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SPRINGTIME IN THE WEST: ELECTRICITY REGULATORY POLICY REFORMS IN BLOOM?



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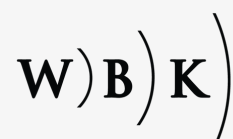


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INTRODUCTION

CONSIDERATIONS FOR REGULATORS

After a period of relative stability regarding how states in the Western United States regulate their electric utilities, recent months have brought a raft of developments showing changing dynamics in how these states may approach the structure of utility regulation in future years.

The West, aside from California, has long been the province of vertically integrated utilities (inclusive of investor-owned, cooperatively-owned and public power utilities) that participate in bilateral wholesale markets (as opposed to organized wholesale markets). (1) Yet the West has seen significant new developments of late, as utilities across the region have taken steps to move in the direction of wider regional wholesale market integration. (2)

While this development is noteworthy, it is perhaps more surprising that a subset of states in the West (and elsewhere) are simultaneously in the process of revisiting the notion of retail rate restructuring. (3) Though a handful of states initiated restructuring approximately 20 years ago, its momentum was stopped in the wake of the California Energy Crisis, and no states have adopted the model in recent years.” (4)

This paper discusses the concept of “competition” in the context of the sales and regulation of electricity in the Western U.S. It approaches the subject by delineating approaches to competition in wholesale markets as distinct from retail markets.

Part I of the paper discusses the wholesale market context and recent developments in the West. Part II describes retail restructuring efforts in the West, noting Nevada and Arizona, two states in which retail competition has been explored recently. This section examines challenges to potential market reforms in Western states, as well as potential ramifications of pursuing these reforms. Part III offers takeaways for regulators and lawmakers throughout the region. By drawing on the experience of other states, this paper concludes that the emergence of various emergent wholesale market structures and other regulatory innovations offer a plausible path towards harnessing competitive forces, while aligning state public policies with customer benefits. Conversely, the experience of retail competition across the U.S. is far less sanguine and seems particularly ill-suited to the Western context.

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1. The electric grid of the contiguous United States is contained within three separate interconnections: the Eastern Interconnection, which includes approximately the eastern two-thirds of the contiguous U.S. (as well as portions of Canada), the Western Interconnection, which includes approximately the western one-third of the contiguous U.S. (as well as portions of Canada), and the Texas Interconnection (also known as the Electric Reliability Council of Texas, or ERCOT), which includes portions of the state of Texas. This paper’s references to the West or the Western U.S. generally equate with the footprint of the Western Interconnection.
 2. As discussed in Part I. below, the California Independent System Operator (“California ISO” or “CAISO”), the regional grid operator for most of the electric grid in the state of California commenced a regional Western Energy Imbalance Market (“EIM”) in 2014 and has continued to expand beyond its California footprint since then, with current and planned participation by utilities and other market participants throughout the Western Interconnection. The Southwest Power Pool (“SPP”) has taken steps to implement a Western Energy Imbalance Services market (“WEIS”) commencing in February 2021. Other initiatives in the West that did not come to fruition include the Mountain West Transmission Group and the then-proposed PJM-Peak Reliability western market.
 3. See, e.g., Changes to Energy Market and Prohibit State-Sanctioned Electric-Generation Monopolies Amendment, Question 3 (Nevada 1998); *In the Matter of Possible Modifications to the Arizona Corporation Commission’s Retail Electric Competition Rules*, Arizona Corporation Commission Docket No. RE-00000A-18-0405; see also Electric utilities; right to shop, HB 868 (Virginia 2020 Session); Electric utility regulation and retail competition; SCC to conduct pilot program, HB 889 (Virginia 2020 session); see also <https://www.koaa.com/news/covering-colorado/colorado-lawmakers-considering-community-choice-utility-model-study>; see also <https://www.ktvh.com/news/2019/02/13/try-electric-utility-deregulation-again-in-montana-dem-lawmaker-says-yes/>; see also <https://www.komu.com/news/missouri-bill-aims-to-deregulate-electricity-market>; see also <https://www.forbes.com/sites/brianmurray/2019/10/11/reforming-the-carolinas-power-markets-producing-a-panacea-or-a-pandoras-box/#13a28de1c5ea>.
 4. Though the concept remains substantially the same, supporters have largely abandoned the phrase “deregulation” in favor of terms like “electricity choice” and “retail access.” For the purposes of this paper, “restructuring” is employed as a relatively neutral term of art.

PART I

WHOLESALE MARKET DEVELOPMENTS

With its 38 balancing authorities, (5) the West has long been one of the most fragmented regions of the country as it relates to the wholesale sales of electricity. (6) Like both the Southeast and most of the Midwest, states in the Western U.S. have predominantly maintained the vertically integrated model of utility regulation. However, the West has maintained some differences relative to these other regions of the country. It is unlike the Midwest, insofar as most utilities in that region participate in organized wholesale day-ahead and real-time energy markets like the Southwest Power Pool (SPP) and the Midcontinent Independent System Operator (MISO). It is also unlike the Southeast, insofar as the West is far more fragmented in terms of geographic dispersion of multiple balancing authority areas across the region.

This situation is in the process of changing, however. The efficiencies that can be gained by the dispatch of generating resources across a larger power pool have caused many Western states to consider the potential benefits of wholesale market integration, as has the growth of intermittent variable energy resources like wind and solar, which are better suited to operating over larger geographic areas (for reasons of both the economies of scale and technical operations).

The most noteworthy of these efforts towards greater wholesale integration and organization has been the implementation of the Western Energy Imbalance Market (“EIM” “Western EIM”) operated by the California Independent System Operator (CAISO). Many of the power providers in the Western United States either already participate or have plans to participate in the EIM for real-time energy.

The CAISO launched the Western EIM in 2014. At the time, it was expected that pooling generation and transmission resources across a larger territory would lead to cost savings and reduced renewable energy generation curtailments. Through the Western EIM, CAISO opened its power market to other entities outside of its ISO territory. The first major non-California entity to join was PacifiCorp, in 2014. PacifiCorp operates across a large service territory in Oregon, Washington, Idaho, Utah, and Wyoming. Thus, when PacifiCorp joined the EIM, the total market area reached across parts of six western states.

Subsequently, the footprint expanded further when NV Energy joined in 2015, Arizona Public Service and Puget Sound Energy joined in 2016, Portland General Electric joined in 2017, Idaho Power and Powerex (a wholly owned subsidiary of BC Hydro) joined in 2018, and the Balancing Authority of Northern California joined in 2019. The growth has not stopped there; several other utilities plan to enter by the end of 2022, and these include Salt River Project, Seattle City Light, Los Angeles Department of Water & Power, Public Service Company of New Mexico, Tucson Electric Power, NorthWestern Energy, and the Bonneville Power Administration (to name a few). As a result, the Western EIM will have a footprint in portions of ten western states and in Canada by the end of 2022.

The non-CAISO entities participate on a voluntary basis. They have chosen to participate in the market to realize several benefits that can be gained from pooling resources across a wide geographic footprint. (7) Of critical importance to the states that have authorized their utilities to participate in the EIM, because the state

5. “A balancing authority is responsible for operating a transmission control area. It matches generation with load and maintains consistent electric frequency of the grid, even during extreme weather conditions or natural disasters.” See <http://www.caiso.com/about/Pages/OurBusiness/The-ISO-grid.aspx>

6. Wholesale sales of electricity are sales in which the purchaser of the power is not the end-use consumer. This is distinct from retail sales. As a general matter, wholesale sales in interstate commerce are subject to the jurisdiction of the Federal Energy Regulatory Commission, whereas retail regulatory jurisdiction is reserved to the states. See 16 U.S.C. § 824(b)(1).

7. Among the suggested benefits: lower costs for consumers, more efficient/reliable management of transmission, and environmental benefits via a reduction in curtailment of renewable resources.

commissions maintain regulatory jurisdiction over their vertically integrated utilities they retain their traditional public policy prerogatives over the resource procurement of the utilities operating in their states, with minimal federal interference.

Without getting into too much technical detail regarding how the EIM operates, the EIM essentially runs a real-time market for power and transmission services to balance supply and demand. It operates a least-cost, security-constrained dispatch, meaning that the lowest cost resources are dispatched first, but only if reliability metrics will also be satisfied. EIM participants schedule their own systems how they traditionally have, and retain balancing authority obligations, but can commit resources -- often surplus renewable resources -- voluntarily to the EIM. The EIM also may provide benefits related to congestion management, system optimization and transmission planning. (8) It is a relatively low-cost, low-risk way for utilities to gain some of the benefits of a broader regional market, while maintaining a greater degree of control over their systems than would be permitted in a fully organized market such as SPP or MISO, where functional control of generator dispatch and transmission operation is more fully ceded to an independent grid operator.

While CAISO's EIM has made the biggest inroads across the West, it is not the only potential such operator. SPP has proposed a similar construct available to interested utilities, under the name, "Western Energy Imbalance Service" (WEIS). (9) SPP intends to implement the WEIS in February 2021 and has gained commitments from at least six utility systems in the West to participate.

While CAISO "classic" (i.e., the independent grid operator for the system-members in California) remains the only fully organized, day-ahead and real-time Western wholesale energy market, time will tell if the energy imbalance markets will signify a "high-water" mark for wholesale markets in the region, or whether they are merely wayside rests on the road to fuller integration.

PART II

RETAIL RESTRUCTURING DEVELOPMENTS IN THE WEST: POTENTIAL CHALLENGES AND CONSEQUENCES

Aside from the status of wholesale market development, a second set of competition-related questions have been discussed in several Western states; namely retail restructuring. Retail restructuring would allow end-use customers the right to choose their electric provider. Nowhere has this debate been more active in recent years than in the neighboring states of Nevada and Arizona.

The following section briefly recaps the debate and ultimate failure of retail restructuring in Nevada, then notes the current ongoing debate in Arizona. This section identifies significant challenges that face any Western states considering retail restructuring, particularly related to the state utilities' need to participate in some form of wholesale market.

SILVER STATE SHOWDOWN

The November 2018 General Election in Nevada featured a hotly contested ballot proposition that would have fully restructured Nevada electricity providers, which would have made Nevada the first state to adopt the model in recent years. The supporters of restructuring -- led by large commercial customers like casinos and data server farms -- ultimately failed after a years-long battle to amend the state's constitution to introduce retail choice and break up the incumbent electric utility. Campaign spending was heavy on both sides -- totaling nearly \$100 million combined. (10)

8. See Bonneville Power Administration, "Energy Imbalance Market," available at <https://www.bpa.gov/Projects/Initiatives/EIM/Pages/Energy-Imbalance-Market.aspx>.

9. See Southwest Power Pool, "Western Energy Imbalance Service Market," available at <https://spp.org/weis>.

10. See Bailey Shulz, "Question 3 energy measure soundly defeated in Nevada," *Las Vegas Review-Journal* (Nov. 6, 2018), available at <https://www.reviewjournal.com/news/politics-and-government/nevada/question-3-energy-measure-soundly-defeated-in-nevada-1521136/>.

THE ARIZONA CONTEXT

Meanwhile, to the south of Nevada, an August 7, 2019, headline from Bloomberg news online declared: “Arizona May Have the Best Chance of Breaking up Power Monopolies.” (11)

The observation is understandable. In most states, the decision to restructure utilities rests in the hands of state legislative bodies, or as in Nevada, through the state initiative/referendum processes. Both legislation and citizen initiatives are notoriously difficult ways to shepherd major policy changes. In Arizona, however, the discussion is being led by a significantly smaller body of officials: the five-member Arizona Corporation Commission.

GETTING FROM HERE TO THERE: CHALLENGES LOOM LARGE IN RESTRUCTURING THE WEST

In exploring the topic, this paper attempts to emphasize practical questions regarding the potential transition to retail restructuring in the West. It mostly leaves for others the heated philosophical debates regarding the pros and cons of utility restructuring and direct retail access vs. the vertically integrated utility model. While well-intentioned people can have honest differences of opinion regarding those questions, for policymakers who are charged with the complex details of such matters, the discussion must go deeper than simplistic (and often cartoonish) depictions of “free markets” vs. “monopolists.”

Rather, this paper explores the known and foreseeable real-world challenges that would confront states across the West should they consider full restructuring. The paper is written with an eye towards walking through the jurisdictional and wholesale market realities that would confront the states. Ultimately, this white paper concludes Western states face hurdles to restructuring that make it more difficult to enact retail choice than in the Eastern U.S. Put succinctly, practical realities confront Western states in ways that make it difficult to see how a restructuring push ends in success.

One of the first challenges to Western states exploring restructuring is the threshold question of how to facilitate a functioning wholesale market. It is no small matter and there are no easy answers.

While organized wholesale markets can coexist with vertically integrated, retail monopoly utilities (as proven by SPP and MISO), it is hard to imagine how effective direct retail access/competition exists without an organized wholesale market. At the very least, it can be said no state that has fully restructured its utilities has done so long-term without operating within some form of organized wholesale market. (12) For retail competition to work, a prerequisite seems to be, at a minimum, a day-ahead energy and real-time wholesale energy market.

So, if beginning with the assumption that utility restructuring would necessitate participation in some kind of organized market, the next question is: what would it look like?

Judging from comments received at recent workshops before the Arizona Corporation Commission regarding retail restructuring, it is clear the State of Texas plays a prominent role as a potential model. (13) Supporters of restructuring have long pointed to the Lone Star State as a restructuring model to be emulated, but there are limitations to utilizing the Texas experiment as a blueprint for other states.

As a first matter, Texas itself isn't really all “Texas” in terms of a restructured, direct retail access regime. When people speak of restructured Texas, they refer only to the ERCOT portion of the state.

11. Millicent Dent, “Arizona May Have the Best Chance of Breaking up Power Monopolies,” *Bloomberg* (Aug. 7, 2019), available at <https://www.bloomberg.com/news/articles/2019-08-07/in-battle-to-break-up-utilities-arizona-steps-to-the-front-line>.

12. Direct retail access carveouts for certain electricity consumers have happened in a handful of non-organized market states, but these programs bear little resemblance to utility restructuring as implemented in parts of the Eastern U.S. and the ERCOT portion of Texas.

13. *In the Matter of Possible Modifications to the Arizona Corporation Commission's Retail Electric Competition Rules*, Arizona Corporation Commission Docket No. RE-00000A-18-0405.

It encompasses most of the geography and load of the state, and most important, is the part of Texas exempt from most FERC regulation, due to its entirely intrastate nature. Put another way, ERCOT is the only place within the contiguous 48 states where the retail regulator and the wholesale regulator are one and the same: The Public Utility Commission of Texas. Everywhere else in the Eastern and Western Interconnections, the retail regulator is the state commission, and the wholesale regulator is FERC. (14)

This jurisdictional separation of powers is more than cosmetic. A state relinquishes significant authority to the federal government when it restructures its utilities. A bundled, state regulated, vertically integrated utility – even one operating within a FERC jurisdictional market (e.g., energy imbalance market) – retains significant authority, or is subject to the relevant state regulatory commission’s oversight, to:

- oversee resource adequacy,
- ensure state policy prerogatives are met,
- diversify its generation portfolio,
- support resources that meet environmental policy goals, and
- direct the development of its future grid.

In contrast, wholesale rates for generators not providing bundled service to retail customers are solely FERC jurisdictional under the Federal Power Act. While the lines between FERC wholesale jurisdiction and state retail jurisdiction have gotten blurrier over time, at the very least, it can be said that once either an RTO or full restructuring is embraced by a state, and the more fully a state restructures its utilities (via retail choice and utility generation divestiture), the weaker its jurisdictional prerogatives relative to FERC. Thus, when the resource preferences of states that have restructured clash with FERC wholesale rate-setting mechanisms, a regulatory morass ensues. (15) The difficulty of many nuclear generators in restructured states, and the struggle to procure renewables without state support, are striking examples of how this dynamic has played out in wholesale markets in the Eastern U.S.

It is worth noting Texas itself seemed to have appreciated this distinction, for the only portion of the state where it moved forward with restructuring was the portion where it retains sole jurisdiction over wholesale and retail markets. As committed as Texas has been to the restructured model inside ERCOT, that commitment has not carried-over to those parts of the state that would, like any state in the West, cede authority to the federal government.

As a second matter, ERCOT has some attributes that are not replicable elsewhere. Its load is massive for a single state ISO, (16) and a sizable portion of it is comprised of the type of large industrial consumers that can modify their demand to adjust to market conditions. Additionally, Texas is geographically blessed in a way few states are. Its vast footprint provides unparalleled local access to some of the nation’s prime natural gas, solar and wind resources. Its authority over the intrastate transmission grid has also enabled it to incent the construction of transmission lines in ways that would be far more difficult in an interstate environment. The availability of this mix of in-state resources and sole jurisdiction enables utilities to implement a wide array of state policy directives from “home grown” resources without the need for imports from other states.

Put simply, Texas’ regulatory jurisdictional structure is one-of-a-kind. Furthermore, its size and access to in-state affordable sources of generation, combined with significant interruptible load, is enviable. While those

14. This does not take into account certain entities that are not subject to FERC or state commission jurisdiction over rates.

15. Eastern markets such as PJM, NYISO and ISO-NE are replete with recent examples of the dysfunctional dynamic between FERC wholesale markets and state “around market” interventions. See *Hughes v. Talen Energy Mktg., LLC*, 136 S. Ct. 1288 (2016); Raymond Gifford and Matthew Larson, *Mandatory Capacity Markets and the Need for Reform* (March 2020) (Wilkinson Barker Knauer), available at <https://www.wbklaw.com/wp-content/uploads/2020/03/Mandatory-Capacity-Markets-and-the-Need-for-Reform.pdf>; Raymond Gifford and Matthew Larson, “Around Market,” “In Market,” and FERC at a Crossroads (May 2018) (Wilkinson Barker Knauer), available at [http://wbklaw-com.securec23.ezhostingserver.com/uploads/file/Articles-%20News/2018%20Articles%20publications/White%20Paper%20-%20Market%20Design%20Issues%20-%20May%202018\).pdf](http://wbklaw-com.securec23.ezhostingserver.com/uploads/file/Articles-%20News/2018%20Articles%20publications/White%20Paper%20-%20Market%20Design%20Issues%20-%20May%202018).pdf).

16. Although the other single-state ISO regions, namely CAISO and NYISO, cover states with large populations (California and New York, respectively), ERCOT’s 2019 peak load was over one-and-a-half times that of CAISO and well over double that of NYISO.

attributes make for an intriguing policy incubator, it also begins to look a lot like the ultimate “one-off” electricity market: interesting as an academic matter, but largely not replicable elsewhere.

Understanding the limits of utilizing Texas and ERCOT as a model for the West, we now turn to the realistic options that lay before Western states should they ponder a potential restructured future.

BEHIND DOOR 1: CREATE A NEW ISO A SINGLE STATE ISO?

One option for a state could be to attempt to facilitate the creation of an Independent System Operator (or “ISO”) that exists only within a single state. Unlike ERCOT however, an ISO in the West would be a FERC jurisdictional entity, which means FERC alone would be responsible for approving the initial (and all future) ISO tariffs, administrative charges and structures. At best, the state could seek to carve out some sort of special intervenor status with regard to ISO proceedings before FERC, but make no mistake, the regulator for an ISO is FERC, not the state(s) whose retail customers are ultimately served by it. Yet any sort of a potential single-state Western ISO could face a significant uphill climb.

As an initial matter, it’s not clear how favorably FERC would view this sort of entity. FERC has adopted certain minimum standards for independence, scope and size. (17) The difficulty for a hypothetical “ISO-Nevada” or “Arizona-ISO,” is that they would be significantly smaller in terms of load and customers served than any other authorized ISO or RTO. (18) Moreover, some states, like Nevada, have only a single utility subject to FERC’s jurisdiction. Questions are likely to arise regarding whether the size of a single Western state, and its associated resources (generation and transmission assets) constitute an acceptably robust market. A fair reading of FERC Order No. 2000 suggests an affirmative answer to those questions is uncertain.

In addition to this threshold question of whether FERC would approve such an entity, there are practical considerations. ISOs and RTOs are not inexpensive propositions. In order for consumers to see the benefit of organized markets, the sunk and overhead costs of the market need to be sufficiently outweighed by the benefits that consumers are provided by the market. In the case of a single state ISO, the costs of the market would be borne solely by that single state’s consumers. The per capita burden would be significantly higher than any other RTO or ISO because the administrative costs of fulfilling the minimum requirements of an ISO would be spread over a significantly smaller base of consumers than in any other ISO. (19) While it is uncertain what the exact costs of would be, it is unquestionable that they would be significant.

It also pays to remember, ISO/RTO membership is voluntary, at least as far as FERC is concerned. The question of how this would play-out in, for example, Arizona, (where the courts have said the ACC lacks authority to order the divestment of utility generation assets) (20) adds a further wrinkle to understanding how a single state ISO could be operationalized.

17. See *Regional Transmission Organizations*, Order No. 2000, 65 Fed. Reg. 809 (Jan. 6, 2000), FERC Stats. & Regs. ¶ 31,089 (2000) (subsequent history omitted).

18. For example, in recent years, ISO-NE’s peak load has been (or forecasted to be) approximately 28,000 to 30,000 MW. By contrast, the combined peak demand for Arizona Public Service Company, Salt River Project, and Tucson Electric Power reached approximately 16,900 MW on June 20, 2017, a record for all three companies. NV Energy reports a peak demand for its (combined northern and southern) system of approximately 7,500 MW.

19. For example, ISO-NE reports that there are 7.2 million retail electricity customers (meters) within its footprint where there is a population of 14.8 million residents. By contrast, Arizona has approximately 3.1 million retail electric customers and a population of approximately 7.2 million residents. In Nevada, which has a population of approximately 3.0 million residents, NV Energy provides approximately 80% of electric service in the state to approximately 1.3 million customers.

20. See *Phelps Dodge Corp. v. Arizona Elec. Power Coop.*, 207 Ariz. 95, 114 (2004), 83 P.3d 873 (Ariz. 2004).

A NEW MULTISTATE WESTERN RTO?

Recent months have seen a flurry of advocacy for the development of a new RTO in the West. (21) While a full analysis of this emerging effort is beyond the scope of this paper (indeed the topic merits further exploration as a subject in its own right), at least a few words should be said about the uphill climb any new West-wide RTO push faces. Put simply, there are reasons why the West has historically proved to be infertile soil for seeding an RTO.

The geography of the West itself raises significant challenges. Much of the value of an RTO is derived by robust transmission interconnections that allow energy to be delivered seamlessly across a footprint. The scale of such RTOs helps improve the efficiency of security constrained joint economic dispatch and alleviate concerns related to market power. But the West, by virtue of major physical barriers (i.e. mountains), permitting challenges (i.e. extensive federal land ownership); and population characteristics (i.e. high load islands surrounded by vast rural spaces) has led to a uniquely Western grid that has been less-than-conducive to regionalization. Practical self-interest suggests additional reasons why RTO formation has been so difficult across the entire region. For example, the Pacific Northwest grid is intertwined with the operations of low-cost federal hydropower and the Bonneville Power Authority's system. It is hard to see that region throwing itself into a broader arrangement lacking Bonneville's participation and assurances that energy costs won't rise in a region of the country that has traditionally enjoyed some of the nation's lowest power costs. (22) Additionally, Western states hold a long-standing skepticism of empowering federal overreach into state energy policy matters, and an RTO would clearly involve ceding a certain amount of authority to the federal bureaucracy.

These sorts of obstacles, both of nature and realpolitik, are not easily resolved, at least in short order. Might a West region-wide RTO eventually develop? It is not completely outside the realm of possibility, but a state looking to restructure its utilities in the near term might not want to count on it happening anytime soon.

A WORD ABOUT CAPACITY MARKETS

As an additional point of consideration, should a theoretical restructured state in the West become a part of either a new single-state or multi-state RTO, the question of a capacity market looms large. While it may be tempting to look at ERCOT as a potential model for an energy-only market, the limitations of the Texas analogy have already been discussed. In any event, it would be FERC, not a state, that would make the determination of whether a capacity market is imposed. Instead, a different state more closely foreshadows what restructured utilities operating in an energy-only market would look like. Without a capacity market, a single Western state that adopts utility restructuring and retail choice would be in a situation roughly akin to downstate Illinois. That portion of the state that lies outside of PJM (where there is a mandatory capacity market) is located within MISO, which has only a barebones residual capacity auction mechanism. This region of MISO has been a chronic source of debate. (23) Investment in generation lags in restructured downstate Illinois, because merchant operators have little financial incentive to put money into resources that may never have a chance to earn an adequate return, and under the restructured regime, the electric distribution utility is not subject to traditional state regulation over resource acquisition. At the same time, existing resources leave (or threaten to leave) the market without state "around market" subsidies. This set of factors was illustrated by Vistra's recent announcement that it would close several Illinois power plants due to what it called the "irreparably dysfunctional MISO market." (24) This sort of experience is the most likely outcome should a single state in the West pursue a path of restructuring within an energy-only market, while surrounded by still vertically integrated states.

21. Chris Hansen and Doug Howe, "The West needs an RTO," *Utility Dive* (Aug. 7, 2020) available at <https://www.utilitydive.com/news/the-west-needs-an-rto/583099/>.

22. A long-held concern of leaders in low-cost energy states (as in the Pacific Northwest) is that joining an RTO will inevitably lead to their energy prices rising to the expanded region's equilibrium. While this may benefit consumers outside the low-cost region, the proposition has often been a non-starter for those who can reasonably expect their average prices to rise.

23. See e.g., *Midcontinent Independent System Operator, Inc.*, Order Rejecting Tariff Filing, 158 FERC ¶ 61,128 (2017).

24. Catherine Morehouse, "Vistra to retire 6.8 GW coal, blaming 'irreparably dysfunctional MISO market,'" *Utility Dive* (Sep. 30, 2020), available at <https://www.utilitydive.com/news/vistra-retire-68-gw-coal-blames-irreparably-dysfunctional-miso-market/586113/>; see also, <https://investor.vistracorp.com/investor-relations/news/press-release-details/2020/Vistra-Accelerates-Pivot-to-Invest-in-Clean-Energy-and-Combat-Climate-Change/default.aspx>

On the other hand, a restructured state with utilities that participate in an RTO with a mandatory capacity market is hardly a panacea either. Recent WBK whitepapers have opined extensively on this topic, so the theses are not repeated here, (25) but capacity markets are currently challenged, to say the least. The recent conflagration regarding the PJM region's Minimum Offer Price Rule is a cautionary tale for states contemplating restructuring. (26) From a state perspective, mandatory capacity markets have often been viewed with, at best, suspicion; at worst, downright hostility. Given the nearly anaphylactic reaction certain PJM states have had regarding FERC capacity market directives, it seems exceedingly unlikely any state – let alone ones in the traditionally independent-minded West – would purposefully invite such federal policy machinations into their state's affairs.

Given all this, a new RTO in the West seems a relatively implausible near-term scenario, but if a new regional market is not in the cards, where does that leave us? Looking around the West, there are not a plethora of operating ISOs to choose from. Ah, yes, well, there is one state in close proximity to some Western states that does have size, scope, scale, and an organized wholesale market. Look further west, young man! This brings us to:

BEHIND DOOR 2: WHAT ABOUT (GULP) . . . CALIFORNIA?

In some ways, CAISO is a natural fit for several Western states. A number of Western utilities are already successfully participating in the Western EIM operated by CAISO. But the administrative bureaucracy of an EIM is to fully organized day-ahead and real-time energy markets, what flag football is to the NFL.

Despite the proximity of CAISO to the rest of the West, the notion of Western utilities being subsumed into CAISO en masse, at least as the ISO is currently configured, seems like an even more far-fetched scenario than a new ISO.

To be blunt, it is California, and this is the West. Putting aside the still-too-fresh memories of California's 2020 summer of rolling blackouts, the early 2000's restructuring debacle and the subsequent Energy Crisis, other states in the West fully realize that within any market where California exists, California is the dog and the other state is the tail. At the same time California is not always entirely comfortable with the rest of the West either, especially as it relates to the different states' varying energy and environmental policy priorities.

CAISO's Governance structure probably precludes CAISO expansion as a practical matter, and it doesn't look like that will be changed any time soon. As Western energy market observers know well, CAISO is governed by a board that is appointed by the Governor of California. That level of direct political intervention into the governance of an ISO all but ensures CAISO will remain California's ISO, since no other state is likely to entrust its energy future to any such entity. Without reform, other Western states' political leaders would be putting the state's energy future in the hands of a board appointed by the Governor of California and regulated by the federal government via FERC. Former Gov. Jerry Brown appears to have recognized that CAISO governance reform was the sine qua non to any attempt at a broader regional market and supported reforms that would make expansion possible. But alas, it did not come to pass, and its prospects seem dim for the foreseeable future. (27)

25. See, e.g. Raymond Gifford and Matthew Larson, Mandatory Capacity Markets and the Need for Reform (March 2020) (Wilkinson Barker Knauer), available at <https://www.wbklaw.com/wp-content/uploads/2020/03/Mandatory-Capacity-Markets-and-the-Need-for-Reform.pdf>; Raymond Gifford and Matthew Larson, "Around Market," "In Market," and FERC at a Crossroads (May 2018) (Wilkinson Barker Knauer), available at <http://wbklaw-com.securec23.ezhostingserver.com/uploads/file/Articles-%20News/2018%20articles%20publications/White%20Paper%20-%20Market%20Design%20Issues%20-%20May%202018}.pdf>.

26. A number of restructured states, unhappy with the generation resources selected by FERC jurisdictional markets, created "around market" subsidies to encourage support for their preferred resources (typically carbon-free resources like new renewables and existing nuclear). Because these actions have distortive effects on FERC wholesale prices, FERC has enacted its own "around market" solution: the "super-MOPR," which administratively sets a price floor for certain generators' offers. For an example of the tension created, see Catherine Morehouse, "State-federal tension at an 'all-time high' between MOPR, net metering attack says head Maryland regulator," Utility Dive (May 22, 2020), available at <https://www.utilitydive.com/news/state-federal-tension-at-an-all-time-high-between-mopr-net-metering-atta/578471/>.

27. See Hudson Sangree, "Western RTO Proponents Vow to Keep Trying," *RTO Insider* (Sep. 9, 2018) available at <https://rtoinsider.com/caiso-regionalization-western-rto-99348/>.

But even if the governance issues were somehow resolved tomorrow, a restructured, direct retail access Western state seems a poor fit with California. CAISO has tremendous challenges, to say the least. Among the most pressing is how to ensure 24/7 resource adequacy given the influx of non-dispatchable intermittent resources that enter and exit the grid throughout the day. (28) One “go-to” mechanism has been to expand the use of out-of-market “reliability must run” (RMR) contracts (29) for generators that are necessary for reliable electricity, but not compensated appropriately in the market. (30) Unfortunately, a “market” with zero or negatively priced energy during portions of the day, and a slew of RMR contracts to ensure service during other parts of the day, isn’t much of a market at all, and it would almost certainly disadvantage merchant generators based in any other restructured Western state. For all its problems, at least California generators have the ability to enter into contracts with California incumbent utilities that are then approved by the California PUC for rate recovery, though as evidenced by the state’s most recent blackouts, this has hardly proved to be a fail-safe way to maintain reliability. Full retail choice should theoretically preclude that sort of out-of-market support for generation investment if the model is to be followed. Merchant generators operating in a fully restructured Western state entering CAISO as an import, would be in an extraordinarily challenging position. Unable to obtain adequate compensation in the markets, such dispatchable generators would either shutdown permanently or seek an out-of-market payments. Such a result would likely negate whatever value the state hoped to achieve through restructuring, while hollowing out generation investment.

PART III

TAKEAWAYS FOR WESTERN REGULATORS AND POLICYMAKERS

CONTEMPLATING A BETTER PATH FORWARD

Vertically integrated states should explore ways to adopt certain aspects of competition that can improve consumer outcomes, while maintaining the positive attributes of the regulated, vertically integrated utility model. There is a reason most states across the country maintain the vertically integrated utility model: it continues to meet customer expectations regarding affordability and reliability; while maintaining the states’ abilities to ensure that future grid goals are met in an orderly fashion. Years spent arguing and litigating over restructuring could result in a lost decade of needed grid investments that might otherwise result from the traditional integrated resource planning process.

Among recommended reforms that should be studied:

- **Understand ways that utility resource selection and resource planning can be conducted in an open, transparent manner.** Explore mechanisms that assure regulators that resources selected are, in fact, the best (or, at the very least, reasonable) resources available at the time the utility is procuring them. Such a mechanism could include things like standards for resource procurement and planning that allow for the opportunity for competition in resource selection, even if within the vertically integrated utility model.
- **Ensure that the state’s utilities plan for a diverse set of resources, while keeping in mind the state’s energy policy priorities.** One of the great strengths of the vertically integrated model is that it can, over time, ensure consumers have a diverse pool of resources that help shield consumers from the inherent price volatility of the restructured, energy-only markets.

28. Tony Clark, “Learning from California’s Blackouts,” *Real Clear Energy* (Sep. 1, 2020), available at https://www.realclearenergy.org/articles/2020/09/01/learning_from_californias_blackouts_576023.html

29. Such contracts are, essentially, an out-of-market, cost of service-type arrangement that ensure that generation units needed for reliability purposes are retained.

30. See *California Independent System Operator Corp., Order Accepting Tariff Revisions*, 168 FERC ¶ 61,199 (2019).

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- **Vertically integrated states can and should study mechanisms to give consumers options within the regulated model.** Customers have varying needs and priorities. The electricity provider of the future, and its regulator, should consider how to provide choices and options to consumers even when served by a vertically integrated utility. Such optionality would take place in the context of tariff revisions that are better aligned with the economic, social and operational demands of consumers. These reforms may be particularly helpful in meeting the needs of larger purchasers of electricity, or for those customers that are interested in specific sources of generation such as renewables. These programs hold the benefit of increasing customer choice and flexibility, while achieving goals with the cost and reliability benefits that come with utility scale investments. One of the benefits of conducting this sort of inquiry within the context of a state regulatory proceeding is that state commissions are well situated to developing the sort of record by which various customer classes can be protected from unfair cross-subsidization or arbitrage.
 - **Get retail rate design right; change tariffs to reflect the electricity market of today, not the one of 30 years ago.** This step is a precursor to any utility grid of the future. Its importance cannot be overemphasized. Under any scenario where there is more power (literally and figuratively) at the edge of the network, states will need to recognize that the grid itself is the most valuable consumer asset that is owned and maintained by the utility. Retail rates have to be designed in such a way that the value of the grid is reflected in the rates customers pay. One way of approaching the issue is through properly structured “decoupling” mechanisms; another is to better align fixed grid charges with fixed network costs. Variable costs should largely be assigned to variable charges. It is an old regulatory concept, but it is a sound one: cost causers should be cost payers. Implicit subsidies between rate classes need to be minimized. Without such reforms, the grid of the future will be characterized by poor consumer outcomes and a distorted retail electricity market, regardless of whether a state maintains traditional regulation of its utilities or moves to retail restructuring.
 - **Study “emergent wholesale market” models that could optimize the benefits consumers realize from broader regional markets by learning from success stories (and pitfalls) in other market contexts.** The growth of renewable energy across the West has helped make the case for such broader markets stronger. The benefits of scale and larger geographical footprints seem well-established. The Western EIM is an example of a market structure that has grown somewhat organically to meet the unique needs of the West. The model is proving that a utility can employ aspects of competition to derive consumer benefit, without adopting full restructuring and retail access, and without a state relinquishing more authority to the federal government than it wishes. Policy makers would be well-served by approaching wholesale market development through a “bottom-up” process; take a no-regrets path that adopts what works and rejects what doesn’t. They may find that the benefits of broader markets – such as joint dispatch, reserve sharing, or trading of excess intermittent energy – can be done through relatively nimble “emergent market” structures such as energy imbalance markets (potentially with enhancements like the “extended day-ahead market), or the recently proposed Southeast Energy Exchange Market in the Southeast U.S., as opposed to “prescribed markets” typified by the more administratively byzantine Eastern capacity markets. (31) In whatever form they take, commissions should expect their regulated utilities to weigh the costs and benefits of broader regional markets. When, and only when, the numbers make sense for consumers, should regulators proceed, but with an eye towards minimizing the administrative costs and potential jurisdictional disputes that come with various market structures – balanced against the consumer benefit derived from their respective designs.

31. Tony Clark, Ray Gifford and Matt Larson, “It’s time for emergent markets to take center stage in non-RTO regions of the country,” *Utility Dive* (July 27, 2020) available at <https://www.utilitydive.com/news/its-time-for-emergent-markets-to-take-center-stage-in-non-rto-regions-of-t/582228/>

ASSESSING RETAIL RESTRUCTURING

The thrust of this whitepaper is a practical one. It is anchored in the belief that the West, for reasons of situation, regional geography and jurisdiction, is in a *suboptimal* position from which to launch a full-scale restructuring of its utilities.

Beyond these practical locational challenges, lessons should be learned from states outside the West that have restructured, and these lessons counsel caution regarding retail rate restructuring.

The bulk of utility retail restructuring took place from the mid 1990's through the early 2000's. Roughly 15 jurisdictions chose to restructure. Not surprisingly, those that did were usually the states with the most expensive electricity costs, and they were looking for a solution to their chronically high electricity bills.

Since that initial group of states deregulated however, few, if any, have followed their path. States that tended to be the highest cost states before deregulation are still typically the highest cost states after deregulation. (32)

To the degree there has been price relief in any state in recent years, it has likely had more to do with access to affordable natural gas than utility restructuring. In addition, since the states that restructured were, by and large, high-cost states, in an era of low and declining priced natural gas, as a function of mathematics, their electricity rates were likely to drop by a greater percentage than other states. They simply started from a much higher baseline. But for consumers, the relevant statistic is not percentage declines or increases; for that is simply a measure of volatility tied to natural gas prices. The salient question is: does restructuring result in lower prices for consumers? A growing body of research suggests the answer is no. (33)

The trajectory of deregulation has been remarkably similar where tried. (34) Some states have explicitly rejected it, such as Montana, where upon its repeal, the state's governor called it "an unmitigated disaster.". (35) Other states, like Maryland, New Jersey, Massachusetts, Illinois, Ohio and others have gone down the path of tacitly rejecting it by creating subsidies and regulatory mechanisms to select their preferred resources the "markets" aren't delivering; the net effect of which is to undercut the functioning of the wholesale markets themselves.

Perhaps as disquieting is the customer experience in deregulated states. Consumer advocates and attorneys general report ongoing problems with retail energy marketers engaging in deceptive consumer practices. A number of companies have been subject to multi-million-dollar fines for consumer protection violations. (36) Several studies have confirmed that residential customers would have been better off simply staying with their traditional utility rather than switching to alternative providers. (37) In Connecticut and Massachusetts public officials have gone so far as to call for the end of the third-party residential electricity supply market. (38)

32. See Retail Electric Rates in Deregulated and Regulated States, available at

https://www.publicpower.org/system/files/documents/2019%20%282018%20data%29%20Retail%20Electric%20Rates_final.pdf

33. Rose, Kenneth and Taruffelli, Brittany and Upton, Gregory, Electricity Market Restructuring and Retail Rates (July 26, 2020), USAEE Working Paper No. 20-462, Available at SSRN: <https://ssrn.com/abstract=3660974> or <http://dx.doi.org/10.2139/ssrn.3660974>.

34. Setting aside Texas, which as previously noted, has unique characteristics.

35. See Electric Utility Industry Generation Reintegration Act, 2007 Mont. Laws 2197, (Schweitzer signing statement, May 14, 2007), available at

https://leg.mt.gov/content/committees/interim/2007_2008/energy_telecom/assigned_studies/hb25page/hb25signstatement.pdf. The Electric Utility Industry Generation Reintegration Act is codified at Mont. Code § 69-8-101, *et seq.*

36. See, <https://energycentral.com/news/state-utilities-commission-recommends-102-million-fine-against-indra-energy>; see also <http://www.capecodtoday.com/article/2019/11/15/250075-Door-Door-Marketer-Electric-Suppliers-Agrees-Stop-Sales-Massachusetts>; see also <https://www.courant.com/business/hc-biz-electric-suppliers-20190227-luee7vi4frhv3g4nkilxr2dy4q-story.html>.

37. See, e.g., U.S. Energy Information Administration, *Participation in electricity customer choice programs has remained unchanged since 2013*, Nov. 1, 2019, <https://www.eia.gov/todayinenergy/detail.php?id=41853> ("In general, residential customers have paid more per kilowatt-hour through competitive suppliers than noncompetitive suppliers, but commercial and industrial customers have paid less."); Elisabeth Leamy, "Should you switch electricity suppliers? Maybe – but do your homework first," *Washington Post* (June 12, 2018), available at https://www.washingtonpost.com/lifestyle/home/should-you-switch-electricity-suppliers-maybe--but-do-your-homework-first/2018/06/11/d0493df8-683a-11e8-9e38-24e693b38637_story.html; see also https://www.citizensutilityboard.org/wp-content/uploads/2020/07/20200812_SupplierLosses.pdf.

38. See Stephen Singer, "Consumer Advocates, saying regulations have failed, seek to shut residential electric supply market," *Hartford Courant* (Feb. 6, 2019), available at <https://www.courant.com/business/hc-biz-third-party-electric-supply-market-ban-20190206-xcm535jpfhazgsgn54qujuy-story.html>; Competitive Electric Supply, Office of Massachusetts Attorney General Maura Healey (2019), <https://www.mass.gov/competitive-electric-supply>.

Given the aforementioned, before any state moves forward with retail restructuring, it should, at a minimum, ask:

1. Why are so many states that restructured either in the process of tacitly rejecting it – or have already repealed it? Are we convinced our state will stick with the restructured model, or is it likely policymakers will still attempt to pick and choose the generation resource mix after restructuring?
2. Is our state comfortable giving up significant authority over generation decisions to a federal government that may not share our policy prerogatives? That is to say, are we comfortable sacrificing things like nuclear generation, diverse generation portfolios, or resources that provide local jobs and tax benefits for state residents, or portfolios that emphasize carbon-free resources, or state resource adequacy requirements in favor of federally jurisdictional wholesale markets that may not deliver on our state's energy goals?
3. Do we have consumer protections that are adequate to address the concerns that have been raised in existing retail choice states?

ANALYZING RESTRUCTURING BY OTHER MEANS

In a handful of states, proponents of utility deregulation have pushed for a version of “restructuring light” whereby off-ramps are created to allow certain groups and classes of customers the option to leave parts the vertically integrated utility based on various factors. Such endeavors need to be approached with extreme caution for they may result in a sort of haphazard de facto restructuring, that neglects important matters that would otherwise be addressed through more straight-forward restructuring. The result can be a particularly pernicious form of restructuring by other means, which ultimately harms the most vulnerable consumers the most. Community Choice Aggregation (39) (CCA) is one variety of “restructuring light” which would need to be approached with extensive regulatory due diligence, as are state law loopholes whereby the most financially lucrative customers are permitted to use their buying power to shop for deals outside the vertically regulated environment.

Whatever the practical problems with straightforward restructuring, at least it can be said that it is a transparent effort to break up the vertically integrated nature of the traditional utility. “Restructuring light” can ultimately wreak more public policy damage, but it does so through circuitous means. Poorly structured, these loopholes create a vicious cycle in which the economics of the regulated utility model are destroyed from within, to the detriment of average customers. It is not hard to understand how it happens. Regulated utilities are given the responsibility to serve an entire franchised geographic area. Their profits are regulated, and they have a duty to serve all customers, regardless of how large or profitable a customer they are. Within the “regulatory compact,” they incur both the obligations and privileges of regulation.

However, if the easiest to serve, most profitable customers can be cherry-picked by energy providers that have no duty to serve a broader group of customers, the legacy costs that were incurred to serve the entire service territory still exist. The customers that remain on the system will then see rates increase as those costs are spread across the smaller group of customers. This further encourages more cherry-picking, ultimately leaving only the hardest to serve and least profitable customers footing the bill for the legacy utility network. The largest customers, and merchant power providers, who do not have a responsibility to the broader public interest, or to serve customers they do not wish to serve, will be fine under this sort of public policy. It is others who would be worse off, such as residential customers, especially those who live in more rural areas. If considered at all, any such effort must be conducted with extreme regulatory caution and oversight, such that all customer classes are financially protected from changes made to benefit a select few. Responsibility for resource adequacy would need to be clearly defined so that

39. See <https://www.epa.gov/greenpower/community-choice-aggregation>. “Community choice aggregation (CCA), also known as municipal aggregation, are programs that allow local governments to procure power on behalf of their residents, businesses, and municipal accounts from an alternative supplier while still receiving transmission and distribution service from their existing utility provider.”

reliability is maintained, and stranded costs must be appropriately accounted for so that departing “self-supply” customers pay their fair share of sunk legacy costs that were spent for their benefit under traditional cost of service principles.

CONCLUSION

“It is just different in the West,” is a mantra that has been uttered countless times at utility regulatory conferences throughout the years. And indeed, it is different in the West. But Western states’ long held “differentness” is something that can be used as an advantage as they explore how to position their states energy policies for the benefit of consumers. Western states have the luxury of learning the lessons of the last 25 years of utility policy experiments in the United States. By “going to school” on what has worked, and what has not, state officials can hope to avoid mistakes of the past and in other parts of the country. Certain wholesale emergent market mechanisms are examples of initiatives that regulators can and should explore. At the other end of the spectrum, the successes of full-scale restructuring are so underwhelming relative to the risks, it cannot be recommended as a path forward. By adopting some of the former approaches, and rejecting the latter, Western states may be able to fashion for themselves a happy medium, where they leverage the advantages and efficiencies of bottom-up market mechanisms, without incurring the well-established pitfalls of full restructuring.