining the CAISO expire on December 31, 2016, suggesting that PacifiCorp no longer intends to pursue Participating Transmission Owner (PTO) status. As of today, other than meetings related to the Energy Imbalance Market (EIM) (such as the EIM Governing Board meetings and the Regional Issues Forums) there are no regional policy meetings on the CAISO's 2017 calendar. The regionalization standstill might allow CAISO staff to refocus on issues key to the efficiency of currently operating markets. Described below are a few issues on the Committee's high-priority list.

CRR Auction Efficiency Initiative Offers Opportunities and Pitfalls

Critical to the CAISO Committee this quarter will be how the CAISO approaches the Congestion Revenue Rights (CRR) Auction Efficiency item that was included in the CAISO's [2017 Policy Initiatives Roadmap]() despite a lack of broad or robust stakeholder support. Gary wrote in the December 9, 2016, Burrito that the initiative has been a long-standing bugaboo of the CAISO's Department of Market Monitoring (DMM), which wants to essentially shut down the CAISO CRR auction mechanism. To maximize the benefit of this initiative and manage its threat, the CAISO Committee is busy addressing this initiative on several fronts.

Regarding process, [DMM's November CRR discussion paper]() lacks the typical academic diligence of ISO market monitoring. It jumps right from some findings to presumed implications and a rash remedy (eliminating the CRR auction) without any analysis of root causes. DMM identifies some interesting data indicating disconnects between CRR auction clearing prices and associated day-ahead market congestion revenue payments. The data point toward where there might be market inefficiencies or distortions and their sources. Yet the paper offers no analysis of root causes, nor does it suggest pursuit of underlying causes. The CAISO Committee is working on all levels to disentangle the data and root causes first and advocate for informing any proposed remediation with analysis.

Optimistically, the CAISO will undertake an investigation of underlying causes, yet the CAISO Committee is not waiting for that to happen. Committee members are comparing notes on oddities they have seen in the availability of data for price discovery and the day-ahead market operations and pricing outcomes. CAISO staff has proposed to conduct a "study" of the CRR issues, yet neither the study scope nor the group who will conduct the study have been identified. Given DMM's narrow treatment of the issue and the numerous unsupported conclusions of its paper, it seems that tapping DMM would be a poor choice. A combination of the CAISO's CRR staff and the market quality staff might make the best study team. The CAISO Committee plans to continue actively working this issue, meeting with CAISO staff, discussing the issue with Market Surveillance Committee members, and doing its own analysis. Even though the CAISO staff has expressed concerns about its limited bandwidth to focus on this issue, the regional slowing is hoped to afford it more time to place DMM's claims in proper context.

Other Goings-On Related to the California Markets

Two proposals are being drafted by CAISO staff that could fundamentally change how energy and ancillary services (AS) are priced in the energy market. The Commitment Costs and Default Energy Bid initiative is looking at how commitment costs (start-up and minimum load costs) can reflect desired supplier offer values and be better incorporated into the energy price. Suppliers have long noted both the restrictive nature of the commitment cost cap and the inability of dispatches at minimum power levels (Pmins) to set the Locational Marginal Price (LMP). As renewable generation increases, many thermal generators are run at minimum load for extended periods. The cost of running at minimum load is not reflected in the LMP, and there are large amount of uplift associated with insufficient funds. Furthermore, if generators are continually recovering costs only through Bid Cost Recovery rules, there is no opportunity for them to receive intramarginal rents to recover fixed costs or enjoy a reasonable rate of return.

The CAISO is also working on an initiative to create a market for frequency response, following up on a commitment to the Federal Energy Regulatory Commission (FERC) to do so and thereby meet the 2015 FERC standard called BAL-003. Because regulation and spinning reserves (other CAISO AS services) interact with frequency response on several levels, this initiative has the potential to fundamentally change the AS market.

Though the CAISO Committee sincerely hopes regionalization moves ahead, at this point the members are looking forward to 2017 being filled with opportunities to make much-needed improvements to the bread-and-butter CAISO markets.

CALIFORNIA PROPOSES COMPREHENSIVE CARBON POLICIES FOR 2030

Clare Breidenich

Clare Breidenich coordinates WPTF's GHG Committee. Clare has over 18 years' experience on greenhouse gas regulation and policy. In addition to her work with WPTF, Clare has worked on international climate issues with the Environmental Protection Agency, the Department of State, and the United Nations Framework Convention on Climate Change secretariat. She has also served on the Washington State Governor's Climate Action Team and on a National Academy of Science's Committee on monitoring of greenhouse gas emissions.

On January 20, CARB finally released its proposed "2017 Scoping Plan Update," a comprehensive strategy to meet the state's target of reducing greenhouse gas (GHG) emissions by 40% relative to 1990 levels by 2030. CARB calculates that the state target is equivalent to an annual limit on emissions of 260 million metric tons of carbon dioxide equivalent (MMTCO2eq) in 2030. Without further climate action, including extension of the cap-and-trade program, CARB projects that state GHG emissions will exceed the 2030 target by 132 MMTCO2eq in that year and by 680 MMTCO2eq cumulatively over the period of 2021–2030.

The proposed Scoping Plan comes against a backdrop of vocal and organized opposition to the cap-and-trade program by the Environmental Justice (EJ) community, and ongoing uncertainty about the legality of the state's use of an auction to distribute allowances under the program. In the Scoping Plan, CARB responded to the concerns of the EJ community, adding two scenarios that eliminate the cap-and-trade program and proposing to develop new regulations to reduce emissions from petroleum refineries. The latter would help to ensure that CARB complies with AB 197's requirement that the agency prioritize direct emission reductions. Additionally, in response to opposition of petroleum refiners to the Low Carbon Fuel Standard (LCFS), CARB included a scenario that eliminates this program and instead relies more on cap and trade to achieve emission reductions. Here is a summary of the final proposed scenarios:

- *Proposed Scoping Plan Scenario.* The cap-and-trade program would be extended, with tightening caps, and all other existing climate and clean energy programs would continue, including the Renewable Portfolio Standard (RPS). The LCFS would be enhanced to achieve an 18% reduction in carbon intensity, consistent with CARB's mobile source strategy. CARB would develop and implement refinery benchmark or technology standards designed to achieve 20% reduction of GHG emissions from petroleum refineries.

- *Alternative One: No Cap and Trade.* CARB would eliminate the cap and trade program. Other programs, including the RPS, efficiency standards, and LCFS would be enhanced to achieve target GHG levels. CARB would design the new refinery standard to achieve a 30% reduction in carbon intensity and would add additional carbon reduction regulations for other industries.

- *Alternative Two: Carbon Tax.* The cap-and-trade program would be replaced by a carbon tax that could be adjusted over time to ensure that emission reductions are met. CARB has not analyzed the level of the tax needed to achieve state GHG targets.

- *Alternative Three: All Cap and Trade.* CARB would retain the cap-and-trade program but remove other discretionary (i.e., not legislated) carbon policies. Most notably, refinery measures would not be implemented and the LCFS carbon intensity reduction would remain at 10% instead of increasing to 18% as proposed under other scenarios.

- *Alternative Four: Cap and Tax.* CARB would establish emissions limit on individual facilities currently covered by the cap and impose a carbon tax on entity emissions. Other existing programs and the proposed refinery regulation, with a carbon intensity improvement target of 20%, would also be implemented.

Despite the discussion of alternative scenarios, both CARB and Governor Brown remained firmly committed to cap and trade as the foundation of the state's carbon efforts. This can be seen both in the choice of alternatives themselves, which appear designed to play the interest of one group of stakeholders (the EJ community) against those of others (the petroleum industry), and in the evaluation of the scenarios. CARB concludes that its proposed Scoping Plan Scenario is preferable to the others in terms of emissions certainty, overall compliance flexibility, ability to maintain and expand linkages to other jurisdictions, and ease of implementation.

CARB intends to finalize the Scoping Plan update by March so that it can be adopted by its board in April. During this time, CARB will consider further modifying the proposed Scoping Plan Scenario to address stakeholder concerns. An issue of particular concern to covered entities is the possibility that CARB will further restrict the use of emission offsets under the cap-and-trade program below the current 8% of emissions. Such a change might help to reduce the opposition of the EJ community to the program.

Cap and Trade Amendments Provide Way Forward on GHG Accounting Issues for EIM

Meanwhile, CARB continues its rulemaking to modify the cap-and-trade program for the post-2020 period. A second regulatory amendment package, released on December 21, is similar to the previous version but addresses allocation of allowances to electric and gas utilities, and to energy-intensive, trade exposed industries. CARB has not proposed any change to the limit on the use of emissions offsets, as mentioned in the draft Scoping Plan, but could do so in a subsequent regulatory package before adoption of the amendments later this year.

The amendment package also gives tacit support to the CAISO's proposal to modify the EIM algorithm to assign electricity imports and associated GHG emissions to California via a two-pass approach. (The two-pass approach would essentially determine a counterfactual dispatch of EIM resources within the EIM footprint to serve load outside the CAISO area. The results from the first pass would then be used as an input to the second pass, in which resources are dispatched to serve load across the entire combined CAISO-EIM footprint. In general, only energy from EIM resources that is considered incrementally dispatched in the second pass could be assigned as an import to California.)

Because the two-pass approach is more likely than the current algorithm to result in more dispatchable zero-emission generation being assigned to the EIM load, and consequently more thermal generation and associated emissions to California load, it should mitigate CARB's concerns about GHG accounting in the EIM. However, because CAISO's timeline for implementation is not clear and FERC must approve any tariff changes, CARB is not confident that the two-pass solution will be in place by the time the regulatory amendments take effect in January 2018. CARB has therefore included a "bridge solution" in the regulation. Under the bridge solution, CARB would retire allowances from under the program cap equal to the quantity of "outstanding EIM emissions." CARB would calculate the quantity of outstanding emissions by multiplying the quantity of EIM imports to California by the default emission rate (0.428 MMTCO2eq/MWh) and subtracting the quantity of emissions actually assigned by the EIM algorithm.

Because the quantity of emissions associated with EIM imports to California is small relative to the overall program cap, and the program currently seems to be oversupplied, CARB's retirement of allowances to account for outstanding EIM emissions is unlikely to affect allowance prices in the short term (e.g., before 2020). Although such retirement of allowances could affect prices once the program caps tighten after 2020, CARB is expected to eliminate the bridge solution once the two-pass EIM approach is in place.

THE GROWING IMPACT OF COMMUNITY CHOICE AGGREGATION

Dan Douglass

Dan Douglass has directed WPTF's legal efforts since helping to cofound WPTF with Gary Ackerman in 1998. On behalf of WPTF, he has been extremely active at the California Public Utilities Commission and assists Ellen Wolfe, Caitlin Liotiris, and Carrie Bentley with WPTF matters at the Federal Energy Regulatory Commission.

His firm, Douglass & Liddell, specializes exclusively in energy law issues, providing regulatory and transactional counsel to generators, suppliers, and end-users in the electricity and natural gas markets. This work has included the formation and representation of several influential regulatory advocacy organizations in addition to WPTF.

Prior to Douglass & Liddell, Dan was a partner with the national firm of Arter & Hadden, where he headed the firm's California energy practice; he previously was General Counsel of LG&E Power and President of Cook Inlet Energy Supply. Dan also spent fifteen years at Southern California Gas Company and its affiliates and worked on several international and domestic gas supply and storage issues during that time.

Community Choice Aggregation (CCA) is becoming a force to be reckoned with in California energy markets. In 2002, the California State Legislature passed Assembly Bill 117, enabling cities and counties to join together to purchase electricity for all customers in their geographic boundaries. No cherry-picking of high-load-factor customers is allowed, meaning a CCA must serve every residential, commercial, industrial, and governmental customer. The bill mandated that customers be automatically enrolled in their local CCA, with an option to opt out.

Little activity occurred until about 2008–2009, when Marin County formed the Marin Energy Authority (now Marin Clean Energy), which became the target of a full-court press opposition by PG&E. The utility sent numerous mailers and had phone banks calling all customers to opt out of CCA service. PG&E even went so far as to sponsor a statewide ballot proposition, Proposition 16, to make it more difficult for local entities to form municipal utilities or CCAs by requiring a two-thirds vote of the electorate, rather than a simple majority, for a public agency to go forward with a CCA. The proposition was defeated, despite a remarkable inequity in spending (PG&E's $46 million versus less than $100,000 by opponents).

Marin Clean Energy launched in May 2010, a month before Proposition 16 was defeated. Although it initially did not even include all cities in the county, it has grown to encompass all Marin County, portions of Napa County, and the adjacent cities of Richmond, Benicia, El Cerrito, San Pablo, Walnut Creek, and Lafayette. Next, Sonoma Clean Power began service in May 2014, serving all eight eligible cities in the county plus a later addition of Mendocino County and the cities of Fort Bragg, Willits, and Point Arena. These two CCA pioneers have been followed by Lancaster Choice Energy in May 2015, CleanPowerSF a year later in May 2016, and most recently Peninsula Clean Energy, started up last October.

Importantly, there are a number of other emerging CCAs, such as Apple Valley Choice Energy, Central Coast Power, East Bay Community Energy, Monterey Bay Community Power, Redwood Coast Energy Authority, San Jose Clean Energy, and Silicon Valley Clean Energy.

The big dog in CCA will be the Los Angeles Community Choice Energy (LACCE) effort that is moving forward in LA County. It has the potential to serve the electricity load requirements of

82 eligible cities as well as all the county's unincorporated areas. At the first California Public Utilities Commission (CPUC) meeting of the year on January 19, President Picker noted that LACCE could take as much as 40% of Southern California Edison's load.

Because of the growing impact of CCAs, the CPUC will hold a February 1 en banc hearing where all commissioners will be present to learn more about CCA, its growth potential, and the implications it raises for utility operations, cost allocation, and the CPUC's own regulatory mandate. There will be panels on such topics as the supply impacts associated with CCA growth, how CCA affects Senate Bill 350 goals, prices in the power market, and how Integrated Resource Planning fits in. The commissioners also plan to look at the challenges to the investor-owned utility (IOU) business model and, importantly, whether the IOUs should continue to be providers of last resort.

The CCA growth may well be troubling to the CPUC, because it has no regulatory authority over the rates, terms, and conditions of service of CCAs. CCAs are subject to CPUC mandates common to all load-serving entities, such as resource adequacy, the Renewable Portfolio Standard, and greenhouse gas requirements. Otherwise, however, the CPUC's authority is quite limited. Assuming typical regulatory creep (and given that the CPUC plans to add about 300 new employees this year), it is reasonable to think that there may be steps undertaken, either at the Legislature or the CPUC, to expand the commission's jurisdictional authority over CCAs.

Plus, the commission is discovering that there are cross-cutting CCA issues in a variety of its proceedings—the CCAs want to run their own demand response and energy efficiency programs, and have concerns (shared with electric service providers and direct-access customers) about unpredictable cost allocation mechanism requests made by the utilities in connection with their procurement. And, of course, there is the Power Charge Indifference Adjustment (PCIA), a huge topic that is beyond the scope of this article. To increase their voice at the CPUC, last fall Marin, Sonoma, Lancaster, CleanPowerSF, Peninsula Clean Energy, and Silicon Valley Clean Energy formed a 501(c)(6) nonprofit trade association, the California Community Choice Association, the mission of which is to protect the interests of California's community choice electricity providers and their customers.

In conclusion, WPTF members need to be aware of the rapid growth in CCA and consider the implications it may have, both for California's regulatory structure and for members' own operations.

MOUNTAIN WEST MOVES FORWARD ALTHOUGH MISCONCEPTIONS REMAIN

Caitlin Liotiris

Caitlin Liotiris coordinates WPTF's [WECC Committee], which engages on technical, policy, and market developments at WECC and Peak Reliability and also advocates for broader western energy markets, especially the EIM and regional market expansion. 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 WECC footprint. 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.

Although efforts to morph the CAISO into a regional organization appear to be stagnating, the West may yet experience expansion of organized markets—an informal group of 10 electricity providers, located mostly in Colorado and Wyoming, is exploring Regional Transmission Organization (RTO) participation. The Mountain West Transmission Group announced on January 6 that it is considering participation in the Southwest Power Pool (SPP) to obtain the many potential benefits of organized market participation, including reduced transmission rate pancaking, enhanced generation development opportunities, increased ability to integrate renewables, and expanded delivery options. Because Mountain West is pursuing participation in an existing RTO, as opposed to developing its own, the participants may, realistically, be able to commence operations as early as 2019.

There has been significant interest in this development as it has the potential to offer benefits to ratepayers, generation developers, transmission owners, and others. However, the structure that Mountain West is contemplating is somewhat unique, meaning that its efforts are not always understood or correctly interpreted. Because of this confusion, it is worth highlighting a few important features of the Mountain West effort.

Mountain West utilities are not setting up a new RTO. At no point during Mountain West discussions has setting up a brand-new RTO been considered a viable option. Instead, the utilities in Mountain West have been studying a joint transmission tariff or participation in an existing RTO. The utilities solicited information from SPP, CAISO, the Midcontinent Independent System Operator (MISO), and PJM. In each case, the utilities sought information about joining the market's existing structure, which implies using the RTO's current market design, tariff, and governance structure. This approach offers advantages, by reducing start-up costs and avoiding the development of contentious new provisions, such as those required for governance of a new RTO.

Each utility will make its own decision on whether or not to join the market. Mountain West anticipates making an RTO membership recommendation by mid-2017. However, because Mountain West is an informal group, if Mountain West opts to move forward with joining SPP, it would not be "Mountain West" that would join SPP. Rather, each utility participating in the Mountain West effort will makes its own decision on whether to join and each individual entity will go through its own approval processes.

The utilities are currently in discussion and preliminary negotiations with SPP, but have not formally selected SPP as the market operator. Mountain West's recent announcement that the group will focus discussions on full membership in SPP is a significant step. However, as is often the case for other utilities that join RTOs, Mountain West will likely have some items that need to be negotiated in order to move forward. And, if Mountain West is not able to reach agreement with SPP, the group could terminate the discussions and begin working with a different RTO (likely MISO or PJM).

There is transfer capability between Mountain West and SPP, but that wasn't a requirement for Mountain West utilities to participate in an RTO. Many have opined that the transfer capability between SPP and Mountain West utilities may not be enough to support full market development between the two areas. However, the Mountain West participants own and operate multiple AC-DC-AC interties that would allow more than 700 megawatts of transfer capacity between the current SPP footprint and Mountain West footprint. Although this transfer capability would increase the market's efficiency, transfer capability is not necessary for an existing market operator to set up a "satellite" market in another area. For instance, Mountain West was in discussions with PJM about joining the PJM market, but no transfer capability realistically exists between Colorado and PJM. Instead, Mountain West would have used the PJM market design, tariff, and governance structure, but maintained a separate footprint.

The prospect of SPP expansion into the Western Interconnection prompts questions: Which other entities might be interested in participating in Mountain West (or SPP) down the road? How will seams issues be addressed if the CAISO and the new SPP eventually share a border? As this effort moves forward, the WECC Committee plans to engage in various stakeholder forums to help ensure that market expansion is efficient and effective, especially if unique provisions are added to SPP's market structure to accommodate the Mountain West utilities.

MEXICO ELECTRICITY REFORM COMMITTEE

Julie McLaughlin & Rebecca Bollenbach

Julie McLaughlin coordinates WPTF's Mexico Committee*. Julie has more than 13 years of experience in the energy sector across 15 countries. In Mexico, she has spent several years developing a utility-scale solar portfolio as co-founder of Vertex Engería. Previously, she held executive positions with Dynamic Energy, E.ON Climate & Renewables and EcoSecurities in the United States, South America, Europe, and Asia. Earlier in her career, Julie completed a two-year Peace Corps assignment in Nicaragua.*

Rebecca Bollenbach of Essentia Advisors is also an advisory partner to WPTF's Mexico Committee.

Rebecca Bollenbach is a Partner at Essentia Advisors (formerly part of WG Consulting). In her eighteen years of experience in deregulated power and gas across ERCOT, SPP, SERC, PJM, CAISO, NYISO, ISO-NE, Ontario, Alberta, and most recently in Mexico. In addition to her consulting experience, Rebecca has served as Vice President of Market Advisory for Adapt2 ISO and held several leadership roles at Reliant Energy, including Director of Forecasting.

La Reforma Energetica's Future in a Turbulent Political Time

The Quarterly Report is not typically a medium for current affairs, but news headlines in Mexico pertain directly to energy reform and provide useful context for this report. The gasolinazo are the recent protests against the 14–20% gasoline price increase and ensuing fuel shortages, stockpiling, and riots sweeping Mexico. Gasolinazo roughly translates to "gasoline protest" and is a twist on "cacerolazo," which means banging pots in the street in protest. The gasolinazo is a response to subsidy elimination, which is representative of the broader energy sector as it is propelled into deregulation.

In Forbes, Justin Dargin, an energy scholar at Oxford, wrote, "fundamentally the problem goes back to Mexico's broken and archaic energy industry that did not see the light of any reforms for seven decades… little investment went towards modernizing the sectoral infrastructure and the government kept spending more and more of tax revenue to subsidize gasoline." Customers are also suffering similar pain, albeit less acute, from their electricity bills, which have been steadily rising since mid-summer last year. Although challenging for consumers, these barometers are good news for those looking to participate in the deregulated market. Both structural changes born of the reform and dwindling cash reserves are forcing the government to let retail prices more accurately to reflect real costs.

From the Mexico Committee's perspective, the consensus that energy reform has no reverse in Mexico and the importance of uniting a consolidated market voice were most evident during the first meeting of the new Mexican trade association, Asociación de Comercializadores de Energía (ACE), in December. ACE was conceived and founded by WPTF as a Mexican energy trade association, much like WPTF was in the early days. Of the 28 meeting attendees, both the energy ministry (SENER) and the grid operator (CENACE) were well represented alongside the CEO of the qualified supplier created by the dismantling of the state-owned energy monopoly (Comisión Federal de Energía or CFE) (CFE Calificados) and the CEO of CFE's fuel distributor (CFE Energía). Additionally, key private players across the energy spectrum, from generators to traders, participated enthusiastically.

During the first ACE meeting, the message from the regulators was clear: regulations around costs, distribution, and tariffs (as initially conceived) may not be ideal for participants, and those participants should have a consolidated voice to ensure market efficiency and broad participation. On the other hand, market participants expressed concerns: that regulated retail tariffs for industrial customers are too low to generate profit once increasing fuel costs (largely a result of peso devaluation) are factored in; that it is important to establish fewer hubs (regulators are currently working with more than 100 nodes); that a netted credit approach to financial transmission rights (FTR) auctions is needed; and that critical market data, like real-time pricing, are essential.

On the retail tariff and consumer front, both regulators and participants pointed to unmet expectations that there would be greater migration away from the regulated tariff (permitted for qualified consumers under the new rules). There was a general feeling that the supply side of the market is developing well, but the demand side is still nascent. Roughly 10% of the total demand could migrate to qualified consumer status by 2018, but the artificially low regulated tariffs mean that only sophisticated consumers who expect ongoing increases in regulated tariffs are taking action.

A surge in consumer migration and increased wholesale demand could come earlier than 2018 if the gasolinazo is any indication of consumer sentiment.

In sum, it is increasingly evident that Mexico is not structurally or financially capable of reverting to the direct and indirect subsidies required by the monopoly-era energy sector, but the timeliness and effectiveness of the new market still hangs in the balance. The reform has just two more years under Peña Nieto and his party, the PRI, to achieve remaining regulatory milestones and fine-tune market mechanisms and transactions.

More Regulatory Milestones Met

Mexico's wholesale market (MEM), and in particular the electricity rulemaking team within SENER, hit several key milestones over the last quarter of 2016, indicating that complete market rules will solidify sooner rather than later. December saw the publications of draft manuals for both the Medium Term and FTR auctions, which are expected to run later this year.

The Medium Term auction is designed to facilitate hedging for basic load service providers (residential and small commercial) as well as other qualified suppliers. Although the product looks more like PJM's basic generation service (BGS) auctions than a standard supply-demand auction, the Medium Term auction should provide much-needed price transparency for shorter-term energy and capacity transactions. The inaugural auction, expected in October, will offer contracts for each or all of the following three years: 2018, 2019, and 2020. Existing generators hope that they will be able to sell energy and capacity at more attractive prices than those cleared in the long-term auctions.

The much-anticipated FTR ("DFT" in Spanish) auction manual is as complex as one could expect for a technical document on FTRs in an emerging market. Highlights of the 100+ page document include revisions to the credit requirement calculations, which effectively drop credit levels for 98% of tradable paths. The draft manual's proposal to run a single-round annual auction has drawn criticism from financial traders as unlikely to result in broad participation. The inaugural FTR auction is expected in November.

In efforts to engage a broad group of market stakeholders, SENER is hosting open workshops on both the Medium Term and FTR auction manuals. In the absence of formal CENACE working groups, these forums are critical for continued market development and demonstrate that regulators value broad-based feedback in finalizing market rules. The Mexico Committee is actively working to participate in and provide feedback during these workshops.

On other fronts, established and potential market participants are awaiting the next round of critical rulings, the most important being the approval of new Basic Service Tariff rates. These are intended to replace legacy tariff structures with more transparent rate constructs, which should reflect the real cost of generation as well as “new world” transmission and distribution cost recovery. They are also expected to further reduce rate subsidies for industrials and serve as a catalyst for load migration to the new deregulated MEM. CENACE, with 39 companies in its queue for ISO certification, plans to host its first-ever Market Participant Meeting in Mexico City this March. Another key development expected in the first quarter of this year is the launch of real-time market pricing. Accomplishing these critical market developments will continue Mexico’s slow but steady transformation into a stable and functional liberalized energy market.