

Testimony of Tony Clark
Senior Advisor, Wilkinson Barker Knauer, LLP
Before the Committee on Energy and Commerce Subcommittee on Energy
United States House of Representatives
May 10, 2018

Chairman Upton, Ranking Member Rush and members of the committee, my name is Tony Clark. I am a senior advisor at the law firm of Wilkinson Barker Knauer LLP, which has offices in Denver, CO and Washington, DC. From 2012 until 2016, I served as a Commissioner of the Federal Energy Regulatory Commission. Prior to that, I served nearly 12 years as a state utility regulator in my home State of North Dakota. During my tenure as a state commissioner, I had the honor of completing a term as President of the National Association of Regulatory Utility Commissioners.

My testimony today centers on a recent white paper I authored entitled “Order No. 1000 at the Crossroads.” It contains my reflections on the Order, its history and its status, now close to seven years after its adoption. I have attached the paper as an appendix to my testimony.

Given my career background, which straddles both sides of the state-federal jurisdictional divide in energy policy, I have long been interested in the topic of electricity transmission policy. This is especially true coming from a region of the country which is rich in energy resources, but geographically distant to the nation’s major load centers.

By way of background, I would note that Order No. 1000 was promulgated shortly before I joined FERC, so while I did not participate in its drafting, I did have the opportunity to be involved with the many compliance filings that resulted in its wake.

The main thesis of my paper is that however well-intentioned the Order, in practice today, it is falling short of its goals. I suggest that with the passage of the better part of a decade since its adoption, now is an appropriate time for FERC to engage in a meaningful assessment of Order No. 1000. The paper concludes that one of the paradoxical results of the rule has been that major transmission projects of the kind that many thought the Order would spur came out of a pre-Order No. 1000 world. Meanwhile, the post-Order No. 1000 timeframe has been marked by bureaucracy, but few tangible projects or empirical data to indicate success for the Order. The paper concludes that FERC should better tailor the rule, especially recognizing the significant regional differences across the utility industry. Put succinctly, we may today find ourselves in the position of having a rule that entails significant compliance costs but without attendant benefits.

I surmise that part of this is the result of the lack of clear focus in the Order itself. Order No. 1000 never fully reconciled the tensions between its numerous goals. Some goals, like increasing transmission planning and investment for remote sources of generation, can conflict with other goals, like competitive developer reforms. Similarly, the Order's public policy goals may be inherently contradictory in the face of conflicting state public policies, including those policies that may discourage the building of transmission.

It is perhaps ironic that many of the most impactful transmission projects (such as the MISO "Multi Value Projects) arose from a pre-Order No. 1000 world. I suggest that the reason for this is multifold:

- Regions, especially those that are still served by vertically integrated utilities, were already doing a fair amount of regional planning before the order. For these regions,

Order No. 1000 replaced this collaborative, bottoms-up approach to transmission planning with a complex bureaucracy, where the name of the game is completing a compliance checklist that may not actually result in transmission development.

- Creating a federal mandate on top of what was previously happening within many regions has added time, complexity and litigation to transmission development.
- The electricity landscape has changed dramatically in terms of resources, technology and state policies that drive transmission decisions. Order No. 1000 was written in a post-Energy Policy Act of 2005 world that may not have yet fully appreciated the impact of things like low-cost natural gas, a proliferation of state public policies that support generation outside of traditional markets, flattening demand growth, and increasing levels of distributed energy resource penetration.
- Certain implementation decisions, such as cost allocation policies, have altered transmission development models that were previously broadly accepted within regions.

In short, even amongst those who are broadly supportive of the original Order, there is a widespread sense that Order No. 1000 is underwhelming in terms of producing results commensurate with its costs.

In light of this, I argue that it is appropriate for policy makers to consider Order No. 1000's future given its track record.

My paper encourages industry conversations about ways that Order No. 1000 could be streamlined across the board. While regional planning conversations may result in some

benefits, there may be ways to keep those benefits without imposing the more prescriptive aspects of the order. This is especially true in the majority of all states where utilities continue to serve as vertically integrated monopolies. Furthermore, while my paper highlights that there may still be a philosophical rationale for Order No. 1000 in restructured regions of the country, I do note that even there, the implementation of the Order has raised concerns, which suggests a review in these regions is merited also.

Moving beyond Order No. 1000, I would offer that I believe there are a number of regulatory policy calls that will be made in the near future that will have a big impact on how and whether transmission infrastructure will be developed.

FERC has significant decisions ahead of it related to transmission returns on equity for federal jurisdictional rates. In addition, issues related to transmission incentives may be ripe for a review at the Commission, as are discussions about how to best utilize regulatory tools such as Construction Work in Progress (CWIP).

Finally, transmission development continues to be a difficult endeavor at many levels of government. Siting and permitting of any energy infrastructure is complex and controversial – and transmission lines have long been amongst the most challenging of these projects. While some attempts to streamline transmission siting have been made in recent years, bringing projects to fruition is still among the most difficult undertakings of energy delivery companies.

Thank you for the invitation to be with you today. I look forward to answering any questions you may have.

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My testimony today centers on a recent white paper I authored entitled “Order No. 1000 at the Crossroads.” The primary conclusion of the paper is that the bureaucratic requirements of Order No. 1000 outweigh its benefits, and it should be reconsidered, especially in regions of the country with vertically integrated utilities.

It is perhaps ironic that many of the most impactful transmission projects arose from a pre-Order No. 1000 world. I suggest that the reason for this is multifold:

- Regions, especially those that are still served by vertically integrated utilities, were already doing a fair amount of regional planning before the order. For these regions, Order No. 1000 replaced this collaborative, bottoms-up approach to transmission planning with a complex bureaucracy, where the name of the game is completing a compliance checklist that may not actually result in transmission development.
- Creating a federal mandate on top of what was previously happening within many regions has added time, complexity and litigation to transmission development.
- The electricity landscape has changed dramatically in terms of resources, technology and state policies that drive transmission decisions. Order No. 1000 was written in a post-EPACT 2005 world that may not have yet fully appreciated the impact of things like low-cost natural gas, a proliferation of state public policies that support generation outside of traditional markets, flattening demand growth, and increasing levels of distributed energy resource penetration.
- Certain implementation decisions, such as cost allocation policies have altered transmission development models that were previously broadly accepted within regions.
- The order lacked a clear focus, and Order No. 1000 never fully reconciled the tensions between its numerous, sometimes conflicting, goals.

In short, even amongst those who are broadly supportive of the original order, there is a widespread sense that that Order No. 1000 is underwhelming in terms of producing results commensurate with its costs.

Order No. 1000 at the
Crossroads: Reflections on the Rule and Its
Future



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With thanks to my colleagues Michael Keegan and Robin Lunt.

I. Overview

With the passage of the better part of a decade since its adoption, now is an appropriate time for the Federal Energy Regulatory Commission (FERC) to engage in a meaningful assessment of Order No. 1000. This paper concludes that one of the paradoxical results of the rule has been that major transmission projects of the kind that many thought the order would spur came out of a pre-Order No. 1000 world. Meanwhile, the post-Order No. 1000 timeframe has been marked by bureaucracy, but few tangible projects. The paper concludes that FERC should better tailor the rule to certain predominantly restructured regions of the country while substantially unburdening those regions for whom the compliance regime seems to have quickly reached a point of diminishing returns.

II. Introduction

If the success of a rule promulgated by FERC is measured solely by the amount of industry discussion and trade press coverage, then FERC Order No. 1000 has a rightful place in the pantheon of great Commission rulings. Yet today, few who follow the electricity industry would argue that Order No. 1000 comes close to having successfully achieved its stated goals in a fashion similar to previous FERC reforms like the unbundling of electric transmission or pipeline transportation. Put plainly, Order No. 1000, you're no 888 or 636.

Why has Order No. 1000 in practice never matched its hype? Why is it that many of the biggest regional transmission buildouts, the type of projects that Order No. 1000 purportedly encouraged, happened prior to Order No. 1000, while the period since its promulgation has seen relatively little transmission development? In short, even its biggest proponents must agree that Order No. 1000 somehow missed the mark, or concede that at best, its impact has been underwhelming. And with the benefit of hindsight, what lessons have we learned? That is the focus of this White Paper.

Order No. 1000... imposes bureaucratic planning requirements on the national transmission system, largely without considering that each region's needs, priorities, and processes are different.

After laying out the background of Order No. 1000 and discussing the myriad of goals that the rule was meant to support, this paper identifies one of the major pitfalls of the rule: it imposes bureaucratic planning requirements on the national transmission system,¹ largely without considering that each region's needs, priorities, and processes are different. After reviewing some of the significant differences that exist between the regions and the changes that have occurred in the electric industry since the rule was promulgated, I ask, "Where are we and where do we go from here?"

¹ Of course, Order No. 1000 is only applicable to the extent of FERC's jurisdiction over the transmission of electric energy in interstate commerce.

III. FERC Order No. 1000 Background

FERC aficionados can feel free to skip this section, but in the interest of thoroughness, I provide the basics of Order No. 1000. FERC's own website offers a concise overview of the 620 page order, its background and features of the rule. Rather than reinventing a summary, FERC's explanation is provided in its own words:

Order No. 1000 is a Final Rule that reforms the Commission's electric transmission planning and cost allocation requirements for public utility transmission providers. The rule builds on the reforms of Order No. 890 and corrects remaining deficiencies with respect to transmission planning processes and cost allocation methods.

Background

On June 17, 2010, FERC issued a Notice of Proposed Rulemaking seeking comment on potential changes to its transmission planning and cost allocation requirements. Industry participants and other stakeholders provided extensive comment in response to the Notice of Proposed Rulemaking. The Commission received more than 180 initial comments and more than 65 reply comments.

Planning Reforms

The rule establishes three requirements for transmission planning:

Each public utility transmission provider must participate in a regional transmission planning process that satisfies the transmission planning principles of Order No. 890 and produces a regional transmission plan.

Local and regional transmission planning processes must consider transmission needs driven by public policy requirements established by state or federal laws or regulations. Each public utility transmission provider must establish procedures to identify transmission needs driven by public policy requirements and evaluate proposed solutions to those transmission needs.

Public utility transmission providers in each pair of neighboring transmission planning regions must coordinate to determine if there are more efficient or cost-effective solutions to their mutual transmission needs.

Cost Allocation Reforms

The rule establishes three requirements for transmission cost allocation:

Each public utility transmission provider must participate in a regional transmission planning process that has a regional cost allocation method for new transmission facilities selected in the

regional transmission plan for purposes of cost allocation. The method must satisfy six regional cost allocation principles.

Public utility transmission providers in neighboring transmission planning regions must have a common interregional cost allocation method for new interregional transmission facilities that the regions determine to be efficient or cost-effective. The method must satisfy six similar interregional cost allocation principles.

Participant-funding of new transmission facilities is permitted, but is not allowed as the regional or interregional cost allocation method.

Nonincumbent Developer Reforms

Public utility transmission providers must remove from Commission-approved tariffs and agreements a federal right of first refusal for a transmission facility selected in a regional transmission plan for purposes of cost allocation, subject to four limitations:

This does not apply to a transmission facility that is not selected in a regional transmission plan for purposes of cost allocation.

This allows, but does not require, public utility transmission providers in a transmission planning region to use competitive bidding to solicit transmission projects or project developers.

Nothing in this requirement affects state or local laws or regulations regarding the construction of transmission facilities, including but not limited to authority over siting or permitting of transmission facilities.

The rule recognizes that incumbent transmission providers may rely on regional transmission facilities to satisfy their reliability needs or service obligations. The rule requires each public utility transmission provider to amend its tariff to require reevaluation of the regional transmission plan to determine if delays in the development of a transmission facility require evaluation of alternative solutions, including those proposed by the incumbent, to ensure incumbent transmission providers can meet reliability needs or service obligations.

Compliance

Order No. 1000 takes effect 60 days from publication in the Federal Register.

Each public utility transmission provider is required to make a compliance filing with the Commission within 12 months of the effective date of the Final Rule.

Compliance filings for interregional transmission coordination and interregional cost allocation are required within 18 months of the effective date.²

² “Order No. 1000 – Transmission Planning and Cost Allocation,” FERC, accessed Mar. 24, 2018, <https://www.ferc.gov/industries/electric/indus-act/trans-plan.asp>.

A reader unfamiliar with much of the history and contemporary practice of the electric utility industry would be forgiven if, after reading this summary, s/he responded with a shrug. On its surface, it really doesn't look like much more than:

- transmission regions (including independent system operators (ISOs) and regional transmission organizations (RTOs)) should be talking amongst themselves and with each other to rationally plan the electric grid;
- regions should figure out how to pay for transmission; and
- there should be an opportunity for non-incumbent utilities to build transmission.

While the preceding description of the rule is accurate, as far as it goes, a 50,000 foot explanation of Order No. 1000 understates the more robust list of motivations that inspired it. Frankly, if those three points were all that Order No.1000 sought to accomplish, one might think it could be done with something less than the thousands of pages of regulations that comprise Order Nos. 1000, 1000-A, 1000-B and the numerous subsequent regional compliance Orders. To better understand the policy environment that gave us the rule and its numerous subsequent compliance filings, a little more color commentary is needed. It helps explain why nearly seven years after the rule was adopted, multiple industry observers wonder why something seems amiss.

IV. The Many Goals of Order No. 1000

Depending on the audience and the person or group discussing the goals of the rule, the benefits of Order No. 1000 might variously be purported to be:

- The rule is designed to support state or federal “public policy requirements” in electricity. It should be acknowledged that, however

However nebulous the term “public policy requirements” in reality it was often code for “supporting renewables.”

nebulous the term, “public policy requirements,” in reality, it was often code for “supporting renewables.” It would be difficult, however, for FERC to just come out and say, “Order 1000 is promulgated to support politically advantaged renewables.” The Federal Power Act does not work like that, and FERC would have been called on the carpet in the courts had it tried it. Nonetheless, the state public policy considerations referenced in Order No. 1000 were clearly aimed at expanding transmission to support things like state renewable portfolio mandates, not expanding

opportunities for coal, nuclear or natural gas powered resources. Order 1000 envisioned the building of big, interregional projects, or energy superhighways stretching from geographically distant, but renewable rich, areas to the nation's load centers. Even more amorphous is the notion of “federal public policy requirements.” In the context of 2010, it would be reasonable to assume FERC might have written this in anticipation of the Obama Administration's imposing of a theretofore unstated national energy policy; in all likelihood driven by carbon emissions constraints. But that never came to pass and if the nation has a coherent, stated national energy policy that lasts beyond the predilections of any given presidential administration, it would be hard to identify it.

- The rule is designed to break down the silos between utilities and amongst regions of the country. In many ways, this argument was part and parcel of the one preceding it. For example, many felt that FERC needed to facilitate the delivery of wind-generated energy from places like the sparsely-populated, wind-rich Upper Midwest and Great Plains regions (located in the MISO and SPP regional transmission organizations), to the Mid-Atlantic and Midwestern population centers located in the PJM Interconnection. To the degree silos needed to be broken down, it was because states and regions were looking to realize the benefit of moving power (presumably renewables) across broader geographic regions, or so the argument went.
- The rule is designed to increase competition in the transmission industry. By eliminating a federal right of first refusal for incumbent transmission providers to construct proposed transmission projects and requiring regions to have a formal planning (and often a competitive bidding) process for transmission projects, competition in transmission development would rule and consumers could benefit commensurately.
- The rule is designed to help overcome the inherent tension between generation and transmission. This argument was particularly salient in restructured regions of the country where an incumbent merchant generator might have self-interested reasons to maintain the price separation available to a generator in an area with transmission congestion.

In sum, if the following questions were asked of FERC:

“Is the main purpose of Order No. 1000 to get more transmission investment or is it to increase competition in the transmission business? OR, is Order No. 1000 designed to overcome the potential self-interest of generators or is it to promote renewable generators? OR, is it designed to support individual state public policies or is it a federal initiative to increase regional planning conducted by the RTOs rather than by the individual state regulated utilities themselves?”

The answer would seem to be an unequivocal “YES!”

Therein lay some of the unresolved tensions within Order No. 1000 which differentiates it from prior FERC orders like 888 and 636. While, like Order No. 1000, Order Nos. 888 and 636 entailed hard regulatory choices, stakeholder arguments and numerous complicated proceedings to implement them, FERC itself seemed to be pulling industry toward a fairly clear goal of what was to be accomplished under each of these seminal Orders.

Such clarity and single-minded purpose escapes the grasp of Order No. 1000. The Rule is held in the eye of the beholder. If you like supporting state or federal public policy requirements

If you like supporting state or federal public policy requirements (whatever they are or whatever divergent goals they might hold), competition, renewables, greater planning, articulated cost allocation principles, decreasing the power of incumbent generators; then you are in luck, because Order No. 1000 has a process for you!

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V. Implementing Changes Nationally without Fully Appreciating Regional Differences

Not only does Order No 1000's lack of focus create internal tensions within the rule itself, but these tensions are then superimposed on an electric industry that is highly regional in polity and practice; and these are factors that Order No. 1000 has little ability to accommodate; though through its implementation, it does its best to avoid acknowledging this reality.³

A. Order No. 1000 in Regions with Vertically Integrated States in Traditional Bilateral Markets

One of my own "lightbulb" moments as it related to this issue was in contemplating how little sense the full Order No. 1000 compliance regime made in a state like Florida. I hope readers will pardon me if I quote from my own separate statement attached to the 2013 Florida compliance order:

... this filing raises in my mind certain broader concerns regarding the general direction Order No. 1000 takes us in relation to

non-market, non-RTO/ISO regions. As I have previously written, there is much I can find worth supporting in Order No. 1000 and some of the subsequent compliance filings. Facilitating cost-effective transmission solutions, encouraging regional planning to meet customer needs and ensuring fair cost allocation are worthy endeavors. Greater standardization of those efforts would seem to hold a good deal of potential, especially in

those regions of the country that have already voluntarily organized themselves into functioning RTOs and ISOs. But Order No. 1000 may not fit quite as well in certain regions of the country. Florida is a prime example.

Order No. 1000 seeks to ensure that transmission projects are planned in a cost-effective manner and in such a way that public policy goals are met. In highly integrated regions, where there is

I cannot help but ask if the bureaucracy imposed by Order No. 1000 may outweigh the benefits to be gained.

³ In the spirit of full disclosure, this has long been a topic about which I have expressed a degree of concern. While I was not a member of FERC when Orders Nos. 1000 and 1000-A were adopted (and was recused from Order No. 1000-B), I did have the opportunity to review and vote on the many regional compliance orders that were filed during my term on the Commission (2012-2016). While individual regions had some degree of flexibility to tailor their compliance filings, that flexibility often seemed to me a bit illusory.

central dispatching, locational marginal pricing, and numerous state public policies that support geographically remote sources of generation, Order No. 1000 seems a reasonable effort to ensure just outcomes.

But in a region like Florida, I cannot help but ask if the bureaucracy imposed by Order No. 1000 may outweigh the benefits to be gained.

The FERC jurisdictional utilities that serve Florida are vertically-integrated, monopoly utilities whose planning and operations are comprehensively regulated by the State of Florida. Integrated resource planning and facility siting, as approved by the state, ensures that generation and transmission decisions are viewed and approved holistically. The Florida utilities' integration with the rest of the greater southeast region is limited physically due to Florida's unique geography. There is no central dispatching entity and no LMPs to reflect local congestion. Florida utilities have exercised their right to retain control of their transmission by not choosing to join an RTO/ISO. The Florida Parties state that there are no identified public policy requirements driving regional transmission needs. Thus, in large part, the rationale for Order No. 1000 is lacking in Florida.

Therefore, I am not entirely sure what is accomplished by Order No. 1000 in such a region. On one hand, since a good deal of integrated resource planning is already happening, there is a chance the real net effect of these changes will fall somewhere between minimally and modestly beneficial. But I fear by shoehorning Order No. 1000 into a region with existing and extensive state-led planning, we could risk the creation of an expensive, potentially litigious, and time-consuming additional layer of unnecessary bureaucracy. If this happens, the counter-productive result will not be more cost-effective and timely built transmission, but less.⁴

At the risk of appearing self-congratulatory, these concerns from 2013 have been largely realized in the non-RTO, bilateral market regions of the country.⁵ Though I am unaware of a comprehensive study of the total costs of Order No. 1000 implementation, if anecdotal discussions with industry participants are any guide, initial and ongoing compliance expenses are greater than immaterial.

One would be hard pressed to point to concrete Order No. 1000 successes in bilateral market regions of the country.

As to the benefits, one would be hard pressed

⁴ *Tampa Elec. Co., et al.*, 143 FERC ¶ 61,254 (2013) (Clark, Comm'r, concurring).

⁵ For purposes of the white paper I use the terms like bilateral market regions, and non-RTO, non-organized market regions to differentiate them from those regions of the country that operate within FERC jurisdictional, organized, centrally-dispatched energy markets such as those served by SPP, CAISO, MISO, PJM, ISO-New England and the New York-ISO.

to point to concrete Order No. 1000 successes in these bilateral market regions of the country. No doubt some good has come from the mandate that regions do a more systematic job of planning and determining cost allocation principles, but one would struggle to pinpoint major accomplishments that were not already being achieved through the traditional state-led regulatory processes that oversee the vertically integrated utilities that exist in these bilateral market regions of the country.

To once again juxtapose Order Nos. 888 and 636, one of the reasons those rules have had greater impact and staying power was that FERC focused its reforms on areas in which its regulatory jurisdiction was more comprehensive—the terms and conditions of interstate electric transmission and natural gas transportation service. In contrast, Order No. 1000 occupies that blurry space at the intersection of state and federal policy. While FERC has undisputed authority over wholesale electric rates and over rate setting and cost allocation for interstate transmission service, Order No. 1000 closely intersects with areas that are just as clearly within state jurisdiction: integrated resource planning, resource adequacy, transmission certification and siting, not to mention state public policy goals that promote various forms of energy generation. Given all that, it is little wonder the impact of Order No. 1000 on actual transmission planning and construction has proved most ineffectual in those regions of the country where states have maintained the greatest degree of regulatory authority.

B. Order No. 1000 in Regions with Vertically Integrated Utilities in Organized Markets

The foregoing discussion is not to suggest that Order No. 1000 has conversely been a rousing success in the organized market regions of the country, only that the Rule's ineffectiveness has been most pronounced exactly where you would expect: where state authority is still most comprehensive.

Order No. 1000's mismatch is most glaring ... *anywhere* states continue to exercise their oversight of the traditional vertically integrated utility business model, whether in an organized market or outside of one.

In my statement on the 2013 Florida compliance filing, I directed my suspicions about the efficacy of the Order No. 1000 planning regime, in part, towards those regions of the country that did not have an organized dispatch market, mentioning as a distinguishing characteristic, "There is no central dispatching entity and no LMPs to reflect local congestion. Florida utilities have exercised their right to retain control of their transmission by not choosing to join an RTO/ISO."⁶

This point is critical in understanding one of those underpinnings of FERC's Order No. 1000 rationale: the tension between generator self-interest and the impact of transmission planning. And while the point is valid, in retrospect, I think I drew the distinction in the wrong place. Specifically, Order No. 1000's mismatch is most glaring not just in regions outside of organized markets, but rather, *anywhere* states continue to exercise their oversight of the traditional vertically integrated utility business model, whether in an organized market or outside of one.

⁶ *Tampa Elec. Co., et al.*, 143 FERC ¶ 61,254 (2013) (Clark, Comm'r, concurring) at 2.

Over the years, I have come to appreciate that the primary distinguishing characteristic between different electric utility regulatory ecosystems is how each state chooses to structure it. In this light, I postulate that an Xcel Energy in MISO and a Dominion Energy in PJM share more in common with a Florida Power & Light in Florida, than any of them share with a fully unbundled Exelon operating in a restructured state like Pennsylvania.

This only makes sense. Much like the example of Florida utilities planning distribution, generation and transmission holistically for a region (with the oversight of the state), vertically integrated utilities within an organized market undergo a similar planning process. It's just that in the day-ahead and real-time energy markets their units are centrally dispatched by an independent market operator. This is far different than in restructured states, where only distribution operates as a monopoly, and transmission and generation operate independently of each other, with wholesale administrative market mechanisms established by FERC to help inform the business decision making process of merchant operators.

With this understanding, it should come as little surprise that the unimpressive effects of Order No. 1000 on the organized markets in the vertically integrated regions of the country mirror the effects on regions outside of the organized markets.

SPP and MISO offer two real-world examples of the pitfalls of Order No. 1000 in practice.

Dating back to my time as a member of the North Dakota Public Service Commission, I had a pretty good sense of what I thought Order No. 1000 was trying to accomplish. It looked and sounded an awful lot like what we had already been doing, but with an overlay of additional FERC compliance burdens.

From 2008-2010, I was a member of an initiative started by the Governors of the States of Iowa, Minnesota, North Dakota, South Dakota and Wisconsin, known as the Upper Midwest Transmission Development Initiative (UMTDI). Like nearly all other states in MISO, these are all vertically integrated states. While each state had its own reason for joining, the collaboration helped vet a series of transmission projects that seemed to establish a baseline of “no regrets” lines that met the needs of each state.

Order No. 1000 ... looked and sounded an awful lot like what we had already been doing, but with an overlay of additional FERC compliance burdens.

The work of UMTDI dovetailed with other regional efforts like the “Cost Allocation and Regional Planning” process and the utility-driven CapX2020 initiative, which provided various levels of support for plans that all eventually funneled into a suite of broadly acceptable transmission projects that became known as “Multi-Value Projects” (MVPs). The MVPs were approved by MISO and integrated with its transmission planning process, and ultimately upheld by both FERC and the courts. As the name suggests, these projects served multiple needs. They displayed shared characteristics of reliability lines, market efficiency lines and lines that supported various state public policies.

These efforts were bottom-up, inclusive, cognizant of state public policy initiatives, and successful in getting a lot of needed transmission built. It was also done before FERC Order No. 1000.

In a similar way, the SPP region (another region made up of vertically integrated utilities) had successfully ushered in a series of reforms through its highway-byway model prior to Order No. 1000.

Yet since the rule has been promulgated, much of this type of transmission activity has slowed to a crawl in the very regions where it had previously been most robust. While some of this may be attributed to flattening electricity load growth, and the fact that these projects alleviated some of the pent-up need for additional transmission projects, I would suggest that an ossified and bureaucratic Order No. 1000 planning process actually stifles what was previously happening organically. Insofar as this is true, it would indicate Order No. 1000 has not just been ineffective in certain regions of the country, it is actually counterproductive.

It is in regions where vertically integrated (and state-regulated) utilities participate in organized markets that we can see most clearly the effects of Order No. 1000's series of unresolved and sometimes contradictory goals. If the rule's goal was to incorporate state public policy planning and establish cost allocation certainty in order to build transmission, then these regions were already doing that.

Yet these regions were admittedly not at the forefront of prioritizing the injection of non-incumbent transmission competition into the planning process because, frankly, the concept has limited value and appeal in a region where the states themselves have determined that they prefer the regulated, vertically integrated utility ecosystem.⁷ In addition, FERC's insistence that even one penny of regional cost allocation ended an incumbent transmission owner's federal right of first refusal caused a series of cost allocation methodologies that previously had garnered widespread acceptance to fall apart.⁸

We have been left in, arguably, a worse position than where we began: more process, more compliance, more delay, more paperwork, more planning; less transmission actually being built.

In short, at least within MISO and SPP, the two RTOs that are most representative of joint dispatch markets composed of vertically integrated utilities, Order No. 1000's pro-non-incumbent "competition" goals ran headlong into its state public policy and pro-transmission investment goals. We have been left in, arguably, a worse position than where we began: more process, more compliance,

more delay, more paperwork, more planning; less transmission actually being built.⁹

⁷ Indeed, a number of states continue to assert a state right of first refusal, further emphasizing this point.

⁸ See *Midwest Indep. Transmission Sys. Operator, Inc.*, 142 FERC ¶ 61,215 at P 518 (2013); see also *Southwest Power Pool, Inc.*, 144 FERC ¶ 61,059 (2013) (Clark, Comm'r., dissenting in part, noting MISO's elimination of regional cost allocation for Baseline Reliability Projects so as to retain a federal right of first refusal for such projects; see *Southwest Power Pool, Inc.*, 149 FERC ¶ 61,048 (2014) (Clark, Comm'r., dissenting in part).

⁹ Beyond the scope of this paper is a comprehensive analysis of how Order No. 1000 is unfolding in each distinct region of the country. Sagas like the PJM Artificial Island project will prove instructive as to the promises and

VI. *The Times They Are A Changin'*

In a turbulent era, Bob Dylan reminded the world that “The Times They Are a Changin’.”¹⁰ So, too, have there been a lot of changes in the electric industry since the Order No. 1000 rulemaking process started in 2010.

Order No. 1000 has its roots in the transmission planning principles FERC established in 2007 in Order No. 890 and was influenced by the Energy Policy Act of 2005’s (EPAAct 2005) emphasis on reinforcing the transmission system and encouraging the construction of new transmission facilities. In 2007, gas prices were high and growth in electric energy usage seemed limitless. Transforming the transmission system, or at least building it out, would be necessary to bring renewable energy resources online that could satisfy the country’s appetite for electricity and wean the nation off of natural gas. As I describe above, regional transmission planning was already underway before FERC promulgated Order No. 1000. Numerous multi-region high voltage transmission projects—the type that seemed to be the goal of rule—were being developed by the time FERC issued its proposed rule in 2010.

Now that the rule has been promulgated and the planning processes have been formalized, where are the projects?

A lot has changed since the Order No. 1000 rulemaking process was begun in June 2010 — flattened demand, increased reliance on cheap natural gas, increased energy efficiency, and the growth of demand response and distributed generation. The combined effect of these and other changes may have made multi-state superhighway transmission projects less viable (and less necessary in order to satisfy state or national policy goals). Order No. 1000 was designed to address problems that existed when Order No. 890 was being implemented, and to facilitate the goals of EPAAct 2005. The Order remains, but the problems it was designed to address, to the extent they were truly problems, have largely gone away or transformed themselves.

A lot has changed since the Order No. 1000 rulemaking process was begun in June 2010 —flattened demand, increased reliance on cheap natural gas, increased energy efficiency, and the growth of demand response and distributed generation.

VII. **Where Are We and Where Do We Go from Here?**

If it is true, as psychologist Nathaniel Branden said, that “the first step towards change is awareness,” then Order No. 1000 may be ripe for a reassessment.¹¹ There seems to be a growing number of individuals aware that the rule has missed its target, or targets, as it were.

pitfalls of Order No. 1000 compliance. On the plus side, PJM has identified a potentially cost saving project, but challenges have abounded: disputes over the project selection process, internecine strife amongst states based on cost allocation decisions, and difficulties for the RTO itself, which has become much more of a project development manager than it probably ever intended or hoped.

¹⁰ Bob Dylan, *The Times They Are A Changin'*, THE TIMES THEY ARE A CHANGIN' (Columbia 1964).

¹¹ In 2016, ScottMadden published a whitepaper that examined the effectiveness of Order No. 1000, stating “it is useful to assess whether the industry has achieved competitive processes as originally intended. While opinions vary

Unfortunately, there is less agreement about what to do about it. The camps basically break into three, and view the current status of Order No. 1000 as either:

- A. A fundamentally sound idea that is making painfully slow progress towards some goals, but not others, such as large interregional transmission projects; or
- B. Something that may not ultimately accomplish a lot, but it seems to encourage some laudable things; or
- C. Proof of the law of unintended consequences; a rule, as currently constructed, that is generating more costs than benefits.

What you think should be done to change the rule is ultimately dependent on which camp you fall into.

For those who see the rule as generally described in proposition “A” there will be a temptation to double-down on Order No. 1000’s most prescriptive aspects. If new projects aren’t being built, it must be because incumbents and states have dug-in their collective heels, goes the theory. They are gaming whatever flexibility was provided in the original compliance filings so it is time to tighten the screws. Less flexibility is the answer and let us drive Order No. 1000 deeper and deeper into the grid. Let’s drive it down to lower voltages. Let’s make sure those projects don’t escape our planning processes by popping up as thinly veiled “reliability projects.”

Let us call this approach, “the beatings will continue until morale approves!” solution.

I strongly urge that we avoid this path.

If the goal is to make sure that even less gets built than under “Classic Order No. 1000,” then this is would be the way to accomplish it. Order No. 1000’s requirements have changed the goals of transmission planning. Before the rule, the purpose of the planning processes was to identify necessary improvements in electric energy infrastructure. The imposition of Order No. 1000 has created a new litmus test for success: identifying projects that can satisfy the rule, particularly a project that is eligible for interregional cost-sharing.¹²

As I describe earlier, Order No. 1000’s requirements are oftentimes redundant to pre-existing state regulatory schemes for vertically-integrated utilities, simply adding an unnecessary layer of regulatory process. Expecting regions and RTOs, which are already struggling under the weight of their existing regional and interregional planning processes, to impose said process even further down to the next level on the grid invites even more stagnation and death by bureaucracy. All of the unresolved internal conflicts with the divergent goals of Order No. 1000 that I have written about

by stakeholder and region, we believe the answer to this question is a resounding ‘no.’” Cristin Lyons and Brian Messick, *FERC Order No. 1000: Five Years On*, June 2016, at 3, available at http://www.scottmadden.com/wp-content/uploads/2016/06/ScottMadden_FERC_Order_1000_2016_0601.pdf.

¹² As an aside, it’s interesting that a transmission project located entirely in Missouri might cross through multiple regions, and, therefore, be a success under Order No. 1000 interregional planning; but a transmission project that would run the length of the Mississippi River could be located entirely in the MISO region, and, therefore, worthy of no particular merit under the rule.

become more problematic at this level. This change wouldn't alleviate Order No. 1000's problems, it would exacerbate them.

Those who fall into camp "B," "Order 1000 may not ultimately accomplish a lot, but it seems to encourage some laudable things" are the most status quo oriented of the bunch. They are probably aware that the rule is not working as intended, but are cautious by nature, and think that any problems should be addressed incrementally. Their argument might be: At the very least, letting the rules collect a bit more dust wouldn't seem to do much harm while we give Order No. 1000 more time to mature. People who fall into this camp may also be of the opinion that Order No. 1000 is actually doing more harm than good, but they are concerned that once FERC begins tinkering with it, they might end up with something worse: better the devil you know than the devil you don't.

Finally, are the people who are in camp "C," those who have come to the conclusion that no matter how well-intentioned the rule, the cumulative weight of it can no longer be justified by its results, or lack thereof. Count me among their number.

No matter how well-intentioned the rule, the cumulative weight of it can no longer be justified by its results, or lack thereof.

Even within Camp C, no doubt, there is a variety of opinion on what to do about the failed Order. "Be done with it already" is certainly one path, and given the paucity of hard data that supports Order No. 1000's efficacy, and the difficulty in evaluating what data exists, it would be an understandable response.¹³ However, realists about government action have to acknowledge that history is not replete with examples of government regulatory agencies on their own "calling a mulligan" and dismantling a regulation of Order No. 1000's scope.

VIII. The Order No. 1000 Reboot

My suggestion is for FERC to step back and reassess Order No. 1000's key goals and adjust accordingly.

The "supporting public policy requirements" goal, while a nice sounding bumper sticker, fails in practice. State policies, to the degree they happen in vertically integrated states, are already self-supporting through state-led resource adequacy and integrated resource planning that has gone on for years. In restructured states, goals and requirements have been shifting rapidly in recent months, as state governments in such places as diverse as Illinois, New York, New Jersey, Massachusetts and Connecticut devise around market actions to prop-up ailing and politically favored generators. At the Federal level, to the degree the nation has public policy requirements that would establish a national energy policy; they are vague, at best. As previously noted, there is no stated national energy policy. To the degree there is an implicit energy policy guided by

¹³ See, e.g., Federal Energy Regulatory Commission, *2017 Transmission Metrics: Staff Report*, Oct. 6, 2017 at __, available at <https://www.ferc.gov/legal/staff-reports/2017/transmission-investment-metrics.pdf>. The Staff Report notes that "it is difficult to assess whether the electric industry is investing in sufficient transmission infrastructure to meet the nation's needs and whether investments made are more efficient or cost effective." *Id.* at 6.

Presidential ambitions, in the last 18 months it has shifted from an administration for whom GHG policy was the overriding factor to one that emphasize energy dominance, security and economic development. Given the nature of these competing state and federal energy visions, it would be better for FERC to step away from this aspect of Order No. 1000. At most, a FERC requirement that that utilities located in the same and adjacent regions compare notes and plan for efficiencies should be more than enough to deal with this matter.

Eliminating the public policy requirements goal also has the benefit of discarding one of the thornier problems embedded in Order No. 1000. When state goals come into conflict (*e.g.*, state A has a particular flavor of an RPS, state B does not, and would like to support its own native generation, thank you very much), who decides which state's requirements are valid? The planning region? The RTO? FERC?

Even in regions that might support some of the competition goals of Order No. 1000, the

Given the nature of these competing state and federal energy visions, it would be better for FERC to step away from [the Public Policy] aspect of Order No. 1000.

public policy requirements goals sound better on paper than in practice. Take for example, recent efforts in New England to build transmission from Canada for access to Canadian hydro. The region is predominantly restructured. Massachusetts has a state public policy to use more hydro power. But New Hampshire does not, and has shown no intention of allowing a transmission line to be sited through it for the benefit of Massachusetts energy priorities.¹⁴ FERC rules or not, there is nothing in the Federal Power Act that resolves that situation. And

multistate RTOs are not in a position to pick which state's policy should take precedence over that of another state.

So if we take out the canard of supporting state and federal public policy requirements, what are we left with? I would suggest that a potential nugget within FERC Order No. 1000 that bears ongoing consideration is related to the notion that in certain restructured regions of the country, there is a potential disconnect between transmission planning decisions and generation/market decisions. Issues related to the changing generation portfolio, the desire for fuel diversity, and effects of low gas prices and the growth of renewables are related to the challenges of transmission congestion reduction. The way to address these related concerns is to require transparent regional transmission planning, interjected with the ability of non-incumbents to compete for those projects.

But here is the rub; that problem statement should not be addressed through nationwide fiat, but rather as a rule primarily targeted towards "Restructured Administrative Markets."¹⁵

¹⁴ See: <http://www.unionleader.com/business/massachusetts-drops-northern-pass-bid-in-favor-of-rival-project--20180328>

¹⁵ That is to say, NY-ISO, PJM and ISO-NE, See Clark, Tony, *Regulation and Markets: Ideas for Solving the Identity Crisis*. July 2017, available at [http://wbklaw-com.secure23.ezhostingserver.com/uploads/file/Articles-%20News/2017%20articles%20publications/Market%20Identity%20Crisis%20Final%20\(7-14-17\).pdf](http://wbklaw-com.secure23.ezhostingserver.com/uploads/file/Articles-%20News/2017%20articles%20publications/Market%20Identity%20Crisis%20Final%20(7-14-17).pdf).

If FERC more clearly targets Order No. 1000 to address this issue, then it need not impose the requirements on those regions where they make little sense. If that sounds somewhat familiar, it should, because it is essentially the policy call FERC made when it only approved capacity markets for regions of the country that had substantially restructured. For all of the problems and controversies that exist with capacity markets, at least it can be said that FERC has tacitly acknowledged that they only seem to have a role where the structural characteristics of the market fit.

If only FERC would make such an acknowledgment in the Order No. 1000 planning space, much of the Order No. 1000 conundrum could be avoided. It could accomplish this by targeting the bulk of the Rule to the Eastern Capacity Market regions of the country, while substantially repealing or reducing it in those areas where it is less justified, and which were inarguably meeting much of the spirit of Order No. 1000 prior to its imposition.

IX. Conclusion

FERC Order No. 1000, for all its good intentions, is today a rule that has largely fallen short of accomplishing its goals. Unfortunately, the failure of it to fulfill its potential has not come without costs. Given the changes in the electricity industry over the last decade, now is a good time for the Commission to consider an Order No. 1000 reassessment. FERC would do well to ask, “What are we really trying to accomplish?” and then tailor the rule narrowly to achieve those goals. Clinging to an increasingly odd fitting rule in the face of growing evidence that it is not working will only increase the difficulty of reforming it when that time eventually comes.