Electricity Transmission Cost Allocation

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Summary

Perhaps the most contentious electricity transmission financing issue is cost allocation for new interstate transmission lines—that is, deciding which electricity customers pay how much of the cost of building and operating a new transmission line that crosses several states. This report provides background and analysis of current transmission cost allocation policy and issues.

The report makes several observations concerning current cost allocation policy at the federal and state levels. First, there is no uniformity in cost allocation procedures, and at least to date the Federal Energy Regulatory Commission (FERC) has declined to go beyond establishing general principles. Second is the regional focus of current processes for making cost allocation decisions. This is consistent with FERC's efforts to encourage a regional perspective on transmission planning that incorporates many stakeholders in the planning process. Third, determining a method of allocating the costs of "economic" upgrades to the transmission grid (i.e., projects aimed at reducing the cost of operating the power system) has proved more complex than for reliability upgrades.

The report also reviews several recent developments in the cost allocation area. These include:

- The decision of the Seventh Circuit in *Illinois Commerce Commission v. FERC*, to reject a cost allocation plan approved by FERC which would have permitted "socialization" of the costs for some new transmission projects (i.e., allowing the costs to be spread widely among ratepayers in the PJM Interconnection, even those who do not substantially or clearly benefit from a project).
- The addition of the "Corker Amendment" to S. 1462, the American Clean Energy Leadership Act. Supporters argue that this amendment would require FERC to ensure that the costs of new transmission projects are allocated commensurate with measurable benefits. Opponents argue that the amendment would establish an impossible-to-meet threshold for quantifying project costs and benefits.
- FERC's decision to take an in-depth look at cost allocation and other transmission planning issues as part of a new docket. In its request for comments (Docket AD09-8, *Transmission Planning Processes under Order No. 890*, June 30, 2009) FERC observed that its "best remaining opportunity to eliminate barriers to new transmission construction may therefore be to provide greater certainty in its policies for allocating the cost of new transmission facilities, particularly for facilities that cross multiple transmission systems."

Recent public comments by FERC commissioners also suggest that the Commission may release a proposed transmission cost allocation policy, perhaps before the end of 2010.

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Introduction

Construction of new, long-distance transmission lines has become a hotly debated energy policy issue. Advocates see enhancements to the transmission grid as necessary for exploiting remote sources of renewable power and improving the reliability of the transmission system. Others argue that there are less costly and intrusive means of meeting energy needs than a large transmission build-out.

Estimates of the cost of expanding the transmission grid to increase renewable power delivery and other goals run into the tens of billions of dollars. For example (all figures in nominal dollars):

- The estimated transmission cost of the Joint Coordinated System Plan to bring Great Plains wind power to the East Coast range from $49 billion to $80 billion.[1]
- A Department of Energy (DOE) study of expanding the use of wind power estimated transmission expansion costs of $60 billion by 2030.[2]
- A study of transmission funding requirements for all purposes for the period 2010 to 2030 estimated total costs of about $300 billion.[3]

Perhaps the most contentious transmission financing issue is cost allocation for new interstate transmission lines – that is, deciding which customers pay how much of the cost of building and operating a new transmission line that crosses several states. DOE's Electricity Advisory Committee concluded that "cost allocation is the single largest impediment to any transmission development."[4]

This report provides background and analysis of current transmission cost allocation policy and issues. The balance of the report is organized as follows:

- Background and history, including a discussion of federal authority under the Federal Power Act.
- The current status of cost allocation policy at the federal and state levels.
- Recent developments and proposed changes to federal authority and policy.

[1] Executive summary to the Joint Coordinated System Plan 2008, p. 6, http://www.jcspstudy.org/. Note that the cost of the transmission is modest compared to the estimated cost of the generation needed to meet demand and, in one scenario, renewable energy goals ($674 billion to $1,050 billion).

[2] U.S. Department of Energy, *20% Wind Energy by 2030*, Washington, D.C., July 2008, p. 98, http://www1.eere.energy.gov/windandhydro/pdfs/41869.pdf.

[3] Marc Chupka et al., *Transforming America's Power Industry: The Investment Challenge 2010 - 2030*, prepared by the Brattle Group for The Edison Foundation, Washington, DC, November 2008, p. 40, http://www.eei.org/ourissues/finance/Documents/Transforming_Americas_Power_Industry.pdf.

[4] The Electricity Advisory Committee, *Keeping the Lights on in a New World*, U.S. Department of Energy, Washington, DC, January 2009, p.50, http://www.oe.energy.gov/eac.htm.

Background and History

The Federal Power Act

The authority of the Federal Energy Regulatory Commission (FERC) to regulate interstate transmission is derived primarily from Sections 205 and 206 of the Federal Power Act (FPA).[5] Section 205 of the FPA provides that all rates and charges for the transmission of electric energy subject to FERC's jurisdiction, as well as rules and regulations affecting those rates, must be "just and reasonable," and that no public utility's rates "unduly discriminate" against any customers.[6] Because the requirements of section 205 are placed at the feet of the public utilities, FERC's section 205 authority has been characterized as "an essentially passive and reactive" role.[7]

However, section 206 of FPA gives FERC a broader and more proactive rate authority:

> Whenever the Commission, after a hearing had upon its own motion or upon complaint, shall find that any rate, charge, or classification, demanded, observed, charged or collected by any public utility for any transmission ... subject to the jurisdiction of the Commission, or that any rule, regulation, practice, or contract affecting such rate, charge or classification is unjust, unreasonable, unduly discriminatory or preferential, the Commission shall determine the just and reasonable rate, charge, classification, rule, regulation, practice or contract to be thereafter observed and in force, and shall fix the same by order.[8]

Section 206 thus permits FERC to make changes to existing utility rates, including transmission charges, either on its own initiative or at the request of an interested party. In order to make such changes, FERC must: (1) find that the existing rates or practices are unjust, unreasonable, unduly discriminatory, or preferential, and (2) show that its proposed changes are just and reasonable.[9] Section 206 also allows FERC to establish a just and reasonable rule, regulation or practice "to be thereafter observed and in force," and to "fix the same by order."[10]

The statutory authority found in section 206 of the FPA thus gives FERC broad authority to establish a set of general principles to be applied in setting just and reasonable rates upon a finding of unjust, unreasonable, unduly discriminatory, or preferential rates or practices in the industry. FERC has cited its Section 206 authority in promulgating other significant rulemakings related to interstate electricity transmission facilities, including Order No. 2000[11] (allowing the creation of Regional Transmission Organizations to manage electricity transmission grids) and Orders 888[12] and 890[13] (requiring utilities to provide for access to transmission facilities and

[5] 18 U.S.C. §824 *et seq*.

[6] 18 U.S.C. at §824d(a) and (b).

[7] City of Winfield v. FERC, 744 F.2d 871, 876 (D.C. Cir. 1984).

[8] Id. at §824e(a).

[9] Atlantic City Electric Company v. FERC, 295 F.3d 1, 9 (D.C. Cir. 2002) (citations omitted).

[10] 16 U.S.C. §824e(a).

[11] Regional Transmission Organizations, Order No. 2000, 65 FR 809 (January 6, 2000), FERC Stats. & Regs., ¶ 31,089 (1999), *order on reh'g*, Order No. 2000–A, 65 FR 12,088 (March 8, 2000), FERC Stats. & Regs. ¶ 31,092 (2000), *affirmed sub nom.* Public Utility District No. 1 of Snohomish County, Washington, et al. v. FERC, 272 F.3d 607 (D.C. Cir. 2001).

[12] Promoting Wholesale Competition Through Open Access Non-discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities, Order No. 888, 61 FR 21,540 (May (continued...)

creating a pro forma tariff for utilities to adopt for transmission services). FERC's authority to promulgate these rulemakings has not been successfully challenged on grounds of inadequate legal authority under the FPA.

Past FERC Action on Transmission Cost Allocation

In recent years, FERC's transmission cost allocation activities have focused on complex projects with one or more of the following types of characteristics:

- May traverse multiple utility service territories and cross the boundaries between power system planning areas.
- May have multiple owners.
- May provide benefits to many and diverse beneficiaries. These beneficiaries may be difficult to accurately identify, and it may be even more difficult to quantify the benefits.

However, cost allocation for these and other transmission lines was less contentious – or at least less visible and pressing at the national level – in the past because of the nature of the regulatory structure that existed prior to the mid-1990s. Transmission lines were historically constructed primarily by investor-owned utilities subject to traditional cost of service regulation by state utility commissions. These utilities sold a "bundle" of electric power transmission, generation, and distribution services to ratepayers as a single averaged price. Each customer in the utility's service area paid for a share of the costs of transmission investments, whether or not the investment was of value to the customer; this universal sharing of expenses is referred to as the "socialization" of costs.

Under this regulatory regime, cost allocation was therefore generally not a complex issue, since the beneficiaries of the transmission service and the customers paying for the services were, in effect, assumed to be the same – the utility's entire set of captive ratepayers. As one analysis points out, the bundling of costs made it possible and acceptable for cost allocation issues to be "swept under the rug."[14]

Cost allocations, and related transmission planning issues, were also less contentious and visible because of the historical development of the electric power grid. Transmission lines were first built in the early 20th century by single utilities to move electricity to population centers from relatively nearby power plants. As generation and transmission technology advanced, the distances increased, but the model of a single entity building lines within its own service territory

(...continued)

10, 1996), FERC Stats. & Regs. ¶ 31.036 (1996), *order on reh'g*, Order No. 888–A, 62 FR 12,274 (March 14, 1977), FERC Stats. & Regs. ¶ 31,048 (1997), *order on reh'g*, Order No. 888–B, 81 FERC ¶ 61,248 (1997), *order on reh'g*, Order No. 888–C, 82 FERC ¶ 61,046 (1998), *aff'd in relevant part sub nom.* Transmission Access Policy Study Group, et al. v. FERC, 225 F.3d 667 (D.C. Cir. 2000), *aff'd sub nom.* New York v. FERC, 535 U.S. 1 (2002).

[13]Preventing Undue Discrimination and Preference in Transmission Service, Order No. 890, 72 Fed. Reg. 12,266 (Mar. 15, 2007), FERC Stats. & Regs. ¶ 31,241, *order on reh'g*, Order No. 890-A, 73 Fed. Reg. 2984 (Jan. 16, 2008), FERC Stats. & Regs. ¶ 31,261 (2007).

[14] Working Group for Investment in Reliable and Economic Electric Systems (WIRES), *A National Perspective on Allocating the Costs of New Transmission: Investment: Practice and Principles*, September 2007, p. 32, footnote 34, http://www.wiresgroup.com/images/Blue_Ribbon_Panel_-_Final_Report.pdf.

to supply its own load still predominated. Over time, these local grids began to interconnect, due to utilities building jointly owned power plants and because power companies began to grasp the economic and reliability benefits of being able to exchange power.[15] Nonetheless, this pattern of development did not emphasize the construction of very long-distance inter-regional lines involving multiple owners and jurisdictions, the kinds of projects likely to have difficult cost allocation issues.

Cost allocation issues have become pressing in part because of the restructuring of the electric power generation and transmission industries that began in the late 1970s. The Public Utility Regulatory Policies Act of 1978 and the Energy Policy Act of 1992 had as one of their aims the introduction of competition into generation service. In order to facilitate the ability of non-utility generators to access the transmission grid, in 1996 FERC issued Orders 888 and 889, to establish an open access regulatory regime for the transmission grid.[16] These orders directed transmission owners and operators to open their system to any connected generator or load on a "non-discriminatory" basis (that is, without giving preference to their own generation or load). Rates are to be cost or market based, and rates and conditions of service are to be embodied in an open access transmission tariff (OATT) approved by FERC.

By allowing non-utility generators and loads to use the transmission system, open access broke the formerly rigid link between the entities that built transmission and their captive ratepayers. Now a new transmission line could be used by multiple entities to transmit or receive power. The economic and operational links between utilities and transmission were further weakened by the advent (with the encouragement of FERC and some state regulators) of regional transmission organizations (RTOs) in the 1990s and 2000s in the Northeast, Midwest, Texas, and California. In RTO markets, utilities retain ownership of the transmission grid but operational control is exercised by the RTO. The object is to further ensure that the transmission grid is operated in a non-discriminatory fashion to the benefit of all market participants.[17]

The restructuring of the transmission market had several consequences for transmission cost allocation and planning:

- Cost allocation became more complex and contentious because the clear links that existed under traditional regulation between the parties that built, operated, and benefited from new transmission lines were broken.

[15] The power grid in the conterminous states now consists of three large interconnections: eastern, western, and ERCOT (covering most of Texas). The linkages between these interconnections are limited and for most purposes the three systems can be viewed as operationally independent. For additional information and a map, see CRS Report R40511, *Electric Power Transmission: Background and Policy Issues*, by Stan Mark Kaplan.

[16] FERC's economic authority extends to "public utilities" engaged in interstate commerce, as defined by the Federal Power Act. In practice this includes investor-owned utilities and a few rural cooperatives operating in the conterminous states outside of ERCOT. FERC's economic regulatory authority generally does not extend to public power agencies and most cooperatives. However, in respect to transmission open access, section 211A of the Federal Power Act (added by the Energy Policy Act of 2005) generally brings public power and cooperatives (but not ERCOT utilities) within FERC's aegis. In contrast to the somewhat limited scope of FERC's economic regulation, the Commission's authority over the reliability of the bulk power system extends to all power market entities in the conterminous states. For more information, see CRS Report R40511, *Electric Power Transmission: Background and Policy Issues*, by Stan Mark Kaplan.

[17] The term independent system operator (ISO) is often used interchangeably with RTO. Strictly speaking, an organization is an RTO only if it has been so designated by FERC, but from the standpoint of how these organizations operate this is a distinction without a difference. For a map of the RTOs and ISOs, see CRS Report R40511, *Electric Power Transmission: Background and Policy Issues*, by Stan Mark Kaplan.

- Under the traditional regulatory regime, distinctions between transmission additions aimed at improving system reliability and those aimed at reducing the costs of operating the power system (i.e., "economic" projects) had little meaning. In the open access regime the distinction between reliability and economic projects became critical, since each type of project could benefit different groups of customers to different degrees.
- In the open access regime, much of the responsibility for transmission planning shifted from utilities to either RTOs or, in the markets without RTOs, a plethora of other planning organizations built around utilities, generators, and other stakeholders.[18]

Current Status of Cost Allocation Policy

FERC Order 890

FERC has historically decided cost allocation on a case by case basis. More recently FERC has begun to move toward establishing cost allocation principles, but these are no more than general guidelines. The clearest articulation of FERC's current approach to transmission cost allocation is embodied in Order 890, issued in February 2007. The purpose of the order was to improve the operation of the open access transmission market created by Orders 888 and 889, including establishment of cost allocation procedures as an element of transmission planning.[19]

Order 890 established nine transmission planning principles, of which one is "Cost Allocation – a process must be included for allocating costs of new facilities that do not fit under existing rate structures, such as regional projects."[20] This principle was included because FERC found that "[t]he manner in which the costs of new transmission are allocated is critical to the development

[18] Examples of these non-RTO planning organizations include ColumbiaGrid in the northwest (http://www.columbiagrid.org/), CapX 2020 in and around Minnesota (http://www.capx2020.com/), the North Carolina Transmission Planning Collaborative (http://www.nctpc.org/nctpc/), and the Eastern Interconnection Planning Collaborative (http://www.eipconline.com/).

[19] The objectives of Order 890 were to amend "the regulations and the pro forma open access transmission tariff adopted in Order Nos. 888 and 889 to ensure that transmission services are provided on a basis that is just, reasonable and not unduly discriminatory or preferential. The final rule is designed to: (1) strengthen the pro forma open-access transmission tariff, or OATT, to ensure that it achieves its original purpose of remedying undue discrimination; (2) provide greater specificity to reduce opportunities for undue discrimination and facilitate the Commission's enforcement; and (3) increase transparency in the rules applicable to planning and use of the transmission system." FERC, Order 890, *Preventing Undue Discrimination and Preference in Transmission* Service, February 16, 2007, Summary. This and other FERC orders can be downloaded at http://www.ferc.gov/legal/maj-ord-reg.asp.

[20] The other eight principles are (1) Coordination – the process for consulting with transmission customers and neighboring transmission providers; (2) Openness – planning meetings must be open to all affected parties; (3) Transparency – access must be provided to the methodology, criteria, and processes used to develop transmission plans; (4) Information Exchange – the obligations of and methods for customers to submit data to transmission providers must be described; (5) Comparability – transmission plans must meet the specific service requests of transmission customers and otherwise treat similarly-situated customers (e.g., network and retail native load) comparably in transmission system planning; (6) Dispute Resolution – an alternative dispute resolution process to address both procedural and substantive planning issues must be included; (7) Regional Participation – there must be a process for coordinating with interconnected systems; (8) Economic Planning Studies – study procedures must be provided for economic upgrades to address congestion or the integration of new resources, both locally and regionally. FERC, Order 890-A, December 28, 2007, paragraph 181.

of new infrastructure. Transmission providers and customers cannot be expected to support the construction of new transmission unless they understand who will pay the associated costs. We therefore find that, for a planning process to comply with the Final Rule, it must address the allocation of costs of new facilities."[21]

A particular concern of FERC was cost allocation for long-distance transmission projects that would cross multiple utility service areas and state jurisdictions. Another concern was the treatment of projects that would yield economic benefits to multiple parties. According to FERC:

> … we are not modifying the existing mechanisms to allocate costs for projects that are constructed by a single transmission owner and billed under existing rate structures. Our intent is not to upset existing cost allocation methods applicable to specific requests for interconnection or transmission service under the pro forma OATT. *The cost allocation principle discussed herein is intended to apply to projects that do not fit under the existing structure, such as regional projects involving several transmission owners or economic projects*….[emphasis added][22]

The Commission chose to leave transmission owners and operators with significant but not unlimited latitude in establishing cost allocation policies. On the one hand, the Commission stated that it "will not impose a particular allocation method for such projects, but rather will permit transmission providers and stakeholders to determine their own specific criteria which best fit their own experience and regional needs."[23] On the other hand, the Commission did conclude that "some overall guidance [on cost allocation] is appropriate." FERC's overriding premise was that "'[a]llocation of costs is not a matter for the slide-rule. It involves judgment on a myriad of facts. It has no claim to an exact science.'"[24] FERC would therefore "allow regional flexibility in cost allocation and, when considering a dispute over cost allocation, exercise our judgment by weighing several factors." Three factors were listed by FERC:

> First, we consider whether a cost allocation proposal fairly assigns costs among participants, including those who cause them to be incurred and those who otherwise benefit from them. Second, we consider whether a cost allocation proposal provides adequate incentives to construct new transmission. Third, we consider whether the proposal is generally supported by state authorities and participants across the region.
>
> These three factors are interrelated. For example, a cost allocation proposal that has broad support across a region is more likely to provide adequate incentives to construct new infrastructure than one that does not. The states, which have primary transmission siting authority, may be reluctant to site regional transmission projects if they believe the costs are not being allocated fairly. Similarly, a proposal that allocates costs fairly to participants who benefit from them is more likely to support new investment than one that does not. Adequate financial support for major new transmission projects may not be obtained unless costs are assigned fairly to those who benefit from the project. [25]

[21] FERC, Order 890, February 16, 2007, paragraph 557.

[22] FERC, Order 890, February 16, 2007, paragraph 558.

[23] FERC, Order 890, February 16, 2007, paragraph 558.

[24] FERC, Order 890, February 16, 2007, paragraph 559, citing *Colorado Interstate Gas Co. v. Federal Power Commission*, 324 U.S. 581, 589 (1945).

[25] FERC, Order 890, February 16, 2007, paragraphs 559 and 560. Also see the FERC's *Transmission Planning Process Staff White Paper*, August 2, 2007, pp. 17-19, http://www.ferc.gov/industries/electric/indus-act/oatt-reform/order-890/white-paper.pdf.

Examples of Cost Allocations Under Order 890

The transmission planning processes required by Order 890 were generally filed by utilities and RTOs (in the form of amendments to their OATTs) by December 7, 2007. The processes were generally either accepted by FERC as filed or accepted with requirements for amendment to ensure compliance with Order 890's planning principles. Several examples are shown below to illustrate the diversity of approaches used throughout the nation. Although most of these approaches involve a combination of beneficiary pays (also referred to as "participant funding") and socialization of costs, the details are wholly dissimilar. Note that these brief summaries do not attempt to capture all the complexity of the cost allocations procedures.

PJM Interconnection

The cost allocation process established by PJM and approved by FERC allocated costs in terms of the physical characteristics and purpose of the proposed transmission line:

- The cost of projects planned by individual utilities to meet local needs rather than system-wide needs are to be charged to the customers in the zones of PJM that benefit (i.e., beneficiary pays).
- Beneficiaries are also to pay for new projects with a rating of less than 500 kilovolts (kV). FERC directed PJM and its customers to develop a standard methodology for allocating the costs of such projects.
- For "backbone" transmission projects with a rating of 500 kV or greater – that is, the proposed lines with the greatest capability to move large amounts of electricity – costs would be socialized throughout the PJM Interconnection (i.e., all customers within PJM would pay a portion of the costs of the facilities, regardless of their location relative to where the upgrades were made, on the assumption that all customers would benefit from these "backbone" upgrades).[26]

The socialization of the costs of 500 kV and greater facilities was controversial from the outset; for example, the Illinois utility commission reportedly characterized it as "not only unjust and unreasonable, but patently irrational."[27] On August 6, 2009, the United States Court of Appeals for the Seventh Circuit, in response to petitions filed by the Ohio and Illinois utility commissions, rejected PJM's cost socialization approach and remanded the issue to FERC. The court stated that "FERC is not authorized to approve a pricing scheme that requires a group of utilities to pay for facilities from which its members derive no benefits, or benefits that are trivial in relation to the costs sought to be shifted to its members.… No doubt there will be *some* benefit to the midwestern utilities just because the network *is* a network, and there have been outages in the Midwest. But enough of a benefit to justify the costs that FERC wants shifted to those utilities? Nothing in the Commission's opinions enables an answer to that question."[28] The implications of this decision are discussed in greater detail later in the report.

[26] FERC, Order No. 494, *PJM Interconnection LLC*, Dockets EL-05-121-000 and -002, April 19, 2007; PJM Interconnection, Compliance filing in response to FERC Order No. 890, Docket OA08-32, December 7, 2009.

[27] Jason Fordney, "Exelon, Illinois Commission and DP&L Protest PJM Allocation of Upgrade Costs," *Platts Electric Utility Week*, February 9, 2009.

[28] Illinois Commerce Comm'n v. FERC, 576 F.3d 470, 476-477 (7th Cir. 2009) (italics in original) (citations omitted).

New England ISO (NE-ISO)

In NE-ISO the costs of reliability investments with region-wide benefits are paid for by all customers in the RTO. A reported $4 billion in reliability investments have been made and allocated region-wide since this rule was adopted in 2004. The ISO's rules also provide for cost socialization for economic investments that provide regional benefits, but "[t]hus far [i.e., through November 2009] there have been no Market Efficiency Upgrades determined to be needed through the regional system planning process."[29] This experience illustrates how cost socialization for reliability upgrades can be more easily justified than for economic upgrades. This is because a failure at one point in a regional grid can potentially disrupt the entire system, while an economic upgrade may benefit only a subset of the region, making it harder to justify region-wide cost allocation.

Florida Power and Light Company (FPL)

FPL follows cost allocation procedures approved by the Florida Reliability Coordinating Council (FRCC), the regional electric grid reliability entity (but not an RTO) covering most of Florida. In brief, a party may be able to recover a portion of its costs for a new transmission project intended to serve incremental load or generation if, among other factors, the upgrade will affect the reliability of the FRCC grid and the transmission owner participates in the FRCC Regional Transmission Planning Process. If these criteria are met, a portion of the costs associated with the project will be split evenly between the customers in the zone with the need for the project and the "sources or cluster of sources" that are creating the need.[30]

Duke Energy Carolinas and Progress Energy Carolinas

These utilities made a joint filing in response to Order 890. Both companies participate in the North Carolina Transmission Planning Collaborative (NCTPC) regional transmission planning process and adopted the organization's standard cost allocation approach. In summary, that approach defines exceptions to the general principle that investments in the transmission grid should be allocated to the initiating utility company and its ratepayers (i.e., beneficiaries pay). One exception is "Regional Reliability Projects" included in the NCTPC planning process. These are projects undertaken by one utility that has region-wide reliability benefits; in this case costs are allocated to other utilities in proportion to the savings each company receives by not having to undertake its own reliability project.

The second exception is Regional Economic Transmission Path projects that reduce the cost of transmission service across two or more utility systems. These are envisioned as projects with multiple participants who will pay the upfront costs of the project. In return the participants will receive back their investment via payments made by the utilities over a period of up to 20 years. The utilities in turn will have the opportunity to recover the cost of these payments from

[29] FERC Docket AD09-8-000, *Transmission Planning Processes Under Order No. 890*, "Comments of New England Power Pool," November 23, 2009, p. 3.

[30] Florida Power & Light Co., Order 890 OATT Compliance Filing – Attachment K, FERC Docket No. OA08-29, December 7, 2009, pp. 14-16.

ratepayers.[31] Economic projects must be included in the NCTPC planning process to qualify for this type of cost allocation.[32]

Concluding Comments on Cost Allocation Examples

The examples presented above are only four of the dozens of Order 890 cost allocation filings made with FERC. Nonetheless, they do illustrate several points about current cost allocation policy at the federal and state levels. First, there is no uniformity in the cost allocation procedures, and at least to date FERC has declined to go beyond establishing general principles. The lack of consistency was highlighted at a March 23, 2010 hearing on FERC oversight held by the Subcommittee on Energy and the Environment of the House Energy and Commerce Committee, at which the following exchange reportedly occurred:

> "Has the commission decided who it is that should pay for new lines?" [Congressman John] Dingell asked. "Is it going to be the originator of the power? The transmission company? The ultimate recipients, the customers?"… "Currently, it depends on how the line is built," [FERC Chairman Jon] Wellinghoff said. "If it's built by a merchant, then the merchant will pay for it. If it's built by a developer who wishes to allocate costs more broadly, then it depends on the region and different regions do it differently. "
>
> Dingell interrupted: "You don't have a standard approach to this?"
>
> "No," Wellinghoff said.
>
> "You're telling me you have different rules for different states, different regions?" Dingell asked.
>
> Wellinghoff said each region decides which methodology works for it, and FERC reviews the different approaches to make sure they are fair.[33]

Second is the regional focus of all four processes. NE-ISO and PJM are multi-state RTOs and inherently take a regional perspective, but even the FPL, Duke, and Progress Energy processes are tied back to regional transmission planning organizations. This is consistent with FERC's efforts to encourage a regional perspective on transmission planning that incorporates many stakeholders in the planning process. Third, these examples illustrate the complexity involved in socializing transmission costs. The PJM process was rejected by a federal court and remanded to FERC. The NE-ISO process for socializing the costs of economic projects has never been used. The NCTPC and FPL cost socialization processes for regional reliability upgrades are fairly straightforward, but the NCTPC process for socializing economic project costs involves a multi-step procedure extending for up to 20 years. FPL did not include socialization of economic projects in its filing.

[31] That is, the utilities involved retain ownership in the project and recover its capital costs from ratepayers.

[32] Duke Energy Carolinas LLC and Progress Energy Carolinas LLC., Order 890 OATT Compliance Filing – Attachment K, FERC Docket Nos. OA08-50 and -51, December 7, 2009, pp. 15 – 16, and the attached "NCTPC Transmission Cost Allocation" statement.

[33] Meghan Gordon, "Wellinghoff: Transmission Cost Rule Could be on the Way," *Inside FERC*, March 29, 2010.

Recent Cost Allocation Developments

Recent developments in national energy policy have brought increased visibility to transmission cost allocation issues. In 2005, in response to a perceived shortfall in transmission investment (creating reliability and economic risks), Congress gave FERC new authority and direction in the Energy Policy Act of 2005 to offer incentives for transmission projects. Transmission investment and construction have subsequently increased. Another development has been growing concern over climate change and increased interest in using renewable power sources. Many of the best solar and wind resource areas are in remote areas, and in order to bring power from those locations to load centers new and costly inter-regional transmission lines would have to be built.[34] The combination of increased transmission construction activity, interest in building expensive and complex projects, and the lack of a standardized approach for allocating transmission costs, has brought the cost allocation issue to the fore.

S. 1462 and the "Corker Amendment"

On June 17, 2009, the Senate Committee on Energy and Natural Resources reported out of committee S. 1462, the American Clean Energy Leadership Act. The bill contained an amendment proposed by Senator Bob Corker of Tennessee that would direct FERC to issue a new electricity transmission cost allocation rule which could allow for "allocation of the costs of high-priority national transmission projects to load-serving entities within all or a part of a region, except that costs shall not be allocated to a region, or sub-region, unless the costs are reasonably proportionate to measurable economic and reliability benefits."[35]

The "Corker Amendment" replaced the original cost allocation language in S. 1462. The original text would have directed the Commission to issue a rule on the allocation of transmission costs on high-priority national transmission projects requiring only "that any cost allocation methodology, and any rates affected by the cost allocation methodology, shall be just, reasonable, and not unduly discriminatory or preferential." This requirement would likely have not significantly constrained FERC discretion in cost allocation rulemaking beyond the requirements already present in the FPA. The Corker Amendment, on the other hand, contains language pertaining to "measurable economic and reliability benefits" which is generally considered to create further limitations on FERC in formulating a cost allocation rulemaking. Many of the concerns seem to center on the perception that the amendment might require a quantification of benefits, and that such a requirement could present practical difficulties beyond what FERC would face in a rulemaking proceeding under the current FPA language or the original language of S. 1462.

Advocates of new electricity transmission construction have expressed concern that the amendment would limit FERC's ability to spread costs widely among all users in a given region.[36] They also argue that the benefits from a new transmission project may accrue over many years and therefore may not presently be "measurable."[37] FERC Chairman Jon Wellinghoff has

[34] As an example, see the conceptual designs of transmission projects for moving wind power from the Midwest to the east coast in the Joint Coordinated System Plan at http://www.jcspstudy.org/.

[35] S. 1462, at §121.

[36] *Transmission Groups Push Senate Cost Allocation Provision Changes*, EnergyWashington Week, (August 12, 2009).

[37] Id.

also been critical of the Corker Amendment, saying that it would both restrict the Commission's ability to spread transmission costs across the region and also needlessly tie up FERC in litigation over individual transmission cost allocations.[38] Three former FERC chairmen have also voiced their disapproval of the Corker Amendment, noting in a letter that the amendment could "hamstring" FERC and that the language could jeopardize planned infrastructure investment due to uncertainty about cost recovery.[39]

Others have voiced support for the amendment, however. A coalition of utilities has offered its support, noting that they believe transmission facility costs should be allocated narrowly in order to focus on those receiving clear benefits from the new or upgraded facilities.[40] Their concern is that the broad allocation of costs could result in the subsidization of transmission with mostly localized benefits (for example, Midwest wind power facilities) by those outside the area of direct benefit.[41] Critics also argue that socialization of transmission costs over wide areas would give long-distance transmission projects an economic advantage over alternatives (such as the local development of renewable power, including off-shore wind farms, and energy efficiency) which might be preferable if the playing field was kept level.[42]

No action has been taken on S. 1462 since it was reported out of Committee on June 17, 2009.

Illinois Commerce Commission v. FERC

The debate over the proper method of allocation of transmission costs has not been confined to the executive and legislative branches of government. In *Illinois Commerce Commission v. FERC*,[43] the U.S. Court of Appeals for the Seventh Circuit heard a challenge to FERC's approval of a cost allocation for certain new transmission facilities in the PJM Interconnection.[44] Two state utility commissions in Midwestern states protested a FERC-approved allocation of transmission costs for the PJM interconnection that required pro rata contributions from all utilities in the region; that is, the utilities in the PJM region would increase their rates by a uniform amount sufficient to cover the cost of the new facilities.[45] According to the court, FERC's rationale for this pro rata increase was that (1) some of the PJM members entered into similar pro rata cost sharing agreements in the past and would like to continue to allocate costs in that manner; (2) the burden of determining which parties would benefit from the new transmission (and to what degree they would benefit) would be onerous and would likely result in litigation; and (3) that every member of the PJM Interconnection would benefit from the new transmission facilities because the reliability of the entire network would improve.[46]

[38] *Wellinghoff Criticizes Corker Transmission Cost Sharing Amendment*, EnergyWashington Week (October 7, 2009).

[39] Id.

[40] *Transmission Cost Allocation Fight Intensifies With New Pro-Corker Group*, EnergyWashington Week (November 11, 2009).

[41] Id.

[42] Id.

[43] 576 F.3d 470 (7th Cir. 2009).

[44] The court also heard a challenge to the approved cost allocation method for certain upgrades to existing facilities; however, that discussion is not germane to the subject of this memorandum, and therefore is not discussed here.

[45] 576 F.3d at 474.

[46] Id.

The court held that the FERC-approved pro rata rate increase for recovery of transmission costs was not supported by substantial evidence.[47] The court "dispatched briefly" FERC's two arguments in favor of the reasonableness of the pro rata rates. According to the court, the fact that previous arrangements among the PJM members had pro rata cost sharing arrangements in the past carried no weight.[48] The court rejected FERC's argument regarding the difficulty of measuring benefits and the likelihood of litigation, because of an absence of evidence of the relative difficulty of assessing the benefits.[49] The court did not dismiss the possibility of such a finding, noting that feasibility concerns can play a role in rate determinations.[50] However, in this instance, the court found that FERC had not offered a sufficient explanation for this factor and the role it played in the rate decision.[51]

The court spent more time addressing FERC's third line of reasoning: that the new transmission facilities would benefit every PJM member, and therefore that the costs should be allocated among all of them. As the court acknowledged, even though the purpose of the new facilities was to satisfy demand for eastern customers in the PJM system, the entire PJM system would benefit from greater reliability as a result.[52] However, the court found that it was possible that such secondary benefits could be minor in relation to the costs to customers not in the eastern region expected to benefit directly from the new transmission capacity, and that FERC had not provided any information by which these benefits could be assessed.[53] According to the court:

> [i]f FERC cannot quantify the benefits to the midwestern utilities from new ... lines in the East, but it has an articulable and plausible reason to believe that the benefits are at least roughly commensurate with those utilities' share of the total electricity sales in PJM's region, then ... the Commission can approve PJM's proposed pricing scheme on that basis. But it cannot use the presumption to avoid the duty of "comparing the costs assessed against a party to the burdens imposed or benefits drawn by that party."[54]

The impact of this decision on cost allocation going forward is not entirely clear. On the one hand, as several observers have noted, the case appears to create a new obligation for FERC to reconsider and potentially discard pro rata allocation of transmission costs.[55] However, the ruling seems to be directed more at FERC's procedural failure to justify the ratemaking than a substantive failure in the application of the law. The court repeatedly mentioned that FERC's arguments in favor of the pro rata allocation were dismissed not because such a cost allocation method was unreasonable on its face, but rather because FERC had failed to demonstrate the reasonableness of the rates. Perhaps the most significant restriction on FERC articulated by the Seventh Circuit is that FERC must show reason to believe that the benefits received by the parties are "at least roughly commensurate" with the pro rata cost allocation.[56] Such a standard could

[47] Id. at 478.

[48] Id. at 475.

[49] Id.

[50] Id.

[51] Id.

[52] Id. at 476.

[53] Id.

[54] Id. at 477.

[55] *Appeals Court Sets Precedent In Rejecting FERC Socialized Grid Costs*, EnergyWashington Week (August 26, 2009).

[56] 576 F.3d. at 477.

likely be interpreted as less restrictive than the language found in the Corker Amendment, as a "roughly commensurate" requirement could be interpreted as not requiring a quantification of benefits; while the Corker Amendment's requirement that rates be reasonably proportionate to "measurable economic and reliability benefits" could be interpreted as requiring a quantification, a process which could present practical difficulties.

FERC's Request for Comment on Transmission Planning

As part of its continued oversight of transmission planning, FERC initiated Docket AD09-8, *Transmission Planning Processes under Order No. 890*, on June 30, 2009.[57] FERC's first action under this docket, in September 2009, was to hold technical conferences on transmission planning with transmission owners, operators, and other stakeholders in Atlanta, Phoenix, and Philadelphia. Based on these meetings, the Commission concluded that significant issues remained with: the effectiveness of transmission planning generally and regional and inter-regional planning specifically; the treatment of certain types of electricity resources in the planning process (such as renewable power); and cost allocation for new transmission projects. In relation to cost allocation, the Commission found that:

> Determining the costs and benefits of adding transmission infrastructure to the grid is a complex process, particularly for projects that affect multiple systems and therefore may have multiple beneficiaries. At the same time, the expansion of regional power markets and the increasing adoption of renewable energy requirements have led to a growing need for transmission projects that cross multiple utility and RTO systems. *There are few rate structures in place today that provide the allocation and recovery of costs for these inter-system projects, creating significant risk for developers that they will have no identified group of customers from which to recover the cost of their investment.* [emphasis added][58]

Following these meetings, FERC signaled, in an October 8, 2009 notice requesting comments on cost allocation and other transmission planning issues, that it may take a more directive approach toward cost allocation processes than in the past. The Commission noted that its "best remaining opportunity to eliminate barriers to new transmission construction may therefore be *to provide greater certainty in its policies for allocating the cost of new transmission facilities, particularly for facilities that cross multiple transmission systems*." [emphasis added][59] The specific questions for which FERC requested comments may also provide a window into the Commission's thinking. The questions included, among others:

- How can the beneficiaries of a specific project be identified, and should the delineation of beneficiaries include generators in addition to loads? The unstated but concomitant question is how should the level of benefits, and therefore the cost responsibility of different customer groups, be determined? This goes to the heart of the issue raised by the Seventh Circuit's rejection of the PJM Interconnection cost allocation process.[60]

[57] Filings under this docket can be accessed through the FERC docket search web page, at http://elibrary.ferc.gov/idmws/docket_search.asp.

[58] FERC, Docket No. AD09-8-000, *Transmission Planning Processes Under Order No. 890*, "Notice of Request for Comments," October 8, 2009, p. 5.

[59] FERC, Docket No. AD09-8-000, *Transmission Planning Processes Under Order No. 890*, "Notice of Request for Comments," October 8, 2009, p. 7.

[60] Illinois Commerce Comm'n v. FERC, 576 F.3d 470 (7th Cir. 2009).

- Should cost allocation processes be designed to cover larger geographic regions? This would seem to raise the contentious issue of whether costs should be allocated over large areas and perhaps interconnection-wide.
- Should cost allocations be static or change over time? This question was posed by FERC as a general issue, and specifically in respect to transmission lines which are initially built with overcapacity in anticipation of demand growth.
- How, if at all, should non-quantifiable costs and benefits be incorporated into cost allocations? [61]

By the end of November 2009 FERC had received 103 sets of comments. The comments manifest a wide range of opinions on how FERC should proceed. For example:

- American Electric Power, a large utility company operating within the PJM, SPP, and ERCOT RTOs, argued for interconnection-wide planning and cost allocation for extra-high voltage transmission lines, to be implemented by a FERC rulemaking.[62]
- Southern Company, a large southeastern utility operating outside of RTOs, rejected the whole notion that problems with transmission planning and cost allocation were inhibiting transmission development. Southern concluded that:

  > A significant misconception being promoted by certain aspects of the industry in the name of promoting renewable resources is that the current transmission planning processes and cost allocation methodologies are obstacles to the expansion of the transmission grid. This is not the case. The reason that more inter-regional transmission projects are not being built, at least in the Southeast, is that they have not proven to be economic as compared to other options. As a result, those who would benefit from these projects desire to have other entities subsidize their costs by seeking to mandate the planning of these projects through restructured "top-down" planning processes and through the broad socialization of the costs of such uneconomic transmission projects.[63]

- The New England Power Pool Participants Committee (a committee of stakeholders operating within the NE-ISO) stated that "*it would be helpful for the Commission to provide policy guidance on how it would treat a range of cost allocation options.*" [emphasis in the original][64] However, the committee was opposed to the establishment of interconnection-wide or national cost allocation rules, or to the notion of interconnection-wide cost allocation.[65]

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[61] FERC, Docket No. AD09-8-000, *Transmission Planning Processes Under Order No. 890*, "Notice of Request for Comments," October 8, 2009, p. 7-8. An example of a non-quantifiable benefit may be the use of existing transmission right of ways for new or upgraded transmission lines, in order to avoid the time and controversy that can accompany efforts to place lines in new right of ways.

[62] FERC Docket No. AD09-8-000, *Transmission Planning Processes Under Order No. 890*, "Comments of American Electric Power Service Corporation," November 23, 2009, pp. 23-24.

[63] FERC Docket No. AD09-8-000, *Transmission Planning Processes Under Order No. 890*, "Initial Comments of Southern Company Services, Inc.," November 23, 2009, p. 3.

[64] FERC Docket No. AD09-8-000, *Transmission Planning Processes Under Order No. 890*, "Comments of New England Power Pool," November 23, 2009, p. 7.

[65] FERC Docket No. AD09-8-000, *Transmission Planning Processes Under Order No. 890*, "Comments of New England Power Pool," November 23, 2009, pp. 7 - 8.

- The Southwest Power Pool RTO suggested that FERC implement standardized rules for inter-regional transmission planning and cost allocation. It also supported the establishment of cost allocation processes across broad areas, such as the Eastern Interconnection.[66] SPP stated that:

  > …attempts to precisely define benefits are misplaced. The real benefits of a major transmission project, as part of a robust EHV network, over its useful life will never be fully captured in an economic model as there are many benefits that fall outside the scope of economic modeling. While precise analysis may be desirable, the limitations of such analysis must be acknowledged. Moreover, it is important to recognize that doing nothing also has a cost….Currently, SPP is working to implement a cost allocation method that would even provide more cost sharing for regional projects and simplify the cost allocation.[67]

- In virtually complete contradiction to the position of SPP, the Electricity Consumers Resource Council (ELCON), an association of industrial electricity users, emphasized that cost allocation should follow a fundamental principal of "beneficiary pays." Rather than viewing the issue of allocating benefits as a stumbling block to transmission project development, ELCON stated that:

  > [A]s FERC notes in the Request [for comments], how to allocate costs is "not a new problem." Indeed, courts have developed a carefully crafted body of law to guide the allocation of the costs of transmission investment, centering on the principle that the beneficiaries of a service are to pay for it.
  >
  > [T]hose who are allocated costs based on actual, demonstrable benefits are less likely to object to the construction of new transmission facilities than those who are allocated costs based on an assumption that they will receive some general, unquantifiable benefit. The "beneficiary pays" model is, therefore, more likely to reduce controversy and assure that future transmission would be built where the costs truly are justified. [68]

The diversity of these comments indicates the lack of agreement on how FERC should proceed in respect to cost allocation. In November 2009, at about the same time these comments were filed, a transmission trade group and a consortium of environmental groups filed separate petitions with FERC asking the Commission to establish a rulemaking to set transmission cost allocation standards.[69] How FERC will respond to these petitions, or to comments it has received on cost allocation, is not known. One press report does suggest that the Commission may be preparing to take new action on cost allocation and other transmission issues, based on its existing legal authority.[70] While this cannot be verified, it would be consistent with an earlier public statement

[66] FERC Docket AD09-8-000, *Transmission Planning Processes Under Order No. 890*, "Comments of Southwestern Power Pool, Inc., Regarding Transmission Planning Processes Under Order No. 890," November 23, 2009, p. 12.

[67] FERC Docket AD09-8-000, *Transmission Planning Processes Under Order No. 890*, "Comments of Southwestern Power Pool, Inc., Regarding Transmission Planning Processes Under Order No. 890," November 23, 2009, p. 13.

[68] FERC Docket AD09-8-000, *Transmission Planning Processes Under Order No. 890*, "Comments of the Electricity Consumers Resource Council" November 23, 2009, pp. 2 and 14.

[69] Peter Behr, "FERC Enters a Maze of Questions About Renewable Energy Transmission," *The New York Times*, November 23, 2009, http://www.nytimes.com/cwire/2009/11/23/23climatewire-ferc-enters-a-maze-of-questions-about-renewa-29763.html?scp=3&sq=Conservation%20Law%20Foundation&st=cse.

[70] "Wellinghoff Comments May Point To New FERC Transmission Push," EnergyWashington.com, December 2, (continued...)

by FERC Commissioner Suedeen Kelly (who left FERC at the end of 2009) that if transmission legislation is not passed by Congress, FERC will "look seriously at using our existing authority to move forward in the direction of planning, siting, and recovering the costs of longer transmission lines."[71] More recently, FERC Chairman Wellinghoff reportedly stated at a March 23, 2010 hearing held by the Subcommittee on Energy and the Environment of the House Energy and Commerce Committee that FERC "should know where we're going to be in six months" regarding cost allocation policy.[72]

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[71] "Kelly Says FERC Will Address Transmission if Congress Fails to Act," *EnergyWashington.com*, April 22, 2008.

[72] Meghan Gordon, "Wellinghoff: Transmission Cost Rule Could be on the Way," *Inside FERC*, March 29, 2010.