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Via HAND DELIVERY

The Honorable Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426

**Re: Pioneer Transmission, LLC
Docket No. ER09-____-000**

Dear Ms. Bose:

Pursuant to Sections 205 and 219 of the Federal Power Act (“FPA”) and Order No. 679,¹ Pioneer Transmission, LLC (“Pioneer” or “Applicant”) submits this request for acceptance of a formula rate and rate incentives for its investment in a major 765 kV transmission project (the “Pioneer Project” or “Project”) that Pioneer intends to build in Indiana, which will traverse the footprints of PJM Interconnection, L.L.C. (“PJM”) and the Midwest Independent Transmission System Operator, Inc. (“Midwest ISO”). At a cost of over \$1 billion,² the Pioneer Project will be a first step in using 765 kV

¹ *Promoting Transmission Investment through Pricing Reform*, Order No. 679, FERC Stats. & Regs. ¶ 31,222, *order on reh’g*, Order No. 679-A, FERC Stats. & Regs. ¶ 31,236 (2006), *order on reh’g*, 119 FERC ¶ 61,062 (2007).

² The cost of the Project will depend upon selection of a final route and execution of construction-related contracts.

technology to strengthen the interconnection between PJM and the Midwest ISO, thereby increasing reliability and opening the way for the development of thousands of megawatts (“MW”) of wind generation in this area.

I. INTRODUCTION

The Pioneer Project will be the first 765 kV project that will interconnect PJM and the Midwest ISO, increasing reliability and improving system economics for customers in both RTOs. At a cost of about \$1 billion, this 240-mile project will strengthen the ties between pockets of generation in southern Indiana and load centers in the central and northern part of the state. In doing so, the Project will unload the underlying lower-voltage networks, thereby providing additional operating flexibility, increasing reliability, reducing transmission losses, and relieving transmission congestion thereby allowing lower-cost energy to be delivered to load.

In addition, with a capacity of over 4,000 MW, the Project will facilitate the interconnection of the many new wind projects currently being developed in central Indiana and make it possible for additional projects to be developed. Regional studies currently underway have identified the need to build additional extra high voltage facilities in the Eastern Interconnection to improve reliability and accommodate the surge in wind power development, and the Pioneer Project fits that bill. The Project will accomplish these objectives by using state-of-the-art 765 kV technology, which will benefit consumers by increasing deliverability with smaller right-of-way requirements than would be needed for the equivalent capacity using lower-voltage facilities.

Although AEP and Duke have begun the study process with PJM and the Midwest ISO, Pioneer has not yet been formally approved for inclusion in PJM's or the Midwest ISO's regional transmission expansion plan, and has not yet received all necessary siting approvals. As such, the Project faces substantial challenges. Given the substantial potential benefits, this is precisely the kind of transmission investment that the Commission should be seeking to promote through its incentive program under Order No. 679. The incentives sought in this application are both necessary and appropriate to induce Pioneer to undertake the steps necessary to bring the Project to fruition.

II. DESCRIPTION OF RATE REQUEST

Pioneer requests that the Commission accept for filing a formula rate under which the costs of the Pioneer Project ultimately will be recoverable through the open access tariffs of PJM ("PJM OATT") and the Midwest ISO ("Midwest ISO TEMT"). The formula rate is typical of the formula rates accepted for transmission cost recovery in the past, under which costs are projected and then trued up to actual costs once they are known. Pioneer also seeks the following four rate incentives for the Project:

- (1) An incentive return on equity ("ROE") of 13.5%, which is 170 basis points below the high end of the zone of reasonableness. This incentive ROE includes incentive adders for RTO participation, the use of substantial advanced technologies, and for investment in substantial new transmission facilities that will promote the public interest by reducing the cost of

electricity and providing for the interconnection and delivery of renewable generation in the region (“Incentive ROE”);

- (2) Inclusion of 100% of construction work in progress in rate base during the development and construction period for the Project (“CWIP Incentive”);
- (3) Approval of the recovery of Pioneer’s prudently-incurred costs associated with the Pioneer Project in the event this Project must be abandoned for reasons outside of the Applicant’s control (“Abandonment Incentive”); and
- (4) Permission to establish a regulatory asset that will include expenses not included in CWIP that are incurred in connection with the Project prior to the date that the formula rates are made effective under PJM’s and the Midwest ISO’s open access transmission tariffs, plus authorization to amortize the regulatory asset with interest³ over five years for cost recovery purposes (“Regulatory Asset Incentive”).

Pioneer describes its proposal in detail in this letter and the following attachments:

³ Pioneer seeks permission to use the Allowance for Funds Used During Construction (“AFUDC”) rate for accrual purposes until the regulatory asset is included in ratebase. In *Potomac-Appalachian Transmission Highline, L.L.C.*, the Commission explained that such a rate proposal will be reviewed under Order No. 679 because it “achieves the same outcome as the Order No. 679 incentive for pre-commercial costs because such costs will be fully amortized (expensed) and recovered during the construction of the Project.” 122 FERC ¶ 61,188 at P 9 n.8 (2008) (“*PATH*”).

- Appendix A – proposed PJM OATT and Midwest ISO TEMT tariff sheets;⁴
- Appendix B – Direct Testimony of Heather Geiger (introduction of other witnesses, ownership structure, benefits and costs of the Project);
- Appendix C – Direct Testimony and Exhibits of Christopher M. Fallon (Project benefits);
- Appendix D – Direct Testimony and Exhibits of Lisa M. Barton (advanced technology);
- Appendix E – Direct Testimony of Stephan T. Haynes (description of financial risks supporting the incentive package);
- Appendix F – Direct Testimony of J. Danny Wiles (accounting, taxes);
- Appendix G – Direct Testimony and Exhibits of Donald J. Clayton (depreciation);
- Appendix H – Direct Testimony and Exhibits of Dr. William E. Avera (Incentive ROE);
- Appendix I – Direct Testimony and Exhibits of Alan C. Heintz (formula rate);
- Appendix J – Statement In Compliance With CWIP Regulations, Including Statement BM;
- Appendix K – Attestation required by 18 C.F.R. § 35.13(d)(6); and
- Appendix L – Service List.

⁴ Appendix A includes a clean version of the proposed Tariff Sheets, as well as a redlined version of the one existing Tariff Sheet (Midwest ISO TEMT Sheet No. 1315) that would be changed by this filing.

III. PROPOSED EFFECTIVE DATES

A. 61-Day Effective Date: Abandoned Plant and Regulatory Asset Incentives

The Applicant requests an effective date of 61 days after the date of this filing (December 15, 2008) so that the abandonment protection requested in this filing can be put into effect as soon as possible. In addition, Pioneer seeks acceptance within 61 days of the right to establish the regulatory asset described above for Project expenses incurred prior to the effective date of the formula rate. The regulatory asset is proposed to include all expenses incurred to date in connection with the Project as well as expenses incurred going forward.

B. Deferred Effective Date: The Formula Rate Itself and ROE-Related Incentives

With respect to the formula rate itself, Pioneer requests that the Commission permit a deferred effective date. The reason is that neither PJM nor the Midwest ISO has yet to include the Project in its respective transmission expansion plans. Moreover, while under the respective relevant Midwest ISO and PJM tariffs, cost recovery mechanisms for transmission projects have been adopted,⁵ the two RTOs have not yet filed a proposal to allocate the cost of economic cross-border projects between one another. They were

⁵ *E.g.*, *PJM Interconnection, L.L.C.*, 122 FERC ¶ 61,082 (2008); *Midwest Indep. Transmission System Operator, Inc.*, 120 FERC ¶ 61,080 (2007); *Midwest Indep. Transmission System Operator, Inc.*, 114 FERC ¶ 61,106 (2006).

ordered to do so by the Commission several years ago⁶ and have been granted an extension of time until January 28, 2009 to complete this important task.⁷

Until the Project is approved by PJM and the Midwest ISO for inclusion in the PJM's Regional Transmission Expansion Plan ("RTEP") and the Midwest ISO's Transmission Expansion Plan ("MTEP") and there is a Commission-approved mechanism for recovery of the costs of such a cross-border Project through PJM and Midwest ISO rates, Pioneer's formula rate cannot realistically go into effect. An appropriate Commission-approved cost allocation mechanism is necessary to ensure that the cost of the Project is fairly allocated among the Project beneficiaries in PJM and the Midwest ISO, which will enable the Project's sponsors to garner support from the RTO stakeholders. It is for that reason that Pioneer requests approval to establish a regulatory asset for Project expenses prior to the effective date of the formula rate. The Commission has deferred the effectiveness of rate schedules in appropriate circumstances, subject to the applicant's submission of a notification to the Commission of the occurrence of the event upon which the rate schedule's effectiveness depends.⁸ The Applicant will submit such notification if the Commission determines such action is required.

⁶ *Midwest Indep. Transmission Sys. Operator, Inc.*, 113 FERC ¶ 61,194 (2005).

⁷ *E.g., Midwest Indep. Transmission System Operator, Inc.*, Dkt. Nos. ER05-6, *et al.*, Notice of Extension of Time (July 30, 2008).

⁸ *See, e.g., Southern Cal. Edison Co.*, 106 FERC ¶ 61,183 at P 46 (2004); *Western Kentucky Energy Corp.*, 83 FERC ¶ 61,336 at 62,362 (1998); *West Texas Wind Energy Partners, LLC*, 83 FERC ¶ 61,078 at 61,382 (1998).

IV. BACKGROUND

A. Description of Pioneer and Its Members

Pioneer is a joint venture between AEP Transmission Holding Company, LLC (“ATHC”), and Duke Energy Transmission Holding Company, LLC (“DTHC”). ATHC in turn is a wholly-owned subsidiary of American Electric Power Company, Inc. (“AEP”), and DTHC is an indirect wholly-owned subsidiary of Duke Energy Corporation (“Duke”).

Pioneer has been formed as a limited liability company (“LLC”) organized in Indiana. It is fifty percent owned by ATHC and fifty percent owned by DTHC (the “Members”). Pioneer will have a “Board of Managers,” which will be the principal decision-making body of the LLC. The Board of Managers and officers have been chosen from officers and employees of AEP and Duke and/or their subsidiaries. Pioneer will have no employees; however, it will have access to the utility expertise it needs through service contracts with American Electric Power Service Corporation (“AEPSC”) and Duke (or its subsidiaries), as appropriate. Pioneer will be capitalized through a combination of equity contributions from the Members, ATHC and DTHC, and debt financing obtained by Pioneer itself. ATHC and DTHC will invest equity capital as approved by the Board of Managers.

AEP brings its unique expertise in the design, construction and operation of 765 kV transmission to this Project. AEPSC will enter into an at-cost contract with Pioneer to provide engineering, design and project management for the construction of the facilities.

Utility subsidiaries of Duke operate high-voltage transmission facilities in proximity to the Project and these utilities have experience in developing transmission projects in this region. In addition, AEP utilities are members of and familiar with the processes and procedures of PJM, while Duke utilities are members of and familiar with the processes and procedures of the Midwest ISO.

1. AEP

AEP, through its utility units, delivers electricity to more than five million customers in eleven states. AEP ranks among the nation's largest generators of electricity, owning nearly 38,000 MW of generating capacity in the U.S. AEP also owns the nation's largest electricity transmission system, a nearly 39,000-mile network that includes more 765 kV extra-high voltage transmission facilities than are operating in all other U.S. transmission systems combined. AEP's transmission system directly or indirectly serves about 10% of the electricity demand in the Eastern Interconnection and approximately 11% of the electricity demand in ERCOT, the transmission system that covers much of Texas.

2. Duke

Through its utility units, Duke delivers electricity to approximately 4 million retail customers in five states. The Duke utilities own nearly 28,000 MW of generating capacity in the U.S., and also own nearly 16,000-miles of transmission facilities⁹ that

⁹ About 1,000 of these miles of facilities are co-owned with other entities.

include a substantial amount of extra-high voltage transmission facilities. Duke utilities serve retail and wholesale customers in North Carolina and South Carolina as well as in three states in the Midwest ISO region.

B. Description of the Project

The Pioneer Project is proposed to be an approximately 240-mile 765 kV transmission line, and related facilities, located in Indiana. The Project will interconnect the generation-rich region of southwestern Indiana with the more populated load centers in central and northern Indiana. The line will run between two existing 765 kV substations, the Rockport Station in the south (in PJM) and the Greentown Station in the north (in the Midwest ISO). As described in more detail below, the line will also traverse an area in central Indiana that is experiencing substantial development of wind-powered generation. The Project is expect to have a capacity of over 4,000 MW, cost about \$1.0 billion, and be in service in the 2014-2015 timeframe.

V. REQUEST FOR INCENTIVES UNDER ORDER NO. 679

Under Order No. 679, an applicant requesting incentive rate treatment must provide a detailed explanation of how the proposed rate treatment complies with Section 219 of the FPA, and a demonstration that the incentives are just and reasonable and not unduly discriminatory or preferential. To do this, the applicant must demonstrate that: (1) the facilities for which it seeks incentives satisfy the requirements of FPA Section 219 – *i.e.*, they either ensure reliability or reduce the cost of delivered power by reducing congestion; (2) the total package of incentives is tailored to address the

demonstrable risks or challenges faced by the applicant in undertaking the project – *i.e.*, the incentives meet the nexus test; and (3) the resulting rates are just and reasonable.¹⁰

As detailed below, the requested rate incentives meet all three elements of this test.

A. The Project Is Eligible for Incentives Under Section 219 at this Time

Order No. 679 provides that a public utility may make an FPA Section 205 filing to obtain incentive rate treatments for transmission infrastructure investment that satisfies the requirements of FPA Section 219 – namely, that the facilities for which it seeks incentives either ensure reliability or reduce the cost of delivered power by reducing transmission congestion.¹¹ Order No. 679 establishes a rebuttable presumption that this requirement is met for: “(i) a transmission project that results from a fair and open regional planning process that considers and evaluates projects for reliability and/or congestion and is found to be acceptable to the Commission; or (ii) a project that has received construction approval from an appropriate state commission or state siting authority.”¹²

In Order No. 679, the Commission indicated that it would consider a request for incentive treatment for a project which is still undergoing consideration in a regional

¹⁰ See 18 C.F.R. § 35.35(d) (2008).

¹¹ See 18 C.F.R. § 35.35(i) (2008).

¹² *Id.* at § 35.35(i) and (ii); see Order No. 679-A, 117 FERC ¶ 61,345 at P 47. Order No. 679-A clarifies the operation of this rebuttable presumption by noting that the authorities and/or processes on which it is based (*i.e.*, a regional planning process, a state commission, or siting authority) must, in fact, consider whether the project ensures reliability or reduces the cost of delivered power by reducing congestion.

planning process, but that the Commission may make any requested rate treatment contingent upon the project being approved under the regional planning process.¹³

Realistically, absent inclusion of the Project in the PJM and Midwest ISO regional plans (the RTEP and MTEP, respectively) and acquisition of all necessary regulatory

approvals, the Project will not be able to move forward. Pioneer, however, is seeking Commission approval of two incentive rate treatments to be effective at this time:

Recovery of abandonment costs and approval to establish a regulatory asset for expenses not recovered through CWIP that are incurred prior to the effective date of the formula

rate and, upon the effective date, the ability to recover these costs, with a return,

amortized over a five-year period. For this reason, Pioneer will demonstrate that the

Project is eligible for these two incentives without relying on its inclusion in the PJM and Midwest ISO regional expansion plans.

1. Overview

The Project will produce numerous and substantial benefits: it will improve reliability, facilitate the interconnection of new generation that would otherwise require substantial upgrades to the existing lower-voltage networks, eliminate existing and anticipated congestion on the transmission system, reduce losses, and permit the interconnection of substantial quantities of wind generation.

¹³ Order No. 679 at n.39. *See also Xcel Energy Services, Inc.*, 121 FERC ¶ 61,284 at PP 53, 61 (2007) (rebuttable presumption granted contingent upon state commission siting approval).

These benefits primarily are derived from the 765 kV technology that the Project will employ. The primary benefits associated with the use of 765 kV transmission are discussed in detail below, and in the attached testimony of Ms. Lisa Barton. Ms. Barton identifies the following significant benefits associated with the use of 765 kV transmission:

1. 765 kV transmission has a significantly greater thermal capability than lower voltages. For example, she explains that 765 kV transmission has 3-6 times the capacity of a 345 kV line. Exh. No. PNR-300 at 12. For this reason, 765 kV transmission has a significant cost advantage over lower voltage facilities (*id.* at 5, 14-15), and requires substantially less land for equivalent capacity. *Id.* at 12-14.
2. 765 kV transmission is inherently more reliable than lower voltage transmission because 765 kV facilities are generally free of overload risk. She explains that outage statistics show that 765 kV circuits experience significantly fewer forced outages than their 345 kV counterparts and that there have been no multi-phase faults recorded at 765 kV, except for the rare occurrences of structure failure. *Id.* at 7.
3. 765 kV transmission facilities will take power off of the underlying transmission system, relieving congestion, eliminating reliability and performance issues that may exist, reducing losses, and reducing the need

to invest in lower voltage transmission to relieve existing constraints. *Id.* at 6-8, 15-16.

4. Losses on 765 kV transmission facilities are substantially lower than losses on lower voltage facilities. *Id.* at 5. For example, typical losses on 765 kV facilities average approximately 1%, as opposed to the more typical 5% losses on 345 kV and lower voltage transmission.
5. 765 kV transmission has a significant cost advantage over lower voltage transmission. *Id.* at 5, 14-15.
6. 765 kV technology reduces air emissions, reduces land use, and lessens visual impacts on the landscape by requiring less right-of-way. *Id.* at 12-14.

2. Reliability Benefits

The Commission consistently has found that placing additional transmission under the control of an ISO results in greater reliability. In *City of Anaheim, California*, for example, the Commission stated that additional transmission entitlements “provide reliability benefits to the [ISO] grid by giving the [ISO] increased ability to control scheduling.”¹⁴ The Commission similarly found in *California Indep. Sys. Operator*

¹⁴ 113 FERC ¶ 61,091 at P 48 (2005).

Corp. that increasing the scope of facilities under an ISO's control increases reliability.¹⁵

As the following discussion confirms, Pioneer will have reliability benefits for PJM, the Midwest ISO, and their respective market participants.

The primary reliability benefit of the Project is that it will effectively tie together the load centers in central and northern Indiana with the generation centers in the southwestern part of the state and beyond. As illustrated in Figure 1 of Mr. Fallon's testimony (Exh. No. PNR-200 at 4), the 345 kV and 230 kV networks (designated by the red and blue lines, respectively) currently are the primary means to deliver the output of that generation to the load centers. These networks are already heavily loaded, and the situation will be exacerbated as future generation being developed in the region begins to interconnect to the grid. Table 1 to Mr. Fallon's testimony illustrates some of the overloaded 230 kV and 345 kV transmission facilities in Indiana, and how the corresponding reliability violations can be eliminated by constructing facilities that connect the Greentown area with the Rockport area, with intermediate connections to other generation in southern Indiana. Pioneer addresses these reliability problems. *Id.* at 7. Mr. Fallon further explains that 765 kV technology is the most effective way to accomplish this connection: because the capacity of a 345 kV line is significantly less than the same length of 765 kV line while the impedance of the 345 kV line is

¹⁵ 102 FERC ¶ 61,058 at P 14 (2003) ("We also find that expanding the scope of the California ISO will enhance reliability and operation of the transmission grid, which is a benefit to all market participants"), *aff'd*, 107 FERC ¶ 61,150 (2004), *subsequent history omitted*.

substantially higher (resulting in greater real and reactive power losses), it would require six 345 kV circuits to match the carrying capacity of a single 765 kV circuit. *Id.*

As Mr. Fallon further discusses, in the geographic area where Pioneer will be built, there are numerous older, less-efficient coal-fired generating stations that are not equipped with state of the art environmental technology, and are close to the age of retirement. That, coupled with potential climate change legislation, could result in a significant number of plant retirements over the next 10 to 20 years. Such retirements combined with the need to meet growing demand indicates that this region will need a substantial amount of new generation and, correspondingly, substantial new transmission infrastructure. Exh. No. PNR-200 at 5. Mr. Fallon further explains that as the region's generation portfolio increasingly becomes more remote from load centers and has different operating characteristics than the traditional fossil-fired generation, the new transmission grid will need to be more robust than the current 230-kV and 345-kV networks in the region. *Id.* For this reason, and considering the benefits of 765 kV technology, as discussed above and in Ms. Barton's testimony, AEP and Duke concluded that the Project was the best vehicle to accommodate new generation, including, as discussed below, the substantial wind-powered generation being developed in this area.

Mr. Fallon describes a related reliability concern that involves the limited time window to work on the necessary transmission infrastructure to support new generating projects: the heavy (and growing) loading on the existing 230 kV and 345 kV networks

has reduced the period of time each year that the grid operators can take these facilities out of service to allow construction and maintenance to support new interconnections. *Id.* at 12. This has delayed the addition of new infrastructure to the extent that it is not unusual for the construction of wind projects or other renewable generation resources to take less time than it takes to build the transmission infrastructure needed to support the projects. This delay, of course, creates a burden on project developers that may hurt the economics of their projects or potentially cause the developers to look to locate elsewhere. The capacity added by the Project addresses these issues in two ways: (1) by allowing for the interconnection of a significant amount of new generation with few or minimal or no upgrades needed to the existing networks, and (2) by alleviating operating constraints on the underlying network and providing greater scheduling flexibility to upgrade those facilities as needed for new generation interconnections. *Id.*

Mr. Fallon explains that there are stability and generation curtailment issues at AEP's Rockport Station, primarily due to the concentration of generation in the area and insufficient transmission infrastructure to support that level of generation. In late 2007, for example, an incident in this area caused 4,283 MW of generation in southwestern Indiana to be tripped off-line, including the Rockport Station. *Id.* at 13. AEP's and PJM's analyses of thermal, voltage, and stability limitations resulting from certain transmission contingencies in this area indicated the need to curtail generation by 200-350 MW and to utilize special plant operating controls to maximize the output of the

Rockport Station while maintaining system reliability. Because these problems will be exacerbated as new generation connects to the system, studies prepared by AEP and PJM showed that only a limited amount of new generation can be added at Rockport without further enhancements to the infrastructure. An additional 765 kV circuit to accept power from Rockport will alleviate these issues and address stability and operational concerns in this area that otherwise would be exacerbated as new generation connects to the system.

Id. at 13-14.

Mr. Fallon also describes a collaboration underway by RTOs, ISOs, and various other stakeholders, referred to as the Joint Coordinated System Plan (“JCSP”), that is performing first-of-their-kind interregional reliability and economic studies encompassing most of the Eastern Interconnection. The JCSP is studying, among other things, the transmission facilities that will be necessary to meet the region’s reliability needs and to accommodate the addition of future generation in light of the various renewable portfolio standards already adopted or being considered by various states. *Id.* at 6. Mr. Fallon explains that, although official results of the JCSP study will not be finalized until December 2008, to date, the JCSP studies indicate that a new, high voltage overlay is needed to economically integrate the substantial wind resources expected to be added to the grid, and that Pioneer is an example of the type of an extra high voltage transmission project that will facilitate wind development. *Id.*

As Mr. Fallon notes, the JCSP reliability studies further indicate that there are several areas in southwestern Indiana where transmission limitations raise reliability concerns, as illustrated in Exhibit No. PNR-202, and that the JCSP has identified a 765 kV north-to-south project to address these concerns. Mr. Fallon's Exhibit No. PNR-203, which is an excerpt from the Reference Scenario Transmission Overlay presented at the JCSP's October 2, 2008 meeting, confirms the need for a 765 kV transmission project connecting the Rockport station in southern Indiana to the Dequine station in north central Indiana (highlighted by an orange dashed oval). Mr. Fallon states that the Dequine station is southwest of the Greentown station, and that one of Project routes being studied by Pioneer, PJM, and the Midwest ISO will run from Rockport to Greentown through Dequine. *Id.* at 7. The results of the JCSP work to date reinforce the conclusion drawn by Duke and AEP that the Project is needed to connect the generation pockets in southern Indiana with the load zones in north central Indiana.

3. Economic Benefits

In addition to the reliability concerns discussed immediately above, the fact that the generation cluster in southwestern Indiana is remote from the load centers also causes higher transmission losses and increased congestion charges, which raises costs to electric consumers in the area. Mr. Fallon testifies that Pioneer's preliminary studies indicate that, depending upon the route ultimately selected, the Project will result in a reduction in losses on the order of 80 MW-100 MW, because the Project will lower the overall impedance of the network and improve overall efficiency. *Id.* at 15. Using

conservative net present value (“NPV”) assumptions, Mr. Fallon states this level of loss reduction would result in overall life-of-project energy savings on the order of \$320 to \$430 million, and capacity savings on the order of \$60-\$70 million. *Id.* at 15-16.

Mr. Fallon further explains that much of the congestion in this area occurs when there is insufficient transmission capacity to transmit all the low-cost generation that is available in southwestern Indiana to load centers in the central and northern part of the state, meaning that the lower-cost generation must be backed down and more expensive generation nearer to the load is dispatched instead. This situation will be exacerbated if a significant amount of wind generation is connected to the grid, because wind generation is not dispatchable, which will require greater levels of the existing higher-cost generation to be re-dispatched to relieve transmission facility overloads. Mr. Fallon describes that, under very conservative assumptions, the Project will greatly mitigate this problem, resulting in annual savings on the order of \$20 to \$40 million. *Id.* at 16.

4. Enhanced Access to Wind Generation

One of the key benefits of the Project is that will enable the interconnection of substantial quantities of new wind generation. The Department of Energy, in its 20% Wind Energy by 2030 report,¹⁶ has identified a number of substantial benefits from the development of wind generation, including:

¹⁶ U.S. Department of Energy, *20% Wind Energy by 2030* at 13 (May, 2008) (available at http://www.eere.energy.gov/windandhydro/windpoweringamerica/pdfs/20_percent_wind_2.pdf).

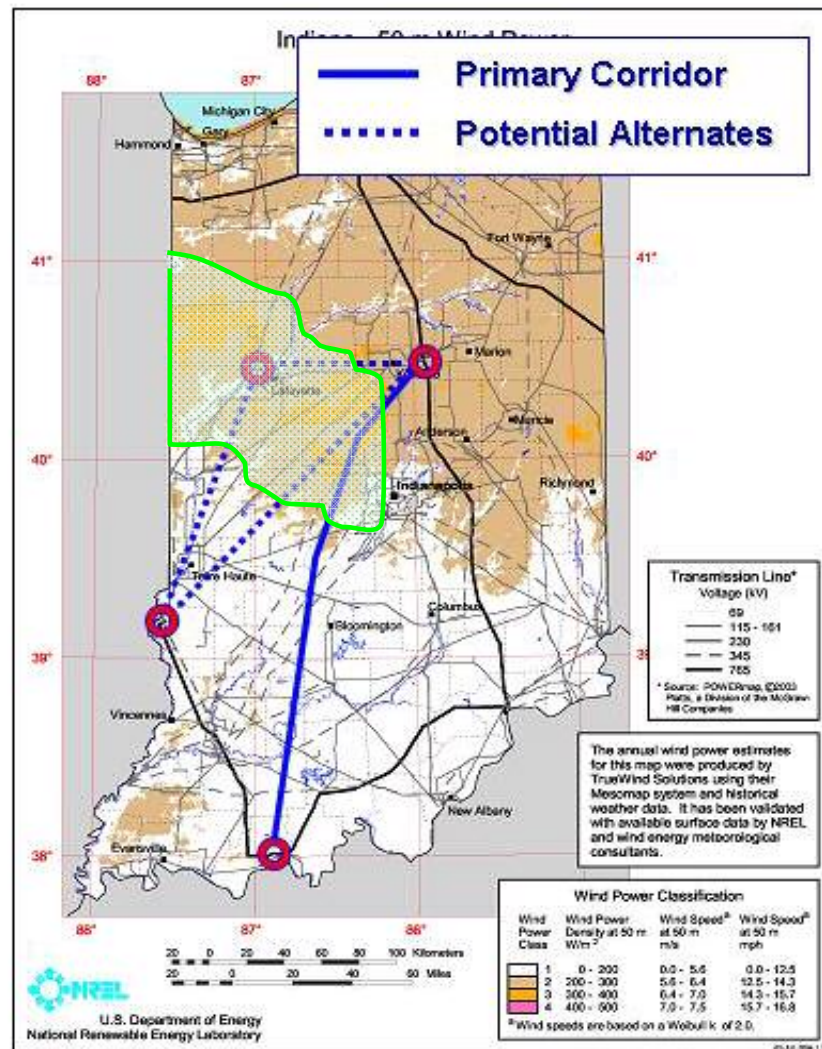
- **Environment:** Avoids air pollution, reduces greenhouse gas emissions, and reduces water use in electricity generation. Reduces electric sector CO₂ emissions by 825 million metric tons.
- **U.S. energy security:** Diversifies our electricity portfolio and represents an indigenous energy source with stable prices not subject to fuel volatility.
- **Energy consumers:** Potentially reduces demand for fossil fuels, in turn reducing fuel prices and stabilizing electricity rates.
- **Local economics:** Creates new income source for rural landowners and tax revenues for local communities in wind development areas.
- **American workers:** Generates well-paying jobs in sectors that support wind development, such as manufacturing, engineering, construction, transportation, and financial services. The new manufacturing will cause significant growth in the wind industry supply chain.
- **Water savings:** Reduces cumulative water use in the electric sector by 8% (4 trillion gallons).

Commissioner Wellinghoff has encouraged the development of transmission to reach renewable resources, explaining “[a]mid heightened concerns about climate change and dependence on foreign oil, it is essential that our country take steps to accelerate the integration of clean, reliable, domestic renewable energy resources into our energy portfolio.”¹⁷

As Mr. Fallon testifies, there is a substantial amount of wind generation that is being developed in central Indiana. Figure 2 to Mr. Fallon’s testimony (shown below)

¹⁷ *Southern California Edison Co.*, 121 FERC ¶ 61,168 at 61,782 (2007) (concurring opinion). He noted that there were “broad and substantial benefits associated with increasing the availability of renewable energy resources.” *Id.*

shows that the primary wind development is occurring in the area encircled in the green border, and that each of the proposed Project routes will run through this area. Therefore, the Project will enable the interconnection of the wind generating projects under development, and more that are being considered, in this part of Indiana.



PJM's generation interconnection queue shows almost 40,000 MW of proposed new wind generation, and the Midwest ISO's generation interconnection queue also indicates almost 40,000 MW of new wind generation. About 6,000 MW of this wind generation is proposed to be developed in Indiana. Under the RTOs' current interconnection rules, the cost assigned to each interconnection request is heavily dependent upon where the project resides in the queue and what projects are ahead of it. As Mr. Fallon explains, this can result in a "straw that broke the camel's back" scenario under which viable projects may become uneconomic depending upon their queue position. He testifies that this problem is particularly acute for projects seeking to connect to lower-voltage networks with lower-rated capacity, because the earlier-queued projects can take advantage of the existing capacity, while later-in-time projects are required to fund substantial network upgrades. At lower voltages, the output of only a few new generation projects can quickly exceed the capacity of the transmission facilities, potentially causing later-in-time projects to become "the straw that broke the camel's back," which would require those developers to face potentially expensive transmission interconnection charges that could render their projects uneconomic. *Id.* at 10-11.

With a capacity of over 4,000 MW, the Project will be able to accommodate thousands of megawatts of new wind generation without requiring substantial upgrades to the underlying lower-voltage networks. The Project can help unload those facilities

through the enhanced carrying capability of the 765 kV facilities coupled with the addition of one or more “collector” stations strategically located in the heart of the area ripe for wind development. *Id.* at 11. A 765 kV “backbone” network will facilitate more economic interconnections for the currently queued wind projects, thereby enhancing the likelihood that a greater number of these projects actually be developed. Adding the Project to the transmission network also may incent additional wind project projects to locate in the area to take advantage of the ease of interconnection. *Id.* at 11-12.

B. The Pioneer Project Is Also Eligible for Abandonment Cost Recovery and Regulatory Asset Incentives at this Time Under the Commission’s Order in *Pacific Gas & Electric Company*

Even if the Commission is not prepared to grant the requested incentives at this time pursuant to Order No. 679, it should still approve the Abandonment and the Regulatory Asset Incentives to be effective promptly. In *PG&E*,¹⁸ the Commission recognized that it has authority to grant policy-based incentives outside of Order No. 679, as such incentives involve matters of rate design and policy judgments that go to the core of the Commission’s regulatory responsibilities.¹⁹ The Abandonment and Regulatory Asset Incentives were granted to PG&E in connection with a transmission project of significant scope, impact, and complexity in order to provide an incentive for the developers to invest significant sums of money to assess whether the project would

¹⁸ See *Pacific Gas & Electric Co.*, 123 FERC ¶ 61,067 (2008) (“*PG&E*”).

¹⁹ *Id.* at P 33.

ensure reliability and/or reduce congestion.²⁰ Pioneer meets the standard established in *PG&E* for the Abandonment and Regulatory Asset Incentives. That case involved a project designed to transmit as much as 3,000 MW of new renewable power over 1,000 miles from British Columbia, Canada, through the Pacific Northwest, and into northern California.²¹ Similarly, in this case, the Project will be able to deliver in excess of 4,000 MW, improve reliability in Indiana by strengthening the grid and unloading lower-voltage networks, provide substantial energy savings resulting from reduced losses and congestion costs, and provide a lower-cost interconnection alternative for the nearly 6,000 MW of wind generation in Indiana that currently are in PJM's and the Midwest ISO's generator interconnection queues.

C. The Pioneer Project Satisfies the “Nexus” Test of Order No. 679

Under Order No. 679, an applicant requesting rate incentives must demonstrate that there is a nexus between the incentive sought and the investment being made. In Order No. 679-A, the Commission clarified that the nexus test is met when an applicant demonstrates that the total package of incentives requested is “tailored to address the demonstrable risks or challenges faced by the applicant.”²² In evaluating whether the requested incentives satisfy this standard, the Commission considers first whether a

²⁰ *Id.*

²¹ *Id.* at P 34.

²² Order No. 679-A at P 40.

project is “routine.”²³ Second, the Commission considers whether the package of incentives requested are designed to overcome specific risks and challenges that the applicant faces. Each of these components of the nexus test is discussed below.

1. The Pioneer Project Is Not Routine

In evaluating whether a project is routine, the Commission has stated that it will consider all relevant factors, including:

(i) the scope of the project (e.g., dollar investment, increase in transfer capability, involvement of multiple entities or jurisdictions, size, effect on region); (ii) the effect of the project (e.g., improving reliability or reducing congestion costs); and (iii) the challenges or risks faced by the project (e.g., siting, internal competition for financing with other projects, long lead times, regulatory and political risks, specific financing challenges, other impediments).²⁴

Pioneer is not a routine project. As discussed above, the Project is projected to cost approximately \$1 billion and represents the first time that 765 kV facilities will be constructed across the boundary of two RTOs.

²³ See *Baltimore Gas and Electric Co.*, 120 FERC ¶ 61,084 at P 54 (2007) (“*BG&E*”) (holding that when an applicant has adequately demonstrated that the project for which it requests an incentive is not routine, that applicant has, for purposes of the nexus test, shown that the project faces risks and challenges that merit an incentive, including an ROE incentive); *Commonwealth Edison Co.*, 122 FERC ¶ 61,037 at P 28 (2008) (“*ComEd*”) (holding that because a project is included as a baseline project in the PJM RTEP, it is “not routine in nature and therefore eligible for the ROE incentive under Order No. 679.”)

²⁴ *BG&E* at P 52. The Commission has explained that “these are only examples of evidence that can help inform the Commission on the question of whether a project is routine” and that this is not “a new formulaic checklist that must be met by every applicant for every proposed incentive or project.” *Id.* n.53.

The Project is also readily distinguishable from other transmission projects or upgrades that are constructed in the ordinary course of a utility's transmission service obligation to provide safe and reliable service to its customers. Pioneer is a stand-alone transmission company, with no operating history. The Project is designed to enhance the capability of the transmission system in Indiana, thereby improving regional reliability and economics in the PJM and Midwest ISO footprints, and to advance national energy policy by allowing for the interconnection of substantial quantities of wind power.

From an electrical perspective, the Project is large by any standard. It is a 765 kV line, which is the highest alternating current ("AC") voltage in use in the United States. The extension of 765 kV facilities across the PJM and Midwest ISO areas will vastly expand the regional transmission system's ability to transfer power from renewables to load and will enhance the performance and reliability of the existing lower-voltage transmission system. The Project is also significant in both in its length and its costs. The Project will be approximately 240 miles in length. In dollar terms, the Project's total cost of over \$1 billion, placing it among the highest-cost transmission projects in this region.

2. The Project Faces Significant Risks and Challenges

a. Financial Challenges

Mr. Stephan T. Haynes testifies as to why Pioneer, as a start-up company with no business history, no credit rating, no debt repayment history, and no guarantees from its Members, will face significant risks and challenges in financing the Project. Exh. No.

PNR-400 at 4-5. As explained, the financial risk is exacerbated by the fact that, at least initially, Pioneer will have all of its business invested in a single project. This lack of diversification makes the entity more risky from a financial perspective. *Id.* It is appropriate that Pioneer receive the requested Incentive ROE to incent the Members to take on a project with these financial risks.

b. Routing and Need Challenges

As Ms. Geiger explains, the State of Indiana does not have a formal siting process that results in a certification that a transmission project is needed, including approval of a designated route. In states that have this process, issues involving the need for the project and the selected route generally cannot be relitigated in individual condemnation proceedings. Exh. No. PNR-100 at 13. Pioneer will not be able to rely on such a process. Instead, once Pioneer becomes a public utility, if it is unable to acquire rights-of-way through negotiations with individual landowners, Pioneer will have to initiate eminent domain proceedings in the circuit court of each county traversed by the Project. These proceedings will enable individual landowners to challenge the need for the Project and the route selected by Pioneer, in addition to the issue of whether Pioneer made a good faith offer to purchase an easement before commencing eminent domain proceedings. *Id.* In addition to the potential for inconsistent rulings, Pioneer also faces the possibility that landowners who are unsuccessful in their efforts to challenge the Project may appeal local rulings to the state Courts of Appeals and eventually to the state Supreme Court. This process exposes Pioneer to the potential for expensive and time-

consuming county-by-county litigation before construction of the Project may begin. Given the size of the Project and the amount of right-of-way that will be obtained, this process subjects Pioneer to uncertainty and the significant risk that construction of the Project could be substantial delayed. *Id.*²⁵

c. Advanced Technology Challenges

The Project also presents risks associated with using advanced technologies. As Ms. Geiger and Ms. Barton explain in their testimony, the implementation of new transmission technologies requires specialized knowledge that is not always readily available within the industry, and new technology carries an inherent performance risk since the technology has not been tested in commercial operation. The planning, engineering, design, operation and maintenance of 765 kV bulk transmission lines and substations are quite complex requiring special skill sets. Exh. No. PNR-100 at 14. Such technologies require specialized knowledge that is not readily available within the industry and must be developed, and retained. Exh. No. PNR-300 at 34. The implementation of new technology has an inherent risk of not performing as designed

²⁵ The time to develop transmission is significantly different than many generation (wind or gas) and distribution (1-2 years) projects. For example, AEP's Jacksons Ferry-Wyoming 765 kV transmission line (owned by AEP subsidiary Appalachian Power Company), located in Virginia and West Virginia and spanning 90 miles, was planned, constructed and energized over a period of sixteen years, at a cost of approximately \$306 million. Ms. Geiger testifies that siting activities alone involved two state commissions and five federal agencies, took more than thirteen years, at a cost of approximately \$50 million. *See* Exh. No. PNR-100 at 13.

once implemented, requiring re-work or replacement. *Id.* at 35. Pioneer must secure the requisite technical expertise to mitigate these risks. Exh. No. PNR-100 at 14-15.

The long lead time needed to design this unusual project enhances the risk associated with cost escalation for labor, parts and materials. As Ms. Geiger testifies, commodity prices have risen sharply in recent years because of international demand. *Id.* at 13-14. Suppliers of labor and materials have their own schedules and competing priorities, and an unexpected delay in one utility's construction schedule, or in the schedule of the supplier, may have a domino effect leading to further delay and increased associated financing costs. Heavy demand for qualified labor is anticipated over the next decade due to significant build-out of transmission facilities throughout the industry both domestically and overseas, all at the same time that utilities and their suppliers confront an aging workforce. Labor scarcity is therefore another risk faced by Pioneer. *Id.* at 15.

3. The Incentives Requested Are Tailored to the Specific Risks and Challenges of the Project

a. The Requested Incentive ROE is Necessary to Attract Capital

As discussed below, the Applicant is requesting an incentive ROE of 13.5%, which is 170 basis points below the high end of the zone of reasonableness. The Commission has explained that the primary purpose of an incentive return on equity is to help attract capital investment to a transmission investment that can offset the risks and

challenges faced by a project.²⁶ In Order No. 679, the Commission explained that an incentive ROE makes a “transmission project[] more attractive [to investors], and therefore more likely” to be constructed.²⁷

As discussed above, Pioneer will have to enter the commercial debt market as a new, stand-alone entity to obtain financing for the Project. Pioneer has no other assets or business to support such financing and will depend on incentives from this Commission to support funding at the lowest possible cost, which of course will redound to the benefit of consumers who pay the cost of debt in their rates. The magnitude of the Project, along with its long lead time, high cost, the lack of a centralized siting process, and need for FERC approval of a cross-border cost allocation methodology, all impose significant risks on Pioneer, and will have a negative impact on its ability to raise capital for the Project.

As Dr. Avera testifies, the Incentive ROE will support the efforts of Pioneer to expand transmission infrastructure on a timely basis. He adds that it is essential that transmission owners such as Pioneer be able to attract the economic resources necessary to build projects that improve reliability and facilitate effective competition in the wholesale electricity market. He concludes that this can be accomplished by granting an

²⁶ Order No. 679 at P 91.

²⁷ *Id.* (stating that “the Commission will approve an ROE at the upper end of the zone of reasonableness for new infrastructure investments that meet the requirements of section 219”).

Incentive ROE that spurs the investment of the necessary resources. Exh. No. PNR-700 at 89-90.

Dr. Avera explains that if Pioneer is not provided an opportunity to earn a return that is sufficient to compensate for these underlying risks, investors and lenders will be unwilling to supply capital. *Id.* at 23-24. The Incentive ROE will facilitate Pioneer's ability to raise capital on reasonable terms, and provide incentives for Pioneer to embark on the difficult task of getting the Project planned and approved by two RTOs, routed through several counties, and built. *Id.* at 19-26; *see also* Exh. No. PNR-400 at 11-12.

Mr. Haynes explains that the difficult credit market conditions being experienced during the current credit crisis are expected to make it more difficult to satisfy the factors that will be reviewed by lenders for the Project. Exh. No. PNR-400 at 5-6. The current credit crisis raises the bar for virtually every project that requires substantial capital to get completed, so the financial risks associated with this Project will be amplified. *Id.* at 6.

b. Construction Work in Progress (“CWIP”) Incentive

The Commission has found that authorizing the inclusion of 100% CWIP in rate base can spur transmission investment, provide up-front regulatory certainty to lenders/investors, stabilize rates, and improve cash flow.²⁸ As discussed in Dr. Avera's and Mr. Haynes' testimony, there is a nexus between this incentive and Pioneer's investment in the Project. Exh. No. PNR-700 at 84-85; Exh. No. PNR-400 at 6-7. The

²⁸ Order No. 679 at P 115.

Project is a major transmission project costing over \$1 billion, which requires large capital expenditures during the construction period, thus creating pressure on Pioneer's cash flow. Pioneer faces financial challenges as a start-up company, and 100% CWIP recovery will alleviate further downward pressures on its financial condition by ensuring adequate cash flow. Without adequate cash flow, the cost of borrowing capital to finance construction can increase, which ultimately increases the cost of the Project for consumers. Earning a return on CWIP would significantly improve cash flow stability and would produce credit ratings of investment grade much quicker – both of which are viewed as positive attributes by the rating agencies and lenders. Exh. No. PNR-400 at 13.

Granting the CWIP Incentive would help alleviate the financial risks that the Project will impose and facilitate the construction of the Project. The return on CWIP would allow Pioneer to begin generating cash with which to service debt almost immediately, thereby reducing the amount of external capital Pioneer would be required to raise. *Id.* Considering the large scope and long lead time of the Project, including CWIP in rate base would help support financial integrity and remove one disincentive to construction of new transmission by providing greater certainty and enhanced cash flows. Exh. No. PNR-700 at 86-87; Exh. No. PNR-400 at 13. Receiving a timely return on the investment is vital for maintaining initial credit ratings upon completion of the Project.

c. Abandonment Incentive

Order No. 679 permits the recovery of 100% of prudently incurred costs associated with abandoned transmission projects “if such abandonment is outside the control of management,” as such incentive is an “effective means to encourage transmission development by reducing the risk of non-recovery of costs.”²⁹ This incentive is especially appropriate where a transmission project can be cancelled by an RTO to which the applicant belongs.³⁰ Moreover, the Commission has determined that allowing recovery of abandonment costs is appropriate where certain regulatory approvals are outstanding.³¹ As the Commission has recognized, “the recovery of abandonment costs is an effective means of encouraging transmission development by reducing the risk of non-recovery of costs.”³²

Pioneer seeks the right to file to recover 100% of prudently incurred costs if the Project, or a component thereof, were to be abandoned for any reasons outside of its control, including failure to have the Project included in either PJM’s or the Midwest ISO’s regional expansion plan, failure to obtain regulatory approvals, or a failure to obtain the rights-of-way necessary to route the Project. This Project faces numerous

²⁹ Order No. 679 at P 163.

³⁰ See *PPL Electric Utilities Corp.*, 123 FERC ¶ 61,068 at P 47 (2008).

³¹ See *Southern California Edison Co.*, 121 FERC ¶ 61,168 at P 72 (2007).

³² *Pacific Gas & Electric Co.*, 123 FERC ¶ 61,067 at P 36 (2008) (citing Order No. 679 at P 163).

uncertainties, including the fact that neither RTO has yet approved the Project for inclusion in its planning process and a cross-border cost allocation mechanism has not been adopted, each of which may be the source of opposition in regulatory proceedings. In addition, Pioneer will have to acquire land rights through private negotiations with landowners and, perhaps, the exercise of eminent domain, for almost the entire Project length since the Project does not follow existing rights of way, which exposes Pioneer to protracted litigation over the need for the Project and the route selected. Allowing the Abandonment Incentive will also reassure the financial community by providing a source of funds to pay back lenders in the event the Project is cancelled for reasons beyond Pioneer's control. Exh. No. PNR-400 at 14.³³

d. Regulatory Asset Incentive

Pioneer is seeking authorization to establish a regulatory asset, consisting of all Project expenses that are not capitalized and included in CWIP prior to the date the formula rate becomes effective. Pioneer requests authorization to amortize the regulatory asset over five years from the effective date of the formula rate, which should correspond closely with the period during which the Project is constructed. Pioneer also seeks permission to accrue carrying charges on the regulatory asset balance at its cost of capital

³³ In the event that Pioneer files to recover abandonment costs, that filing will include a proposal to allocate such costs between PJM and the Midwest ISO.

(as calculated under the formula rate) from the date that the Commission accepts the regulatory asset until the date the regulatory asset is fully amortized.

This incentive is needed because it provides the only means by which the Applicant can recover development costs it incurs before the formula rate is made effective. *See* Exh. No. PNR-400 at 15. In the *PATH* case, the Commission recognized that the recovery of this incentive would enhance *PATH*'s cash flow, assist with financing, and improve coverage ratios used by rating agencies to determine credit quality.³⁴

As noted earlier, the effective date for the formula rate must be deferred because the Project has not yet been included in either PJM's or the Midwest ISO's regional expansion plan and because there currently is no mechanism under the PJM or Midwest ISO OATTs to allocate between the RTOs the costs of projects with cross-border economic and reliability components such as Pioneer. Once the Project is included in the expansion plans and the Commission establishes an effective date for a cross-border RTO cost allocation mechanism for the Project's costs, the formula rate can be made effective and Pioneer can begin recovering its revenue requirement on an ongoing basis under the formula.³⁵

³⁴ *PATH* at P 52.

³⁵ If the RTOs are unable to agree upon an allocation methodology, they have indicated that they either will report to the Commission those areas where agreement has been reached, where agreement is close and may still be achievable and where agreement does not appear

D. The Interrelationship Between the Requested Incentives

In Order No. 679-A, the Commission stated that, in determining whether an applicant has met the nexus test, the Commission will examine “the total package of incentives being sought, the inter-relationship between any incentives, and how any requested incentives address the risks and challenges faced by the project.”³⁶ Pioneer has carefully selected its requested incentives for the Project, tailoring the requested incentives to the large investment being made and the special risks and challenges associated with the Project. Each incentive is designed to address a particular risk.

The Incentive ROE is designed to promote investment in a large transmission project that involves a number of risks and challenges. The CWIP and Regulatory Asset Incentives are designed to alleviate Pioneer’s cash flow difficulties associated with the large capital requirements and the long lead time for building the Project. Exh. No. PNR-400 at 13, 15. The Abandonment Incentive is targeted at mitigating the risk that the Project or its associated components may be cancelled for reasons outside of Pioneer’s reasonable control, which can affect financing for the Project. *Id.* at 14.

Each of the requested incentives is designed to alleviate a different risk, but they were selected by Pioneer as a package of incentives to work together in order to ensure

achievable or will report that consensus is not achievable and the reasons why. In the event that a cross-border cost allocation proposal is not forthcoming, the Applicants may submit a Section 206 filing proposing an allocation for this Project.

³⁶ Order No. 679-A at P 21.

that this important transmission project is completed in a timely manner. Exh. No. PNR-700 at 91-93. The Commission has stated that a package of incentives may be appropriate for large transmission projects, and has authorized similar incentive packages for projects that are comparable to this one.³⁷

Dr. Avera analyzes the impact of the total package of incentives requested by Pioneer on investors' perception of Pioneer's risk. He finds that a reduction in the recommended 13.5% Incentive ROE is not warranted, especially in light of the risks involved in the construction of the Project. He concludes that while including 100% of CWIP in rate base will support Pioneer's credit standing, it will not have a measurable impact on investors' required rate of return for Pioneer. Exh. No. PNR-700 at 91-93; *see also* Exh. No. PNR-400 at 12. He notes in this regard that the DCF results for the proxy group already take the benefits of CWIP recovery into account, since investors recognized that it is not uncommon for state regulators to permit this rate treatment. Exh. No. PNR-700 at 91-92. He also notes that CWIP does not affect the amount, but rather the timing of rate recovery. He concludes that Commission acceptance of the Abandonment Incentive similarly does not warrant a change in the Incentive ROE awarded to Pioneer – particularly in view of the fact the requested ROE is well below the

³⁷ In Order No. 679 at P 94, the Commission stated that “a large new interstate transmission project that reduces congestion or increases reliability can face substantial risks that the ordinary transmission investment does not.” *See, e.g., PATH* at PP 40, 45, 52, 121 (granting an overall ROE of 14.3%, 100 percent of CWIP in rate base, recovery of abandoned plant costs, and recovery of pre-commercial costs and expenses).

top end of zone of reasonableness already. *Id.* at 91. Similarly, he states that approval of the Regulatory Asset Incentive would be supportive of credit quality, but it will not have a demonstrable impact on investment risks or investors' required return. *Id.* at 92.

VI. THE PROPOSED FORMULA RATES ARE JUST AND REASONABLE.

A. Formula Rate Design

The revenue requirement for the Pioneer Project will be determined under a formula rate which is included in Attachment H-20 to the PJM OATT and Attachment O to the Midwest ISO TEMT (*see* Appendix A). Pioneer tenders the formula rate for inclusion in the PJM and Midwest ISO tariffs to be effective upon the Commission's acceptance of an inter-RTO cost allocation methodology applicable to the Project. As a future PJM and Midwest ISO Transmission Owner, Pioneer has the exclusive right to submit this Section 205 filing to establish the revenue requirement for the Project that will be in place when it becomes a Transmission Owner. As detailed below, the formula is designed to recover the annual transmission revenue requirement associated with the Pioneer project, including incentives approved by the Commission.

The Commission has a preference for formula rates for transmission service. For example, in Order No. 679, the Commission noted that "formula rates can provide the certainty of recovery that is conducive to large transmission expansion programs" and

that the Commission “encourage[s] public utilities to explore the benefits of filing transmission-related formula rates.”³⁸

The formula rate proposed by Pioneer is described in Mr. Heintz’s testimony, and is similar to formula rates accepted in several prior cases. It reflects Commission-approved ratemaking methodologies, and contains sufficient specificity to operate without discretion in its implementation. The formula, which is described in further detail below, should be accepted as just and reasonable.

As Mr. Heintz explains, the formula rate has three parts. The first part is simply the annual transmission revenue requirement (“ATRR”) itself, which is determined based on the cost of service (“COS”) formula rate. The second part is the COS formula rate that underlies the ATRR. Exh. No. PNR-800 at 8. The third part is the Formula Rate Implementation Protocols, discussed in Section VI.E below.

To calculate the ATRR, Pioneer will forecast the values that will populate the COS formula rate each calendar year, and calculate a true up of the forecasted values when the actual data become available. Any difference between the forecasted ATRR and actual ATRR will be added to the following year’s ATRR. Thus, for example, Pioneer would determine in 2011 if the forecasted ATRR for 2010 exceeded the actual ATRR for 2010. If so, the difference, along with interest calculated in accordance with Section 35.19a of the Commission’s regulations, would be added to the forecasted 2012

³⁸ Order No. 679 at P 386.

ATTR. This ensures that neither the customers nor Pioneer are harmed if the forecast ATTR differs from the actual ATTR. *Id.* at 5-6.

The COS formula rate provides for the recovery of a return on rate base (and associated taxes), taxes other than income taxes, depreciation expense, and other operation and maintenance (“O&M”) expenses, less revenue credits. For transmission and general plant balances, the COS formula rate uses the average of thirteen monthly balances, whereas for accumulated deferred income taxes, land held for future use, materials and supplies and prepayments, the COS formula rate uses the average of beginning and end of year balances. *Id.* at 8-10.

Although, as a limited liability company, Pioneer is not subject to federal income tax, the tax obligations incurred through its operations will be passed through to and reported on the tax returns of its corporate parents. Exh. No. PNR-500 at 3-4 (Wiles). Accordingly, for ratemaking purposes, Pioneer is treated as a corporation and receives an income tax allowance. *Id.* at 4-5. This is consistent with Commission practice. In addition, while Pioneer will not reflect income taxes for reporting purposes under Generally Accepted Accounting Principles, Pioneer will maintain its books of account based on the Uniform System of Accounts as if it were a corporation, including the income tax accounting requirements of the Uniform System of Accounts, consistent with the Commission’s ruling in *PATH*.³⁹ Exh. No. PNR-500 at 3-4 (Wiles).

³⁹ *PATH* at P 157.

The COS formula rate includes a stated rate for Post-Employment Benefits other than Pensions (“PBOP”), consistent with Commission policy. Other stated values in the COS formula rate include depreciation rates, ROE,⁴⁰ and capital structure during the construction phase of the Project. Any changes to these stated rate components require a Section 205 filing.

The formula rate, populated with projected 2009 data, is included in Mr. Heintz’s testimony as Exhibit No. PNR-802. In addition, Pioneer has populated the formula rate with projected 2010 data. Exh. No. PNR-803. These exhibits provide abbreviated cost support for the projected revenues under the formula rate in lieu of full Statements AA through BL. Depending upon when the formula rate takes effect, the exhibits show the projected revenues under the formula rate during the first twelve months in which the formula rate would be in effect. For example, if the formula rate takes effect on October 1, 2009, the projected revenues under the formula rate during the first twelve months of its effectiveness would be as follows:

⁴⁰ ROE is discussed in Section VI.B below.

Month	Projected Revenues
October 2009	\$532,334 ⁴¹
November 2009	\$532,334
December 2009	\$532,334
January 2010	\$595,590 ⁴²
February 2010	\$595,590
March 2010	\$595,590
April 2010	\$595,590
May 2010	\$595,590
June 2010	\$595,590
July 2010	\$595,590
August 2010	\$595,590
September 2010	\$595,590
Total	\$6,957,312

⁴¹ As stated in the Formula Rate Implementation Protocols, since the initial year of the formula rate is a partial year, the projected revenue requirement for 2009 (\$1,597,002) is divided by the number of months (3) to determine the monthly revenue requirement. Exh. No. PNR-802 page 1, line 4.

⁴² Net Revenue Requirement (\$7,147,074) divided by 12. Exh. No. PNR-803 at 1, line 4.

All of these figures are estimates, and in the case of the 2010 data, the estimates will be revised and provided to customers no later than October 15, 2009, in accordance with the Formula Rate Implementation Protocols. An attestation from Mr. Flynn, in satisfaction of the requirements of 18 C.F.R. § 35.13(d)(6) is included in Appendix K.

B. Rate of Return on Equity

The formula rate includes an Incentive ROE of 13.5%. Dr. Avera's attached testimony establishes the zone of reasonableness for the Project. Exh. No. PNR-700. Dr. Avera's analysis is based on a Discounted Cash Flow ("DCF") analysis of a comparable group of electric utilities, and is corroborated by several other metrics, including a Capital Asset Pricing Model analysis. Dr. Avera's DCF analysis determines the cost of equity consistent with the approach approved by the Commission for transmission rates in *Bangor Hydro*, *PATH* and *VEPCo*.⁴³ This proxy group consists of transmission-owning utilities in the PJM and Midwest ISO RTOs. Dr. Avera employs the Commission's traditional application of the DCF method for electric utilities. After removing DCF results outside of this range that fail fundamental tests of economic logic, Dr. Avera identifies a zone of reasonableness for Pioneer that is 8.2% to 15.2%. *Id.* at 58. The midpoint of this range is 11.7%. *Id.* at 66. The median is 11.0%. *Id.* at n.112.

⁴³ Exh. No. PNR-700 at 30; *Bangor Hydro Electric Co.*, 109 FERC ¶ 61,147 at P 3 (2004) ("*Bangor Hydro*"); *PATH* at P 95; *Virginia Electric Power Co.*, 123 FERC ¶ 61,098 at P 60 (2008) ("*VEPCo*").

Pioneer is requesting a 50 basis point incentive adder for transferring functional control over the Project to PJM and the Midwest ISO⁴⁴ Pioneer also requests a 150 basis point investment adder for the reasons discussed earlier in this filing; that adder is consistent with Commission precedent.⁴⁵ Pioneer also requests a 50 basis point incentive adder for utilizing multiple advanced technologies throughout the Project. The Commission has approved a 50 basis point adder for using advanced technologies in prior cases.⁴⁶ The advanced technologies employed in the Project are described in Section IX of this letter and in the attached testimony of Ms. Barton. The overall package of incentive adders is 25 basis points below the total of 275 basis points approved by the Commission for a transmission project proposed by a stand-alone Transco developer in New York.⁴⁷

If the Commission allows for the use of the midpoint of the zone of reasonableness as the appropriate starting point for establishing the allowed ROE, as it has in numerous electric cases, including an order issued on September 30, 2008, in *Public Service Electric and Gas Company*, 124 FERC ¶ 61,303, the base ROE is 11.7%, and the

⁴⁴ See, e.g., *Southern California Edison Co.*, 124 FERC ¶ 61,308 at P 25.

⁴⁵ See, e.g., *Virginia Electric & Power Co.*, 124 FERC ¶ 61,207 at P 113 (2008) (granting a 150 basis point adder for four projects); *Pepco Holdings, Inc.*, 124 FERC ¶ 61,176 at P 116 (2008) (granting a 150 basis point adder for eight projects); *Pacific Gas & Electric Co.*, 116 FERC ¶ 61,313 at P 16 (2006) (granting a 200 basis point adder).

⁴⁶ *The United Illuminating Co.*, 119 FERC ¶ 61,182 (2007); *Northeast Utils. Serv. Co.*, 124 FERC ¶ 61,044 (2008).

⁴⁷ *New York Regional Interconnect, Inc.*, 124 FERC ¶ 61,259 at P 2 & n.2 (2008).

incentive adders requested produce an overall ROE of 14.2%. Dr. Avera explains why he believes the midpoint is the more appropriate number to use. Exh. No. PNR-700 at 59-63. However, if the Commission uses the median, to which the above incentives are added, the base ROE is 11% and the overall ROE is 13.5%. In order to eliminate any dispute in this proceeding over whether the midpoint or median is the appropriate starting point for establishing the correct incentive ROE, the Applicant is requesting an incentive ROE of 13.5%. This incentive ROE is 170 basis points below the high end of the zone of reasonableness. The Commission has approved incentive ROEs that are much closer to the high end of the zone of reasonableness in several other proceedings.⁴⁸

C. Depreciation Rate

The depreciation rates included in the COS formula rate are based on a depreciation study prepared by an AEP affiliate, Appalachian Power Company (“APCo”), with a significant amount of 765 kV transmission facilities. As Mr. Donald J. Clayton testifies, this depreciation study is appropriate for use because the Project facilities will be similar to the 765 kV transmission facilities owned by APCo. Exhibit PNR-600 at 7-8. This study is appropriate for use for the Project as it determines the service life and net salvage value for a comparable transmission facility. The specific

⁴⁸ *American Electric Power Service Corp.*, 116 FERC ¶ 61,059 at P 44 (2006); *Allegheny Energy, Inc.*, 116 FERC ¶ 61,058 at P 63 (2006); *Southern California Edison Co.*, 122 FERC ¶ 61,187 at P 27 (2008); *Atlantic Path 15, LLC*, 122 FERC ¶ 61,135 at P 21 (2008); *Pepco Holdings, Inc.*, 124 FERC ¶ 61,176 at P 116 (2008).

annual depreciation accrual rates, by account, are supported by Mr. Clayton's testimony.

This testimony includes the depreciation study as Exhibit No. PNR-602.

D. Capital Structure

The formula rate includes a hypothetical capital structure of 50% debt and 50% equity during the construction period. Upon completion of the Project, Pioneer will target an actual capitalization of approximately 50% debt and 50% equity, and the actual capitalization will be used in the formula rate. This target capital structure is similar to what is prevalent in the electric utility industry. As Mr. Haynes explains in his testimony, this capital structure should allow Pioneer to achieve an investment grade rating and therefore reasonable costs of capital, which will inure to the benefit of the PJM and Midwest ISO customers who pay the cost of service in their utility rates. Exh. No. PNR-400 at 13, 15-16.

Although rates will be based on Pioneer's actual capital structure once the Project enters service, Pioneer requests that the formula rate include a 50% debt and 50% equity capital structure during the construction period. Although it is Pioneer's intent to adhere as close to a 50-50 debt-equity ratio during the construction period as is commercially reasonable, the challenge of raising capital during this construction period may result in deviations from this target from time to time. *Id.* at 16. Initially, the Project will operate with capital infusions from its Members, as borrowing requirements will be relatively modest at first. As the Project progresses, Pioneer will require significant borrowings as well as additional capital contributions from its Members. The precise debt-to-equity

ratio thus will vary as new borrowings are made and equity is invested, and will also be affected by negotiations with lenders. *Id.* at 17-18.

In *PATH*, the Commission found that the same treatment as proposed here “will result in lower debt costs for the company, while also permitting it to vary its financing vehicles to the needs of the construction process, including such issues as timing of expenditures, regulatory developments, and changes in financial market conditions.”⁴⁹ It also found the hypothetical capital structure approach during the construction period “a pragmatic approach” to address “fluctuating capital structure.”

E. Implementation Protocols

This filing also includes formula rate implementation protocols that enable customers to monitor and challenge Pioneer’s administration of the formula rate. The formula rate implementation protocols are modeled after protocols that the Commission has accepted for other transmission providers. The protocols describe how Pioneer will update the formula each year, what the review procedures will be, how customer challenges will be resolved, and how any changes to the annual rate restatements will be implemented. The protocols require Pioneer to submit an annual informational filing with the Commission showing the application of the formula rates to the prior year’s cost of service data, including the calculation of the true-up for the prior year. Consistent with the Commission’s order in *PATH*, the protocols require Pioneer to include as part of its

⁴⁹ *PATH* at P 55.

annual informational filing a descriptive list of the costs included as CWIP in order to give all parties the opportunity to examine the prudence of such costs.⁵⁰

F. 100% CWIP Recovery

As discussed above, Pioneer proposes to include 100% of CWIP in rate base. This will facilitate the financing of the Project by improving Pioneer's cash flow during the construction period. The Commission has recognized that the inclusion of CWIP in rate base is just and reasonable, where appropriately supported. In this regard, it is important to note that the CWIP Incentive primarily affects the timing of cost recovery.⁵¹ The Commission has recognized that allowing CWIP in rate base may have a beneficial impact on customers, by reducing the "rate shock" that can occur when a large project enters commercial operation.

In Order No. 679, the Commission stated that an applicant seeking 100% CWIP recovery as an incentive-based rate treatment must comply with the Commission's CWIP filing requirements, which are set forth in 18 C.F.R. § 35.13(h)(38) and 18 C.F.R. § 35.25 (2008).⁵² The Applicant demonstrates compliance with these regulations in Appendix J. To the extent necessary, Pioneer requests waiver of these requirements, for the reasons set forth in Appendix J.

⁵⁰ *Id.*

⁵¹ Order No. 679-A at P 38.

⁵² Order No. 679 at P 121.

VII. COST RECOVERY MECHANISM

As noted above, the Applicant is requesting a deferred effective date for the formula rate (as opposed to the Abandonment and Regulatory Asset Incentives) until the Project is included in the PJM and Midwest ISO expansion plans and the Commission accepts a cross-border cost allocation proposal that allocates the cost of the Project between PJM and the Midwest ISO.

Once the Project is included in the RTOs' respective expansion plans, Pioneer will become a member of PJM and the Midwest ISO and will place Pioneer's facilities under the functional control of the RTOs, which will use those facilities to provide transmission service throughout the region under their respective OATTs.⁵³ Taking the same approach recently accepted by the Commission with regard to the PATH project,⁵⁴ Pioneer is filing proposed tariff sheets with the Commission, pursuant to FPA Section 205,⁵⁵ for inclusion within the OATTs. Pioneer will apply for membership in the RTOs as a Transmission Owner promptly after the Commission approves a cross-border cost allocation method

⁵³ Until the in-service date of its transmission facilities, Pioneer's jurisdictional facilities include its filed rate. *See Trans-Allegheny Interstate Line Co.*, Dkt. No. ER07-562, Transmittal Letter at 7 n.19 (Feb. 21, 2007).

⁵⁴ *See PATH* at P 56.

⁵⁵ 16 U.S.C. § 824d (2000). The tariff sheets are included in Appendix A, and are designated as Attachment H-20 to the PJM OATT and as Attachment O – Pioneer Transmission, LLC to the Midwest ISO OATT. Appendix A of Attachment H-20 and of Attachment O - Pioneer Transmission, LLC is the formula rate determination of Pioneer's transmission revenue requirement and the Formula Rate Implementation Protocols constitute Appendix B of those attachments.

for the Project and the Project is included in the applicable regional transmission expansion plans.

VIII. ACCOUNTING

Mr. Wiles describes the various accounting-related matters relevant to this filing. Exh. No. PNR-500. He explains that the investors (AEP and Duke) will record contributions made to Pioneer as investment in Pioneer on their respective balance sheets, and that Pioneer will record these receipts as equity and maintain separate capital accounts for each of ATHC and DTHC. *Id.* at 3. He also explains that after Pioneer closes its books each month, the capital accounts of ATHC and DTHC will be adjusted to reflect the net income or net loss of Pioneer on a 50-50 basis. *Id.* at 5-6.

Mr. Wiles also addresses the accounting for pre-construction costs. Prior to a ruling by the Commission authorizing recovery of pre-construction period costs, Pioneer does not have an assurance of recovery of those costs in rates. Therefore, prior to such a ruling by the Commission, Pioneer has expensed all such costs. Upon issuance of an order by the Commission authorizing recovery of pre-construction costs, all of such costs will be removed from expense and be recorded on Pioneer's books as a regulatory asset for future recovery on Pioneer's balance sheet. Once the regulatory asset is recorded, Pioneer will accrue carrying costs monthly at a weighted average cost of capital rate on the deferred cost balances including the balance of deferred carrying costs. *Id.* at 6-7.

As explained in Mr. Wiles' testimony, Pioneer requests a waiver of specific accounting treatment for implementation of certain incentive rate treatments. *Id.* at 11-

12. The special accounting treatment requires the accrual of AFUDC and a corresponding debit to Account 407.3, and a credit to Account 254. Pioneer also requests that it be permitted to provide disclosure of such treatment in financial footnotes. The Commission approved such accounting treatment in *American Transmission Company LLC*⁵⁶ and it is equally appropriate here.

Mr. Wiles also explains how Pioneer will account for any difference between the inclusion of projected CWIP in rate base and the actual CWIP balance. Exh. No. PNR-500 at 12-13. He explains that the recovery of the return on CWIP will be trued up to actual, and any difference deferred as a regulatory asset or regulatory liability for future recovery from, or future return to, customers. *Id.* Pioneer will use the PowerPlant accounting system to maintain its accounting records for electric plant assets during construction and when the project is placed in service. The system will be employed to ensure that no AFUDC is calculated on the balance of any work orders for the Project construction, and will ensure that CWIP included in rate base will not include AFUDC. *Id.* at 14.

IX. ADVANCED TECHNOLOGY STATEMENT

Pioneer is entitled to an additional ROE incentive of at least 50 basis points based on the fact that it is employing several new technologies that are among the new

⁵⁶ 105 FERC ¶ 61,388 at P 39 (2003).

technologies described in Section 1223 of the Energy Policy Act of 2005⁵⁷ (“EPAAct 2005”), as well as others, throughout the Project. Regardless of whether an applicant is seeking an incentive for using new technology, Order No. 679 requires that utilities seeking incentives provide a technology statement that describes what advanced technologies have been considered and, if those technologies are not to be employed or have not been employed, an explanation of why they were not deployed.

Section 1223 of EPAAct 2005 lists eighteen technologies that meet the definition of “advanced transmission technology” as used in the act:

- (1) high-temperature lines (including superconducting cables);
- (2) underground cables;
- (3) advanced conductor technology (including advanced composite conductors, high-temperature low-sag conductors, and fiber optic temperature sensing conductors);
- (4) high-capacity ceramic electric wire, connectors, and insulators;
- (5) optimized transmission line configurations (including multiple phased transmission lines);
- (6) modular equipment;
- (7) wireless power transmission;
- (8) ultra-high voltage lines;
- (9) high-voltage DC technology;

⁵⁷ Pub. L. No. 109-58, 119 Stat. 594.

- (10) flexible AC transmission systems;
- (11) energy storage devices (including pumped hydro, compressed air, superconducting magnetic energy storage, flywheels, and batteries);
- (12) controllable load;
- (13) distributed generation (including PV, fuel cells, and microturbines);
- (14) enhanced power device monitoring;
- (15) direct system state sensors;
- (16) fiber optic technologies;
- (17) power electronics and related software (including real time monitoring and analytical software); and
- (18) mobile transformers and mobile substations.

This list is intended to be “illustrative of the kinds of technologies that Congress sought to encourage and not exclusive of advanced technologies that may be employed and considered for incentive ratemaking treatment.”⁵⁸

The Commission entertains proposals for incentives rate treatments for advanced technologies on a case-by-case basis where such technologies indirectly mitigate congestion and enhance grid reliability, if such technologies can be shown to increase the capacity, efficiency, or reliability of an existing or new transmission facility.⁵⁹ The Project involves many of the advanced transmission technologies identified in the act. As

⁵⁸ Order No. 679 at P 290.

⁵⁹ *Id.* at PP 289, 291.

Ms. Barton testifies, Pioneer will utilize a number of advanced technologies to enhance the performance of the Project. These technologies include: 1) advanced conductor design; 2) phase and shield wire transposition; 3) fiber-optic shield wires; 4) wide-area monitoring and control; 5) remote station equipment diagnostics and security; 6) independent phase operation; and 7) switchable shunt reactors. Exh. No. PNR-300 at 20-21. As reflected in Table 2 in her testimony, the use of these seven technologies means that the following advanced technologies identified in EAct 2005 are being utilized: enhanced power device monitoring; fiber optic technologies; power electronics and related software (including real time monitoring and analytical software); advanced conductor technology (including advanced composite conductors, high-temperature low-sag conductors, and fiber optic temperature sensing conductors); and direct system state sensors. Each of the seven technologies is described briefly below and in more detail in Ms. Barton's testimony.

A. Advanced Conductor Design

Use of a six-conductor, as opposed to four-conductor, bundle, as developed for AEP's newest 765 kV line in West Virginia and Virginia, limits noise. This advanced conductor design offers an added benefit of reduced levels of radio interference, and approximately 40% lower line losses than alternatives. *Id.* at 25-26. AEP and Duke also are currently evaluating advanced conductor designs with the goal of further reducing line losses for the Project. *Id.* Pioneer is committed to using an advanced compact

aluminum conductor design for the Project, and is also considering the feasibility of a more advanced core design conductor. *Id.* at 26.

B. Phase and Shield Wire Transposition

Due to the long transmission distances and high loading levels anticipated in the Project, system unbalance needs to be addressed in the design and construction of the project. Pioneer plans to transpose (i.e., rotate) phases on the new line. As such, this will be one of the first 765 kV lines in the United States that will use this design. In addition to moderating system unbalance, phase transposition will also enhance reliability of line protection and reduce line losses. *Id.* at 26-27. Additional line loss reduction will be achieved by also transposing the shield wires of the new 765 kV line. *Id.* at 27.

C. Fiber-Optic Shield Wires

Shield wires with fiber-optic cores will be used to enable the novel application of differential line protection, a superior technique borrowed from transformer protection that reliably detects short circuits. *Id.* Also, fiber-optic shield wires will provide high-capacity, high-speed communication channels allowing system dispatchers to switch facilities remotely and reliably for voltage control and to maintain reliable grid operation and security. *Id.* In addition, these same channels will aid engineering and maintenance staff in performing diagnostics of the remotely-located equipment. *Id.*

D. Wide-Area Monitoring and Control

Information normally obtained from Supervisory Control and Data Acquisition can be greatly enhanced through real-time and continuous monitoring with Phasor

Measurement Units (“PMUs”). PMUs will be installed as part of the Project to communicate real-time data via the line’s optical channels and thereby provide enhanced system state intelligence. *Id.* at 27-28.

E. Remote Station Equipment Diagnostics and Security

To ensure proper functioning of the equipment, its physical status and health will be monitored remotely on a continuous basis. Because the equipment is highly specialized, special remote sensors, detectors and/or audio/video devices – linked via optical channels to computers/databases – will be installed to obtain the necessary equipment diagnostics and ensure the equipment’s physical security. Incoming data will be analyzed using experience-based algorithms designed to identify unusual trends in equipment condition, providing early warning indications and information for operations and maintenance decisions. *Id.* at 28-29. In addition, security breaches, even at remote sites, will be immediately evident using this system. *Id.* at 29.

F. Independent Phase Operation

Alternating Current (“AC”) transmission is designed and operated as a three-phase system, normally requiring the switching of all three phases for a fault on any one phase. Opening only the faulted phase with a technique known as single-phase operation (“SPO”) – formerly single-phase switching, can improve system reliability. Use of enhanced SPO and the fact that 765 kV equipment components are built as single-phase units allows Pioneer to achieve more reliable independent phase operation to improve line reliability substantially. *Id.* at 29-30. A further enhancement of SPO includes a

concept that is presently being explored as part of AEP's technology alliance with ABB Inc. Following a permanent single phase to ground fault, the two unfaulted phases would remain in service long enough to allow for reliable redispatch of the system before the affected circuit must be fully removed from service for repair. *Id.* at 29-30. If this concept proves to be feasible in the timeframe allowed, it will be employed on the Project's 765 kV line, effectively achieving the contingency performance comparable to two circuits strung on common towers. *Id.* at 30. This approach yields a functional equivalent of a double-circuit line.

G. Switchable Shunt Reactors

Long 765 kV transmission lines normally require that banks of shunt reactors be installed at each terminal to control voltages. These reactor banks are commonly connected to the line via simple air-break switches, requiring an outage of the line to disconnect/reconnect the reactors. De-energizing major lines to remove/reconnect line reactors lessens reliability and operational flexibility of the grid. Advanced circuit breakers with power electronics have been successfully applied on a limited basis in the AEP 765 kV system to disconnect reactors without de-energizing the line. Similar circuit breakers will be used as part of the Project to permit (de)energization of these reactors automatically or by remote control without taking the line out of service. *Id.* at 30-31. This feature will also enhance operating flexibility and enable enhanced SPO implementation, as described above. *Id.* at 31.

H. Advanced Technologies Not Selected

Pioneer considered other advanced transmission technologies for the Project, but determined that they were not appropriate.⁶⁰ High-temperature electric lines (including superconducting cables) or high capacity ceramic electric wires were ruled out for the Project due to their unproven nature and lack of availability for 765 kV transmission applications. Exh. No. PNR-300 at 22. Similarly, underground cables are not available at the 765 kV voltage level. *Id.* While an emerging technology called “gas-insulated transmission line” is offered by a few power equipment suppliers, it is very costly and limited to special, short-distance applications. *Id.* Mobile transformers and mobile substations also are not available for 765 kV systems due to sheer physical size and limited transportability of the equipment at this voltage class. *Id.* at 22-23. Wireless power transmission is still in the conceptual stage, with years of development, testing and analysis required to prove performance, safety and cost efficiency for commercial use in bulk power delivery. *Id.* at 23. Because high-voltage DC technology is best suited for specialized applications, such as point-to-point transmission traversing sparsely populated areas or where the systems being connected do not operate in synchronism, it was not selected. *Id.* at 23-24. DC technology would require DC/AC converters, which

⁶⁰ Non-transmission advanced technologies, such as distributed generation, were not considered given the nature of the Project.

can adversely affect station reliability, posing special concerns at critical system locations. *Id.* at 24.

X. AFFILIATE TRANSACTIONS

As noted above, Pioneer will have no employees; however, it will have access to the utility expertise it needs through service contracts with AEPSC (a centralized service company that is affiliated with ATHC, a member of Pioneer) and Duke or its subsidiaries. Pioneer's contracts with such affiliates will be priced at cost because Pioneer's rates are cost-of-service based and not market-based.⁶¹ This will allow Pioneer to take advantage of services provided by affiliates (including AEP's unique expertise in 765 kV transmission design and operation) without any profit being earned by the affiliates in connection with the transactions. The Commission approved this structure in connection with the PATH project.⁶²

XI. CORRESPONDENCE AND COMMUNICATIONS

Correspondence and service regarding this filing should be sent to the following individuals, who should be placed on the official service list in this proceeding:

⁶¹ Order No. 707 imposes pricing standards only for affiliate transactions between franchised utilities and market-regulated power sales affiliates or non-utility affiliates. *Cross-Subsidization Restrictions on Affiliate Transactions*, Order No. 707, FERC Stats. & Regs. ¶ 31,264 (2008). Similarly, Order No. 697 is limited to sales/purchases involving affiliates with market-based rate authority.

⁶² *PATH* at P 146.

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A hard copy of this filing has been served on the state commissions indicated on the attached Service List. Due to the size of the filing, rather than providing service by hard copies, a link to the filing will be emailed by the PJM and the Midwest ISO to their respective members and customers with an address of a link to the filings. Pioneer seeks any necessary waivers to permit this approach to service, which reflects the Commission's efforts to reduce the use of paper in compliance with the Government Paperwork Elimination Act.

XII. REQUEST FOR WAIVERS

Mr. Heintz's testimony shows the application of the formula rate to projected 2009 and 2010 costs, in lieu of full Statements AA through BL. Exh. Nos. PNR-802 and PNR-603. To the extent that this approach may require waivers of Section 35.13 of the

regulations, Pioneer respectfully requests such waivers, including waiver of the full Period I-Period II data requirements, and waiver of the requirements in Section 35.13(a)(2)(iv) to determine if and the extent to which a proposed change constitutes a rate increase based on Period I-Period II rates and billing determinants.⁶³ Good cause exists for such waiver. The abbreviated statements and the testimony submitted as attachments to this filing provide ample support for the reasonableness of the proposed formula rate. Detailed statements of the Applicant's cost of service are not needed where the proposed rates are formula and will be based on actual costs as reflected in the Applicant's audited FERC Form 1 filings. This is particularly true here, in view of the early stage of project development. Further, such waiver would be consistent with Commission precedent for formula rates of this nature.⁶⁴

In addition, although the Applicant believes that this filing includes sufficient information to meet the Commission's filing requirements, it requests waiver of any applicable regulations to allow the filing to take effect in the manner described. Pioneer

⁶³ Since there is no pre-existing rate, Section 35.13(a)(2)(iv) is inapplicable.

⁶⁴ *Public Service Electric and Gas Co.*, 124 FERC ¶ 61,303 at PP 23-24 (2008) (granting waiver of Sections 35.13(d)(1)-(2), 35.13(d)(5), and 35.13(h)); *Oklahoma Gas & Elec. Co.*, 122 FERC ¶ 61,071 at P 41 (2008) (same); *American Electric Power Serv. Corp.*, 120 FERC ¶ 61,205 at P 41 (2007) (granting waiver of Period I and II data); *Commonwealth Edison Co.*, 119 FERC ¶ 61,238 at PP 92-94 (2007) (granting waiver of Period I and II data and cost-of-service statements); *Trans-Allegheny Interstate Line Co.*, 119 FERC ¶ 61,219 at P 57 (2007) (same); *Duquesne Light Co.*, 118 FERC ¶ 61,087 at P 79 (2007) (granting waiver of Sections 35.13(d)(1)-(2) and 35.13(h)); *Idaho Power Co.*, 115 FERC ¶ 61,281 at P 20 (2006) (granting waiver of Period II data); *Allegheny Power Sys. Operating Cos.*, 111 FERC ¶ 61,308 at PP 55-56 (2005) (granting waiver of Period I and II data).

also states that no expenses or costs in connection with this tariff been alleged or judged in any administrative or judicial proceeding to be illegal, duplicative, or unnecessary costs that are demonstrably the product of discriminatory employment practices.

XIII. CONCLUSION

For the reasons set forth above, Pioneer requests that the Commission accept for filing the formula rate filed herewith and grant Pioneer's request for incentive ratemaking treatments as set forth above, in both cases without further investigation or suspension.

Respectfully submitted,



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Attorney for Pioneer Transmission, LLC

Attachments