

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

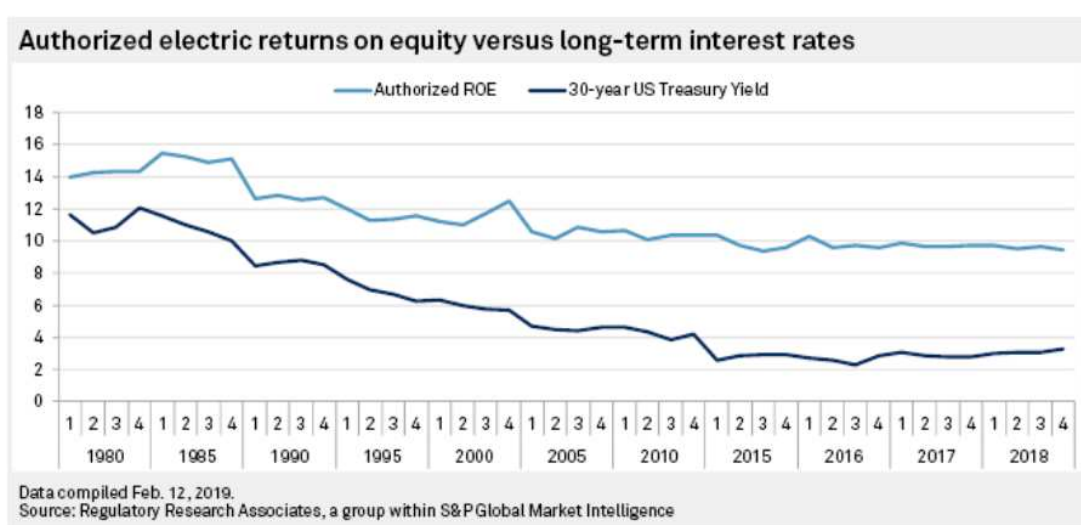
**Inquiry Regarding the Commission’s  
Electric Transmission Incentives Policy**

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**Docket No. PL19-3-000**

**COMMENTS OF THE R STREET INSTITUTE**

Transmission investment in the United States has increased rapidly over a twenty-year period, multiplying nearly tenfold from 1996 to 2016, and it shows no signs of declining.<sup>1</sup> Utility regulatory commissions’ base return on equity (ROE) awards are at a higher premium over the risk-free rate than in the past. In 1980, the average ROE in the United States was approximately 200 basis points above the 30-year U.S. Treasury bond yield. Today, the gap has widened to approximately 600 basis points,<sup>2</sup> even as many transmission owners enjoy regulatory devices such as formula rates that serve to diminish financial risk.



Since this Commission tends to award higher base ROEs to transmission owners than are awarded to state-jurisdictional utilities by their public utility commissions, it is no surprise that capital investment has been drawn to electric transmission. The Commission’s ROE policies are,

<sup>1</sup> “Utilities continue to increase spending on transmission infrastructure,” Energy Information Administration, Feb. 9, 2018. <https://www.eia.gov/todayinenergy/detail.php?id=34892>.

<sup>2</sup> “Authorized electric returns versus long-term interest rates,” Regulatory Research Associates, compiled Feb. 12, 2019.

in a word, generous.<sup>3</sup> There is little reason to believe that widely available incentives are necessary to promote necessary, but routine, capital investment in Commission-jurisdictional infrastructure.

Nevertheless, a discussion of incentives is important because they could be targeted to beneficial transmission investments that cross seams (which are less likely to be built) or to operational changes to existing transmission assets and markets that are not being pursued. These are what the Commission should aim its focus toward when considering incentives.

#### **I. The Commission should incentivize a more efficient inter-regional trade in electricity<sup>4</sup>**

The culture of ISOs tends to be insular. That is no surprise. There is always work to be done to improve the trade within any ISO's boundaries, and the satisfaction of ISOs' various stakeholders usually depends upon resolving matters near at hand and close to home. And, pursuant to their processes for reliability, economic, public policy purposes, they have shown an ability to construct new transmission. Yet where the ISO bureaucracies intersect, less development has occurred. As the Commission notes, "Although Order No. 1000 required coordination among neighboring transmission planning regions to identify potential interregional transmission facilities, such projects have been scarce to date."<sup>5</sup>

Accordingly, the Commission should acknowledge that this is a political economy problem and induce cooperation across seams through financial incentives that face the transmission-owning members of ISOs.<sup>6</sup> These transmission owners exercise significant stakeholder influence over ISOs. Providing incentives to obtain efficiency gains across ISOs' footprints could therefore reduce the insularity of the wholesale markets.

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<sup>3</sup> Many conventional transmission projects are proposed in the ordinary course of business and included within an incumbent transmission utility or ISO's transmission plan. For these, the foremost public policy concern should not be bonus incentives, but cost control. It almost certainly would be better for FERC to require that would-be transmission developers engage in meaningful price discovery via a competition to ascertain the lowest cost of capital or the lowest revenue requirement needed to build a transmission line. Subjecting routine projects to competition, presumably driving down their actual cost of capital, would also make less-typical transmission projects, subject to special incentives, all the more alluring, since the basis differential in ROE between the two would grow to be more substantial.

<sup>4</sup> This section of R Street's comments addresses Section A1 (Incentives Based on Project Risks and Challenges), Section A2 (Incentives Based on Expected Project Benefits), Section B2 ("Economic Efficiency Benefits"), Section B7 ("Improving Existing Transmission Facilities"), Section B8 ("Interregional Transmission Projects") and Section D1 ("Duration of Incentives") of the Commission's instant *Inquiry Regarding the Commission's Electric Transmission Incentives Policy* (hereinafter, NOI), Docket No. PL19-3-000, March 21, 2019.

<sup>5</sup> NOI, p. 26.

<sup>6</sup> R Street has prepared a white paper on the political economy of ISOs as it relates to seams and the operation of wholesale markets, and the development of transmission across those seams. See: Travis Kavulla, "Efficient Solutions for Issues in Electric Seams," *R Street Policy Study* No. 172, April 2019, (hereinafter "R Street White Paper"). <https://www.rstreet.org/2019/04/30/efficient-solutions-for-issues-in-electricity-seams>. We incorporate this white paper into our comments, and append it to them as Attachment A.

**A. Transmission owners should receive an incentive for a new project that crosses an ISO seam**

By making transmission lines that erase seams between ISOs relatively more profitable to their owners, it is reasonable to expect that persistently observed problems of congestion between ISOs will more readily be solved. A “bright line” test that ascertains whether a transmission line has an origin and terminus in two different ISOs could readily be applied. This test corresponds closely to the political difficulties of building an interregional facility, which presumably would need to be included and selected in the planning and cost allocation processes of each ISO. R Street submits that such transmission build-out is by nature difficult and falls neatly within the previously adopted rubric of “risks and challenges,” upon which basis transmission incentives have been awarded. Such an incentive also coheres to the targeting of incentives to “new projects that present special risks or challenges, not routine investments,” first announced in Order 679.<sup>7</sup> We therefore propose that an incentive should be awarded for any new project that interconnects two or more ISOs.<sup>8</sup> Bonus incentives to the base ROE award for such projects would give transmission owners and developers a reason to champion them in the interregional processes of Order 1000, where currently the insularity of ISOs and their members may otherwise tend to focus on transmission planning within a region because of its greater political practicability.

**B. The Commission should use its transmission ratemaking authority to incentivize a more efficient trade in electricity between ISOs**

As it authorizes the Commission to provide incentives to transmission owners to achieve an array of desirable outcomes, the Federal Power Act specifically uses the term “performance-based ratemaking.”<sup>9</sup> Classically, performance-based ratemaking implies a departure from the cost-of-service regulation that computes a revenue requirement from which rates are derived. Instead, performance-based regulation suggests that a regulated firm’s returns are tied to outcomes—or put another way, that the firm should share in the gains its performance has achieved. The question here is how one would apply this to electric transmission.

The Commission can think of transmission in light of its experience with power generators. Generators do not earn homogeneous returns on capital investment in wholesale power markets. They are rewarded most highly if they produce energy in a place where it is relatively scarce (e.g., a power generator in a load pocket) or at a place where the cost of

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<sup>7</sup> NOI (quoting Order No. 679, 116 FERC ¶ 61,057, pp. 22, 24), p. 7.

<sup>8</sup> We express no view on how the number of basis points associated with a bonus return should be calculated, but generally we believe that it should be large enough to work a practical effect on stakeholder culture within ISOs. The Commission could borrow from the current practice of awarding a certain amount of basis points as a bonus return within the transmission owner’s revenue requirement. Alternatively, as discussed below, the Commission could make a time-limited award to a transmission owner of a certain amount of the production cost savings associated with transmission expansion.

<sup>9</sup> 16 U.S.C. §824s.

energy is relatively low (e.g., a wind farm with a high capacity factor or a gas plant atop a major shale play). Cost-of-service regulation, however, pays a standard return on each dollar invested in capital, regardless of the benefits that such capital investment unlocks. While any number of transmission lines may deliver benefits net of their costs, the Commission's existing transmission incentive policies do a poor job of targeting those whose contributions are especially valuable.

To move to a model of performance-based regulation, it would be necessary to identify the benefits that incremental transmission facilities either do result in or (if ratemaking is done as a matter of foresight) are predicted to result in. This is difficult. Unlike a power generator whose value is easily measured and captured almost automatically to private owners—because it is a function of the payment to its production via a locational marginal price, less the cost of owning and operating the plant—the effects of a transmission line are not easily isolable in a grid where so many variables are shifting at once.

Nevertheless, there are several approaches to award incentives calibrated to actual or expected levels of benefits that the Commission should consider.

- i. ISOs' transmission members should be incentivized to dedicate their existing facilities to a co-optimized market between two ISOs

ISO-to-ISO congestion costs in the middle of the United States run into the hundreds of millions of dollars annually, and the barriers to trade between them are well documented.<sup>10</sup> While additional transmission interconnection would relieve some of this congestion, consumers will suffer if adjacent markets do not coordinate or co-optimize the resource offers into their markets, which results in lost opportunities for efficient trade.

The Commission should therefore focus on using its transmission ratemaking authority to incentivize a more efficient trade in areas where no strong incentive may otherwise exist. An example of where this condition obtains is the long and fraught seam between the Midcontinent ISO and the Southwest Power Pool. These ISOs are comprised mainly of generators that exist as part of vertically integrated utilities that are also transmission-owning members of the ISOs. At a retail level, almost none of these utilities have financial incentives that provide them additional or reduced margins based on their economic performance within the ISOs' auctions. Instead, they benefit from fuel and purchased power trackers that are complete pass-through mechanisms to customers. Put another way, these utilities' shareholders (unless consumer- or public-owned) would gain none of the advantages of a more efficient trade across the seams.

The Commission should consider that the core failure in the lack of co-optimization (or something like it) between ISOs is the way the *existing transmission system* is operated. It is therefore appropriate to aim transmission incentives toward solving this problem. The

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<sup>10</sup> "R Street White Paper," pp. 6-9.

Commission could do this in the following way: First, it could require the ISOs either to adopt their independent market monitors' estimation of the amount of possible savings on the table, as a calculation of transmission congestion or; in the alternative, the Commission could require one or more set of ISOs to evaluate the possible gains of a more efficient trade using a production-cost model. The Commission could offer transmission incentives that are equal to a share of the modeled or actual production-cost savings for a limited period of time.<sup>11</sup> This would have the effect of sharing the benefits of an increased efficiency in trade between consumers and investors. Based on our experience in state regulation, we preliminarily suggest that an ISOs' members could elect either a one-quarter distribution of benefits for five years from the market improvement's becoming operational or; if the assurance of foresight is considered necessary, some smaller share of benefits could be elected from the date of the Commission's approval of a tariff revision.

Such treatment is appropriate and equitable in those cases, such as in MISO and SPP, where transmission and generation owners are usually one in the same, although even elsewhere it may warrant evaluation.

- ii. Upgrades to facilities that are not capital intensive but that deliver benefits should also be eligible to reap production-cost-savings-based rewards

In a similar vein, discrete transmission upgrades that reduce production cost savings should obtain rewards commensurate with the benefits they unlock. While the Commission should acknowledge that the kind of co-optimization between ISOs discussed above is a large undertaking, such discrete changes should nevertheless reap a reward, even if a smaller one. As it contemplates the above proposal, the Commission should build upon the specified production-cost modeling approach used in compliance with Order 1000 so that individual transmission owners can make improvements and then obtain a reward in the form of a limited-time share of actual production-cost savings.<sup>12</sup>

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<sup>11</sup> Here, the Commission could draw on the experience of the states that have adopted cost-sharing mechanisms for production costs as a matter of retail ratemaking. States such as Washington, Oregon and Montana have included cost-sharing features that allow anything from 10 to 50 percent of savings from a base case to flow to investors. Such savings would redound to investors until the next rate case was filed, which has the effect of resetting the base line; this time period can range from two to 10 years. For Washington: *In re AVISTA Corp.'s Energy Recovery Mechanism*, Docket UE-069181, Order 03 (Wash. Util. and Transp. Comm'n Jun. 16, 2006); *In re Puget Sound Energy, Inc.*, Consolidated Dockets UE-130583, UE-130617, UE131099, UE-131230, Order 07 (Wash. Util. and Transp. Comm'n Aug. 7, 2015). For Oregon: *In re Portland General Electric*, Consolidated Dockets UE 180, UE 181, and UE 184, Order 07-015 (Or. P.U.C. Jan. 12, 2007); *In re Idaho Power Co.'s Power Cost Adjustment Mechanism*, Docket UE 195, Order 08-238 (Or. P.U.C. Apr. 28, 2008). For Montana: *In re NorthWestern Energy's Power Cost and Credits Adjustment Mechanism*, Docket D2017.5.39, Order 7563c, (Mont. Pub. Serv. Comm'n November 29, 2018).

<sup>12</sup> We suggest that these discrete solutions should not receive prospective incentives but should demonstrate actual performance, while the co-optimization of markets has so consistently demonstrated benefits as to become axiomatic and, therefore, should be eligible for a modest allocated share of production-cost-savings-based rewards prospectively.

As an alternative, the Commission's suggestion to allow upgrades that are currently expensed to be held as a regulatory asset instead should be adopted.<sup>13</sup> It must be noted, however, that if the cost of capital is truly reflected in the base ROE, such treatment axiomatically would not have any effect in company behavior because "expensing" and "rate basing" would be a neutral proposition; the Commission's suggestion, were it to accomplish positive outcomes, would suggest that the base ROE exceeds the actual cost of capital and was being used to pay a supra-normal return. Nevertheless, and realizing that this probably is the case as discussed above, the treatment of certain expenses as regulatory assets may be a modest way to use regulatory accounting to incentivize such discrete investments.

iii. Transmission developers should be incentivized to prospect for interregional solutions on the basis of the size of production-cost benefits obtained

The Commission has already blessed a subscription-based, "merchant" business model for electric transmission.<sup>14</sup> Here, rather than rolling in the cost of new transmission to a utility's or ISO's consolidated revenue requirement, a transmission developer may pre-sell tranches of transmission rights outside of rate regulation. After it becomes operational, however, like other regulated transmission owners, the line is required to file an open-access transmission tariff. In some senses, a merchant line is an ideal of consensual transactions in a part of the electric business where costs are often more crudely socialized. Yet, the merchant model has not come into anything like a full blossom. The Commission should consider using this proceeding to offer further clarity about this business model and engage in additional regulatory forbearance that potentially would encourage the deployment of risk capital in this innovative business model.

With its attendant regulatory opportunity to earn a fair return, it is appropriate to expect any transmission line built on the basis of a utility or ISO plan to be subject unambiguously to the provisions of open access. Simply put, if a transmission owner is going to receive the financial assurances of public utility regulation, its line should be a common carrier. However, it may be reasonable to allow those who take a more profound capital risk through the merchant model of transmission to exist outside of the regular public-policy conventions associated with the industry. Specifically, it may be sensible to clearly exempt merchant transmission lines from open-access requirements, allowing them to operationalize their lines in a way of their choosing.

The Commission may consider a hypothetical in this regard: For example, an investor in a transmission line may have observed a persistent gap between locational marginal prices in one market and a neighboring one. For whatever reason, the incumbent transmission planners in the area have not addressed the issue. Rather than litigating the matter in the mere hope of collecting a regulated transmission rate (and flattening the price differential), the investor may

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<sup>13</sup> NOI, Question 41 of Section B7 ("Improving Existing Transmission Facilities")

<sup>14</sup> Federal Energy Regulatory Commission, *Allocation of Capacity on New Merchant Transmission Projects and New Cost-Based, Participant-Funded Transmission Projects: Priority Rights to New Participant-Funded Transmission*, Docket Nos. AD12-9-000 & AD11-11-000, Jan. 17, 2013.

reasonably wish to obtain a higher return to do what others have been unwilling or unable to do. In a sense, the investor would prefer to have the line act as a merchant generator would. The line and associated throughput are offered by its investor or owner into the markets it interconnects for economic dispatch, at times and prices of the line's choosing. If selected into the ISO auction (or purchased in a bilateral transaction), this would necessarily suggest there are social benefits to its operation, which should not be subject to a regulatory gainsay merely because the transmission line's function does not resemble the typical mode of open-access service.

Such an innovation in transmission might only be used in relatively peculiar circumstances, and where the ordinary transmission planning process has rather spectacularly failed. Nevertheless, the Commission should do what it can to clarify that in those circumstances where incumbent actors and the existing planning process have left benefits on the table, that merchant actors using a deregulated business model are warranted to act to achieve those benefits for themselves and society.

## **II. The Commission should retain but modify the ISO membership incentive<sup>15</sup>**

ISO auctions produce substantial social benefits that do not readily exist when utility networks are not platformed together for the sake of a unified regional auction in electricity. It is reasonable then to induce the transmission owners that make such benefits possible to join and participate in an ISO when they could just as easily not do so or withdraw from doing so. In other words, transmission owners should receive an incentive when they retain a plausible choice to join, participate in or withdraw from an ISO.

Despite the voluntary nature of ISO membership established by the Commission, it is not the case that, as a legal or practical matter, each and every transmission owner retains this discretion. Some states, as part of the policies that attended electricity restructuring, mandated post-restructuring transmission firms to join an ISO. The term "incentive" necessarily implies that the Commission is urging the incentivized party toward some action. However, the Commission should not grant these transmission owners an incentive to do something they are legally obliged to do. Rather, as discussed above, it may be appropriate to use incentives to cause those transmission owners to urge toward still more efficient market solutions.

As a practical matter, there are also situations wherein continued membership in an ISO eventually causes a transmission owner to forego any reasonable opportunity to cease its participation. In particular, the exit fees that attach to certain transmission owners are so high that they already constitute a substantial incentive against withdrawal. R Street suggests that the Commission should apply a materiality threshold to the exit fees that transmission owners would incur if they were to cease participation in an ISO. If the exit fee would be higher than

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<sup>15</sup> This section of R Street's comments addresses NOI, Section C1(b) ("RTO/ISO Participation").

the materiality threshold for a particular transmission owner, the Commission should not award an incentive ROE. Conversely, if the exit fee would be lower than this threshold and the transmission owner is not otherwise legally obliged to participate in an ISO, it is reasonable to continue to award an incentive associated with ISO membership.

## **Conclusion**

Given that the construction and ownership of transmission is already amply rewarded, the Commission should avoid a least-common-denominator approach to incentives. Instead, it should act creatively to award incentives to bold initiatives whereby transmission owners, collectively and individually, obtain further efficiencies in the marketplace—or to maintain those that already have been obtained. The Commission has significant authority under statute to induce positive outcomes for consumers through the development of electric transmission. It should do so.

Respectfully submitted,



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