

# American Transmission Company

Expert Report on the Revenue Requirement  
Impact on ATC's Existing Wisconsin Network  
Customers from Constructing and Operating  
a Hypothetical New Transmission Line Under  
MISO Cost Allocation Procedures

October 30, 2024

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# 1. Scope of the report

At the request of American Transmission Company (“ATC” or “the Company”), I was engaged to prepare an expert report on the development of revenue requirements, cost allocation approaches, and procedures under MISO (Midcontinent Independent System Operator) rules for ATC and competitors under the conditions applicable to the construction of a new transmission line (“The Report”) using assumptions provided by ATC for the hypothetical new transmission line. The resulting revenue requirement impacts to construct and operate the hypothetical new transmission line will affect both ATC’s existing Wisconsin network customers as well as non-ATC network transmission customers within the region of the hypothetical new transmission line. This report provides an illustration of the methods used to develop revenue requirements using various assumptions and applicable MISO rules for cost allocations. The results provide a comparison of the revenues, costs and regional cost-sharing benefits for the construction and operation of the new hypothetical transmission line for incumbent entities (in this case, ATC) as opposed to new entrants.

This report includes:

- Qualifications of Expert (Section 2),
- An executive summary (Section 3),
- Background on the current competitive transmission process (Section 4),
- Using existing MISO/ATC procedures, a description of the methodology used to develop and analyze the revenues, costs and benefits that will apply to existing ATC Wisconsin network customers and customers of the hypothetical new transmission line using assumptions provided by ATC (Section 5),
- Outcomes of the scenarios (revenue requirements) based on ATC-provided assumptions and MISO regional cost allocation methods (Section 6),
- A summary of results and findings from the Study (Section 7), and
- Details of the MISO procedures for revenue requirements (Appendix A), Cost allocations (Appendix B) and Revenue Requirement Calculations under three scenarios (Appendix C).

## **Limitations & assumptions of the Study**

Our work was limited to the specific procedures and analysis applied to ATC as described in this Expert Report. Our engagement cannot be relied upon to disclose errors, irregularities, or illegal acts including fraud or falsifications that may exist. We are not providing an audit, accounting, tax or attest opinion or other form of assurance.

## 2. Alan Felsenthal Qualifications & CARS Practice Overview

### **Alan Felsenthal's Qualifications:**

I, Alan Felsenthal, am currently a Managing Director with PricewaterhouseCoopers LLP ("PwC") and work exclusively in our Complex Accounting & Regulatory Solutions (CARS) practice within PwC's Trust practice. PwC is an international public accounting firm and a leading provider of services to the electric and gas industry. I received a Bachelor of Science degree in Accounting from the University of Illinois and joined the Regulated Industries Division of Arthur Andersen LLP in 1971 and became a Principal at that Firm in 1985. I remained at Arthur Andersen until 2002 when I joined PwC as a Managing Director. Throughout my 50 plus year career, I have focused on the unique accounting, tax and financial reporting issues at regulated entities.

Among various duties, I have provided rate case assistance for a number of utilities on various issues including, but not limited to, the reasonableness of projections in connection with service company cost allocations, forecast test periods, application of regulatory accounting in specific situations, appropriate regulatory treatment of asset retirement obligations and cost of removal, lead-lag studies, various income tax issues and inclusion of the prepaid pension asset in rate base. I have prepared and submitted expert testimony on a number of issues before the Regulatory Commission of Alaska, the Arizona Corporation Commission, the Florida Public Service Commission, the Hawaii Public Utilities Commission, the Illinois Commerce Commission, the Indiana Utility Regulatory Commission, the Maine Public Utilities Commission, the Missouri Public Service Commission, the Public Utility Commission of Ohio, the South Carolina Public Service Commission, the Public Utility Commission of Texas, the Public Service Commission of Utah, the Washington Utilities and Transportation Commission, the Public Service Commission of West Virginia, and the Federal Energy Regulatory Commission (FERC).

In addition to my regulatory consulting experience, I have been a financial statement auditor and supported companies from a financial audit and consulting perspective including review and reporting on financial statements filed with the NYSE and SEC, reporting on FERC Form 1's, consulting on matters involving cost allocations, and compliance with applicable guidelines.

I developed and instructed a Rate Case Experience Seminar which is a week-long seminar conducted each year on an open enrollment basis for utility professionals. I also developed and instructed PwC's Utility Industry Basic Accounting and Ratemaking Seminar and PwC's Utility Income Taxes – Accounting and Ratemaking Issues training, both of which are 2-day seminars provided to utility professionals. I have presented at Edison Electric Institute and American Gas Association seminars. I have conducted numerous special purpose training courses for over 30 utility companies and regulators including the FERC. I am a member of the American Institute of Certified Public Accountants as well as the Illinois CPA Society.

I, as well as other PwC personnel working under my supervision and direction, have read and analyzed supporting documentation and information relevant to the issues on this engagement. I have been assisted by several other PwC professionals, each with applicable experience on utility accounting processes.

**Complex Accounting and Regulatory Support Practice:**

Within the Power and Utilities industry team, there is a smaller, highly specialized group, the Complex Accounting and Regulatory Solutions (“CARS”) practice, of which I am a member. The CARS practice is dedicated to helping regulated companies in the energy and utilities industries manage their regulatory risk and solve complex accounting problems. This team of seasoned professionals has deep experience working with regulated entities. The individuals in the CARS practice have many years of experience serving rate regulated entities (regulated electric, gas, and water utilities).

### 3. Executive summary

Mr. Felsenthal was engaged by ATC to prepare an expert report for the Company supporting the calculation of revenue requirements for ATC's existing Wisconsin network customers necessary to recover construction costs and operating costs over the life of a hypothetical new transmission line under several scenarios using ATC-provided assumptions. The revenue requirements were determined using existing ATC data from their Attachment O filing (the annual formula rate filing described in more detail later in this Report), certain assumptions with respect to the costs to construct a hypothetical new transmission line, cost escalations and procedures to allocate costs between ATC's existing Wisconsin network customers and customers of the new transmission line using MISO (Midcontinent Independent System Operator) regulations and criteria applicable to ATC and its competitors. All of the underlying assumptions related to this hypothetical new transmission line were proposed by ATC and Mr. Felsenthal is not opining on the reasonableness of these assumptions. The guidance included in the MISO Rules, Manuals and Agreements were used to establish a scope and comprehensive understanding to form the conclusion.

Transmission infrastructure is constructed to provide a dependable and reliable flow of electricity to customers. Most rate-regulated utilities, including ATC, determine the price they charge their customers for regulated service using a traditional rate base/rate of return methodology. Under such an approach, revenue requirements (or cost of service) are calculated by determining the regulated entities' allowable operating costs (those costs necessary to provide the regulated service including operation and maintenance expenses, depreciation expense, taxes other than income and income taxes) and adding such expenses to a calculated return (cost of debt and a fair return on rate base, primarily the net investment in property, plant and equipment). This is the regulatory compact that exists between regulators and regulated utilities—in exchange for being granted an exclusive service territory, the regulator permits the regulated entity to recover the costs of providing regulated service plus a fair return to its investors. The revenue requirement formula is reviewed and approved by regulatory bodies such as the Federal Energy Regulatory Commission ("FERC") and administered by MISO. The Public Service

Commission of Wisconsin is responsible for the approval of routing and siting for certain transmission projects in the state of Wisconsin. The revenue requirement is allocated to ratepayers through a rate structure that distributes costs based on factors like usage, demand, and specific service areas, thereby ensuring that each customer pays a fair share of the overall costs.

ATC computes its annual revenue requirement on Attachment O which is submitted to MISO for review and approval. From the Attachment O, transmission rates will be developed based on, among other things, expected system peak. See Appendix A for a more detailed discussion of Attachment O and regulation under MISO as well as MISO's rules and regulations for transmission Multi-Value Projects ("MVP's"), large-scale projects which among other criteria provides various benefits across multiple jurisdictions.

MISO is an independent, not-for-profit, member-based organization that plays a crucial role in managing and coordinating the transmission of electricity across multiple states in the United States. When it comes to allocating the revenues and costs associated with new transmission facilities, MISO follows a structured process to distribute such costs among the various jurisdictions it serves. Costs are divided based on whether the transmission facility provides regional benefits (affecting multiple jurisdictions) or local benefits (affecting a single jurisdiction or a limited area) using different allocation methodologies depending on the type of project. By categorizing projects and using the specific cost allocation mechanisms, MISO strives to increase the equitable allocation of such costs.

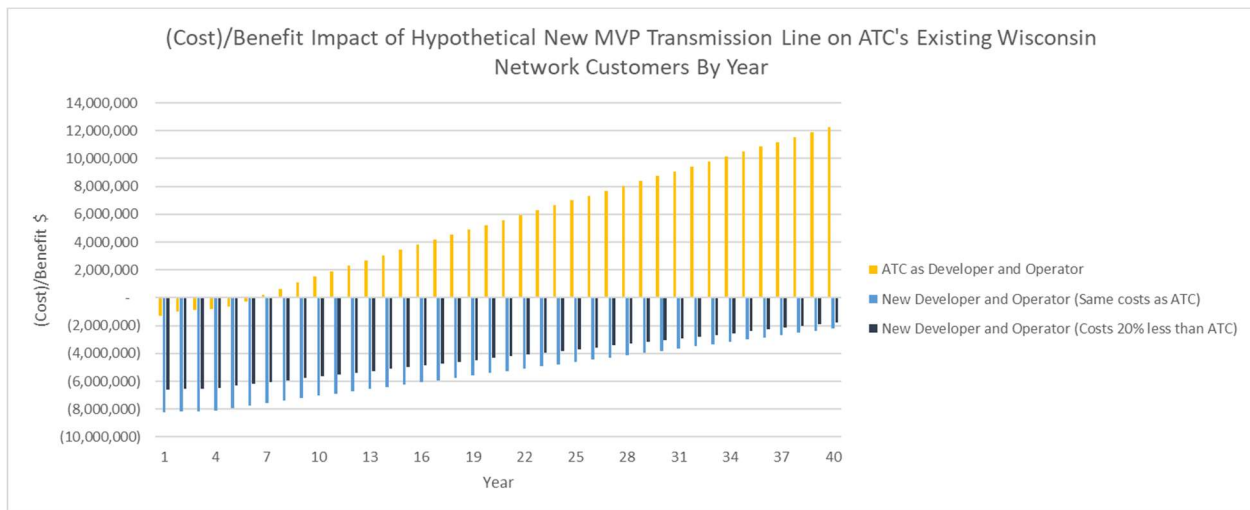
To illustrate these principles and the rate effects to ATC's customers, an example scenario was developed by ATC under which a new hypothetical 200-mile transmission line was assumed to be constructed and operated entirely in the state of Wisconsin. In accordance with MISO guidelines, this hypothetical transmission line would qualify as an MVP under MISO's MVP framework and regional cost sharing policies. As a result of being an MVP, the entire annual revenue requirement associated with this transmission project is allocated across all Midwest MISO member companies and their respective customers (including an allocation to ATC customers).

The cost burden of the hypothetical new transmission line on the Company's existing Wisconsin network customers were calculated under three different scenarios:



- Scenario One: ATC as the entity that constructs and operates the new line,
- Scenario Two: A “New” competitive entity constructs and operates the new line whose construction and operating costs for the project are the same as ATC’s, and
- Scenario Three: A “New” competitive entity constructs and operates the new line whose construction and operating costs for the project are 20% less than ATC’s.

The results of this scenario analysis demonstrate that ATC’s existing Wisconsin network customers will benefit significantly if ATC constructs and operates the hypothetical transmission line compared to what their customers would pay under the scenarios where the project is constructed and operated by new developers. This is true even if the new competitor could construct and operate the hypothetical new transmission line for 20% lower total project construction and operating costs.



As we detail in this report, the basis for ATC’s existing Wisconsin network customers achieving this significant benefit is because of the following cost allocation methodology that exists under MISO rules.

Under MISO rules, the Company is required to compute a share of existing operations and maintenance (“O&M”) and other expenses to allocate to the new transmission line. By doing so, the existing O&M and other expenses are reduced from existing revenue requirements reflected on Attachment O and the revenue requirement of the new transmission line increased by this allocation. However, because it is assumed the new transmission project qualifies as an MVP according to MISO rules, the costs for this project will be recovered from a much wider base of regional customers. The

allocation of existing O&M and Other Expenses to the new project which are then recovered from a wider base of customers, leads to an overall reduction in costs for ATC's existing Wisconsin network customers.

This contrasts to the scenarios for a new developer with a single project where all expenses must be included in the revenue requirements of that one transmission line and not allocated from an existing Attachment O applicable to existing Wisconsin network customers. As this is still an MVP project, the non-incumbent's revenue requirement to construct and operate that hypothetical new line is also allocated across the MISO region, but the new developer will not have existing O&M and Other Expenses (serving existing Wisconsin network customers) that will be reduced for the calculated O&M and other expenses (and allocated to the new transmission project).

In summary, the Company's calculations of a hypothetical transmission line under various scenarios support the assertion that a right of first refusal ("ROFR") translates into reduced costs for existing customers. State-level ROFR provisions grant incumbent utilities the right to construct new transmission projects within the state even if those projects are part of a regional transmission plan subject to FERC's competitive bidding requirements. As detailed within this report, using ATC's Attachment O data, certain construction costs and operating cost growth assumptions and MISO's existing revenue requirement and cost allocation rules, the cost implications for existing ATC customers under the MISO framework suggests that an incumbent transmission developer offers a solution with lower total costs for existing customers as compared to a new developer. Among other reasons, this is due to existing costs allocated to ATC's network customers being allocated among a larger portfolio of projects and under MISO's cost allocation methods for projects that qualify as MVPs, these costs are shared among a larger group of customers for which existing ATC customers only pay a calculated percentage. A new developer does not have an existing network overhead base that a new project will have an effect of diluting (allocating to others).

# 4. Current Competitive Transmission Process

## 4.1 Background

The current competitive transmission process in the United States represents a shift in how transmission infrastructure is planned, developed, and managed. Before the introduction of Order 1000 by the FERC in 2011, the ROFR was a common provision that allowed incumbent utilities the priority or exclusive right to construct new transmission projects within their service areas. This meant that when a new transmission line or infrastructure upgrade was needed, the incumbent utility had the first opportunity to propose, design, and construct the project. FERC's Order 1000 altered the transmission planning and development landscape by eliminating the federal ROFR provisions for new transmission projects selected in regional transmission plans for cost allocation. Under this competitive framework, regional transmission organizations (RTOs) and independent system operators (ISOs), such as MISO, have implemented processes that allow for open bidding on certain types of transmission projects.

ATC is a member of MISO, an organization that oversees the operation of the regional electric transmission grid across 15 states in the Midwest and Southern regions of the United States, operating under its framework and oversight in ensuring that necessary transmission infrastructure is developed and maintained efficiently, while meeting the needs of the region. In the wake of Order 1000, several states within MISO's operational footprint enacted ROFR laws.

## 4.2 Recent Regulatory Developments

In May 2024, FERC issued Order 1920, which among other items impacting transmission planning policy, did not establish a conditional federal ROFR as FERC had originally proposed in its Notice of Proposed Rulemaking ("NOPR"). In the final rulemaking order, FERC explained further that the NOPR proposal and federal ROFR reforms might be more appropriately addressed in other future proceedings and that it would be a policy that it would consider monitoring.

### **4.3 Process for New Transmission Projects under MISO**

Under the current regulatory landscape, regionally cost-shared projects in states without ROFR laws within MISO's footprint are subject to a competitive bidding process. The competitive transmission process under MISO is a process that involves the planning, development, and operation of transmission projects, which are essential for maintaining the stability of the power grid. MISO's competitive transmission process is a component of the annual Transmission Expansion Plan ("MTEP") and the Long-Range Transmission Plan ("LRTP"). The MTEP and LRTP processes are highly collaborative, involving stakeholders such as utility companies, state regulators, and consumer advocates. Through a series of meetings and consultations, MISO gathers input and feedback to refine project proposals and ensure that they meet the region's energy needs effectively. When a transmission project is identified that meets the requirements of a competitive solicitation, MISO issues a request for proposals to solicit bids from qualified transmission developers. Proposals are evaluated based on a range of criteria including cost, project timeline, technical expertise, and the developer's financial stability. MISO has established monitoring and reporting mechanisms to track the progress of transmission projects.

# 5. New, Hypothetical MVP Transmission Line Scenario

## 5.1 Preliminary Overview

To illustrate MISO revenue requirement and cost allocation principles, example scenarios were developed by ATC under which a hypothetical new MVP transmission line would be constructed and operated in Wisconsin. The annual and total costs and revenues were calculated by ATC and shown in Appendix C. These scenarios demonstrate the potential costs and benefits to existing customers who would be using a new transmission line when developed by either ATC as the Wisconsin incumbent state developer (Scenario One) or a nonincumbent developer under the conditions defined in Section 5.2 (Scenarios Two and Three). Both in the context of the new developer constructing the project for costs equal to those of ATC and constructing for costs 20% less than ATC's, the Wisconsin customer costs and benefits in both situations were estimated annually over the course of the project's 40-year lifetime. The annual costs of the new MVP transmission line being charged to existing ATC customers were projected in the context of this framework (refer to section 5.3). Scenarios Two and Three show the impacts to existing ATC customers compared to if ATC were to develop the new transmission line and the annual and overall net customer benefit/expense of the new MVP transmission line was then forecast.

## 5.2 Underlying Assumptions of the Project

Project Assumptions	Scenario 1	Scenario 2	Scenario 3
Developer of New Transmission Line	ATC	New Developer	New Developer
Miles of New Transmission Line	200	200	200
Construction cost per mile	\$3M	\$3M	\$2.4M
Overall Construction Costs	\$600M	\$600M	\$480M
Annual transmission O&M per mile	\$3k	\$3k	\$2.4k
Multi-Value Project (MVP)	Yes	Yes	Yes
Eligible for Regional Cost Sharing	Yes	Yes	Yes
Existing Network Customers	Yes	No	No
Allocated Customer Share of Costs Due to Project being a MVP	13.1%	13.1%	13.1%
Depreciation Rate	2.5%	2.5%	2.5%
Cost Escalation Rate	3.0%	3.0%	3.0%

Under this hypothetical example created by ATC, a new MVP transmission line 200 miles in length would be constructed in Wisconsin with a construction cost of \$3 million per mile. The annual transmission operations & maintenance expense is estimated to be \$3 thousand per mile annually with an annual cost escalation rate of 3% (to factor for inflation). The new transmission line is assumed to have a 40-year life (2.5% annual rate—is approximately consistent with the depreciation rates listed under ATC’s “Electric Utility Plant Depreciation Rate Study”, which was released in December 2020). MISO’s Attachment MM sets forth the method for collecting the charges associated with MVP’s and for distributing the revenues associated with such charges in accordance with the tariff. In accordance with ATC’s 2024 Attachment MM filing, the starting Annual Allocation Factor for Return utilized in the first year of the project was 8.0%. The Annual Allocation Factor for Return under MISO is used to determine each stakeholder’s share of the financial returns or revenue requirements associated with MVP’s. This is calculated by adding the Annual Allocation Factor for Income Taxes of 1.4% with the Annual Allocation Factor for Return on Rate Base of 6.6%. This 8.0% Annual Allocation Factor for Return was utilized in the first year of all three scenarios with the rate rising uniformly to the same rate under each year of the scenario.

### 5.3 Calculation of Annual Portion of New Transmission Line Charged to Customers

This project is assumed to be an MVP under MISO rules and eligible for cost sharing across the Midwest subregion of the MISO footprint through the developer’s annual Attachment MM filing (refer to appendix section B.4 for further detail on the criteria to qualify as a Multi-Value Project). Within the MISO

Tariff, Attachment MM specifies how the costs associated with such MVPs are distributed through a regional cost-sharing mechanism. Following MISO Schedule 26-A guidelines, costs are allocated according to annual customer MVP usage rate for each Local Balancing Authority utilizing data on the customers' share of MVP energy withdrawals in that area (methodology discussed further in appendix section B.4). Essentially, MVP charges are allocated across the MISO region by distributing the total annual revenue requirement for all MVPs among load-serving entities based on their proportional energy consumption.

Based on MISO's 2024 indicative data, the Local Balancing Authorities in ATC's jurisdiction made up 13.1% of the annual charges of the approved MVPs portfolio within the MISO Midwest footprint. As such, 13.1% of the costs related to the new transmission line will be allocated to customers in ATC's jurisdiction with the rest spread across the other Local Balancing Authorities of the Midwest subregion.

The Local Balancing Authorities of the Midwest MISO footprint within ATC Customer Zones are:

<b>Local Balancing Authority</b>	<b>Allocated Portion of MVP Usage Charges in MISO Midwest Region</b>
ALTE (Alliant East)	2.9%
MGE (Madison Gas and Electric)	0.7%
MIUP (Michigan Upper Peninsula)	0.6%
UPPC (Upper Peninsula Power Company)	0.2%
WEC (Wisconsin Electric Power Company)	6.0%
WPS (Wisconsin Public Service Company)	2.7%
<b>Total</b>	<b>13.1%</b>

*Source: MISO Schedule 26-A Data*

The calculation of the annual adjusted revenue requirement for an MVP through Attachment MM of the MISO tariff involves several key financial components. The project gross plant refers to the total capital investment in infrastructure, equipment, and software necessary for the project's development and operation. This gross plant value forms the basis for calculating depreciation and the return on investment. Project accumulated depreciation represents the total amount of depreciation that has been expensed over the life of the assets up to a specific point in time; thereby, reducing the net book value of the project gross plant and is calculated based on the new transmission line's useful life. The annual expense charge includes all operational costs, such as labor and materials, necessary for the project's ongoing maintenance and functioning. Another component is the annual return charge, which represents

the required rate of return on the invested capital. This charge is calculated by multiplying the rate base by the allowed rate of return. The annual return charge ensures that the project meets the financial expectations of its investors and stakeholders. Through a comprehensive evaluation of these factors, the annual revenue requirement ensures that the MVP is financially sustainable and compliant with regulatory standards; thus, securing the necessary funding and support for its successful implementation and operation.



# 6. Outcomes of Hypothetical Example Scenarios

Using ATC's Attachment O data and assumed costs to construct the hypothetical new transmission line, MISO guidelines for cost allocation between existing Attachment O revenue requirements and revenue requirements applicable to the hypothetical new MVP transmission line over the 40-year life of the new transmission line, the net cost/benefit of this project for the Company's network customers was projected annually by the Company.

Taking into consideration the annual revenue requirement associated with the hypothetical new transmission line, the costs for this MVP project were then allocated across the MISO Midwest subregion to arrive at the Portion Charged to ATC Customers. The costs were allocated to ATC's customers at the 13.1% share ATC's local balancing authorities utilized and withdrew energy from the Midwest subregion's MVP projects, with the remaining 86.9% allocated to customers across the MISO Midwest footprint. This portion being charged to ATC's existing Wisconsin network customers was calculated each year of the scenario:

$$\text{Annual Revenue Requirement} \times \text{ATC Customer Share \%} = \text{Portion Charged to ATC Customers}$$

Such a charge would be applicable for each of the conditions tested under this scenario, with the resulting cost to customers factored into the Net ATC Customer (Cost)/Benefit each year. Customers benefit from this regional cost-sharing mechanism, as it reduces the total share of costs associated with the new project paid by the transmission owner's customers.

Under Scenario One, ATC's existing network customers will significantly benefit from the new transmission line if ATC is the developer and operator of that new transmission line, and that line qualifies as an MVP project. Under this scenario, ATC's existing transmission O&M and Other Expenses (supporting the provision of service to customers) do not noticeably increase because of the new transmission line, but under MISO's cost allocation guidelines the new level of such costs (existing plus the estimated incremental) are allocated to the new transmission line (and deducted from the existing

network revenue requirement) using allocation factors derived from ATC's plant and accumulated depreciation balances. Under this scenario, a significant reduction of O&M and Other Expenses currently included in ATC's existing Wisconsin network customers revenue requirements occurs.

The associated revenue requirement calculation with the hypothetical project would not have these existing Wisconsin network customers or established infrastructure for the Second and Third Scenarios with the non-incumbent developer constructing and operating the new transmission line. Since the new developer does not have any Wisconsin network customers or existing assets in Wisconsin, they lack an established revenue requirement where existing customers would benefit from an existing base over which to spread their expense credits in their Attachment O since this new transmission line would be their only assets in Wisconsin. In other words, there are no existing expenses related to an existing Wisconsin asset base that can be allocated to the new project, as they can be with ATC. Therefore, the revenue requirement calculation for the new developer will not benefit from the cost efficiencies that ATC benefits from under MISO's current rate structures. Consequently, in Scenarios Two and Three, existing Wisconsin customers will not see the same reduction in allocated costs from the new developer building the transmission line as they would in Scenario One with ATC's established infrastructure.

While the revenue requirement for the proposed new transmission line itself is higher under Scenario One compared to Scenario's Two and Three (primarily as a result of the allocation of O&M and Other Expenses to the MVP project), the allocation of such costs reduces these costs to existing network customers from Attachment O and, further, the existing network customers are charged only 13.1% of the MVP revenue requirement as the remaining 86.9% are allocated to other MISO customers in the Midwest region. The net overall customer (cost)/benefit values under the scenario with ATC as the developer produces a significant benefit for existing Wisconsin customers. The net cost under Scenarios Two and Three suggests that even with a lower annual revenue requirement associated with the new transmission line, and subsequently a lower portion of the new line's revenue requirement being charged to ATC's existing Wisconsin network customers, the new developer would still ultimately result in a considerable net cost to the existing customers.

Furthermore, Scenario Three underscores that incumbent developers offer existing customers more cost-effective solutions compared to solutions proposed by new developers even when the new developers have lower initial construction and operating costs such as under Scenario Three in which the construction and operating costs are 20% lower. The ability of the incumbent developer under Scenario One to spread costs across a broader portfolio contributes to significant customer benefits. This occurs because the expense credit that existing ATC customers receive on Attachment O exceeds the incremental cost that they pay for the new project.

When calculating Attachment O for a transmission provider, each individual transmission project, including new and existing ones, contributes to the overall revenue requirement. The individual project's revenue requirement is added to the revenue requirements of all other transmission projects and facilities owned by the provider to form a cumulative revenue requirement with this cumulative total representing the amount the transmission provider needs to recover to cover the costs of all its transmission facilities. In arriving at the net ATC Customer (Cost)/Benefit each year under Scenario One, in which ATC is the developer for the new transmission line, the portion of the annual revenue requirement associated with this MVP project would be reduced by the savings customers would receive via Attachment O through these existing customers being allocated a smaller portion of the O&M costs and such costs being allocated to customers in the rest of the region.

## 7. Summary and Conclusion

In assessing the cost implications for existing ATC Wisconsin network customers under the MISO framework, the Company developed scenarios demonstrating that when the incumbent transmission developer of a hypothetical MVP qualifying project (such as ATC for their Wisconsin network customers) is selected as the developer and operator of the hypothetical MVP project, ATC's Wisconsin network customers will pay less compared to scenarios where that hypothetical MVP project is developed and operated by a new developer all other things being equal. This is because under MISO rules, ATC's sum portion of O&M and Other expenses currently included on Attachment O and recovered from ATC's existing Wisconsin network customers are allocated to the hypothetical MVP project and recovered from not only ATC's existing Wisconsin customers but from other transmission customers in the region. ATC's existing Wisconsin network customers benefit from the ability, under MISO rules, to allocate costs across a larger, regional portfolio, thus benefitting from regional cost-sharing mechanisms for MVPs and leveraging established operational efficiencies and providing a cost-effective option for ATC's existing Wisconsin network customers.

The Company calculations under the various scenarios show that under MISO's cost allocation methods for projects that qualify as MVPs, the financial benefits for ATC's existing network customers are significant. In a scenario where ATC is the developer and operator of the hypothetical MVP project, ATC's Attachment O revenue requirement, which includes the combined costs of ATC's current Attachment O costs and the costs of the hypothetical MVP project, is allocated to the hypothetical MVP project using an allocation factor. Based on MISO guidance, this allocation factor is calculated based on the hypothetical project's percentage of net plant, or the value of the project's assets, relative to ATC's total net plant or total accumulated depreciation. This creates a beneficial effect for ATC's existing network customers because the O&M costs and Other Expenses are deducted from ATC's existing Wisconsin network customers and allocated to the hypothetical MVP project, being spread to and recovered from a larger regional customer base. These findings support the assertion that, under the existing MISO framework, ATC's existing Wisconsin network customers benefit when ATC is selected as the developer and operator

of a hypothetical MVP project compared to the amount such customers would pay if a developer and operator who is not currently serving Wisconsin network customers is selected.

Respectfully,

A handwritten signature in black ink, appearing to read "Alan D. Felsenthal". The signature is written in a cursive style with a large initial "A" and "F".

Alan D. Felsenthal

# Index to the Appendices

These appendices detail the cost allocation and revenue requirement policies and procedures under MISO (Appendix A and Appendix B) as well as the Company's calculation of the revenue requirement impacts for a hypothetical new MVP transmission line (impacts on ATC's existing Wisconsin network customers) under various scenarios as to whether construction and operation of the hypothetical new MVP transmission line is constructed and operated by ATC or by non-incumbent entities (Appendix C).

Appendix A: MISO Revenue Requirements

Appendix B: MISO Cost Allocation

Appendix C: Year by Year Cost/Benefit to ATC's Existing Wisconsin Network Customers Based on ATC's Calculated Revenue Requirements for Hypothetical New MVP Transmission Line

# Appendix A

## MISO Revenue Requirements

### **A.1 Background**

Determining revenue requirements for MISO customers involves an established process that ensures fair cost recovery and transparency. Under MISO's existing rate formulas, the cost ultimately allocated to customers arises from the annual revenue requirement, calculated through a detailed process of identifying and justifying various costs to meet regulatory and market standards. MISO's rate policies and formulas are subject to approval by the FERC, utilizing rate formulas that automatically adjust to reflect changes in costs and financial metrics, allowing for timely cost recovery. Once approved, the revenue requirement is recovered through transmission rates set within the MISO tariff structure, ensuring that costs are fairly allocated among customers based on their usage and demand.

### **A.2 Development of ATC's Annual Revenue Requirement**

ATC calculates its annual revenue requirement utilizing Attachment O of the MISO Tariff, which provides the rate formula template to be used by transmission owners within the region. Attachment O provides a standardized formula rate protocol that transmission owners must follow to calculate their ATRR (annual transmission revenue requirements) including several key components designed to ensure that transmission owners can recover the costs associated with operating, maintaining, and developing transmission facilities. The process begins with the calculation of the rate base, which includes the gross plant investment, reduction for accumulated depreciation, and necessary adjustments for working capital and effects of income taxes. This establishes the net value of the owner's investment, commonly referred to as rate base. A critical part of the process is calculating the return on investment, which involves determining the required return on equity (ROE) and the cost of debt, then blending these into a Weighted Average Cost of Capital (WACC) to ensure that owners establish appropriate capital structures and earn a fair return on the investment. Next, O&M expenses are determined, encompassing the prudently

incurred costs related to the operation and maintenance of the transmission system, such as labor, materials, administrative and general expenses, and applicable taxes.

The final step in the Attachment O calculation involves summing the return and yearly expenses to derive the total cost of service. This sum includes the return on rate base, O&M expenses, depreciation expense, and taxes, both taxes other than income and income taxes.

The overall revenue requirement is then calculated by summing the return on the rate base, operating expenses, and other allowable costs and reduced for any credits. This calculation outlined in Attachment O inputs are based on financial statement amounts reported to the FERC on Form 1. This enables transmission owners to recover their investments and costs for operating and maintaining the assets and ensures that the determination of revenue requirements is compliant with regulatory standards within the MISO region.

The costs included in the revenue requirement are then allocated to ATC's Wisconsin customers based on their usage, demand, and ultimately each month, their proportionate share of the total monthly load for the MISO pricing zone. The tariff structure established by MISO and approved by the FERC is central to determining transmission charges. Along with most other transmission owners within MISO, ATC uses formula rates, which are adjusted annually to reflect actual incurred and projected costs. Unlike fixed rates that remain static until formally revised, formula rates adjust annually based on the actual costs incurred and projected by the transmission owners.

Network customers are entities under the MISO framework that use the transmission system to serve their end-use load. They are crucial to the effective operation of the electrical grid as they provide a stable and predictable demand for electricity, ultimately aiding in grid planning and load forecasting for the transmission providers. Schedule 9 under the MISO tariff outlines the rates, terms, and conditions under which ATC's network customers are billed for using the transmission system to meet their load requirements. The charges under Schedule 9 are based on the Annual Transmission Revenue Requirement (ATRR), calculated using the formula rates specified in Attachment O of the MISO tariff. ATC collects monthly load data from its Transmission Customers based on the monthly coincident peaks beginning September 1 of the prior calendar year through August 31 of the current year, including actual



load data provided by its customers and expected transfers of load between customers expected by the end of the following year. Charges to be collected from the network customers are then allocated based on their load ratio share. In essence, Attachment O provides the financial rules and regulatory framework for determining the revenue needs of transmission owners, while Schedule 9 applies these calculations to create a structured billing system for network customers.

### **A.3 Revenue Requirements for New Transmission Facilities**

Determining the revenue requirements for proposed new transmission facilities to be approved by MISO is an established process that integrates various financial aspects. It starts with estimating all potential costs including capital, operational, maintenance, and financing expenses. These costs are detailed and submitted to MISO as part of the MTEP process for approval to ensure they are reasonable and necessary. Once included in MTEP, certain projects may require approval by state regulatory bodies such as the Public Service Commission of Wisconsin. After such approval, the expenditures for the project are included in the transmission company's rate base, where they are depreciated over the expected useful life of the assets and collected in customer rates. This process includes calculating a return on investment to cover the cost of capital and provide a fair return to investors. To calculate the total revenue requirement, the transmission company adds the annual depreciation expense, the return on investment from rate base, and the allowed operational and maintenance costs. This total is then divided by the projected usage of the transmission system to establish the rates charged to users. The total revenue requirement is then incorporated into transmission rates, which are charged to the users of the transmission system.

With the introduction of a new project, the transmission provider's Attachment O incorporates the costs associated with the new infrastructure or improvements. This ensures that the financial implications of the new project including capital investments, operational expenses, and potential benefits are incorporated into the transmission rates. For an example scenario under the MISO framework, illustrating how a new transmission line would impact existing Wisconsin customers refer to Sections 5 and 6 and Appendix C. These sections detail the comparative effects of the incumbent developer ATC with its established infrastructure to serve Wisconsin network customers developing the hypothetical new

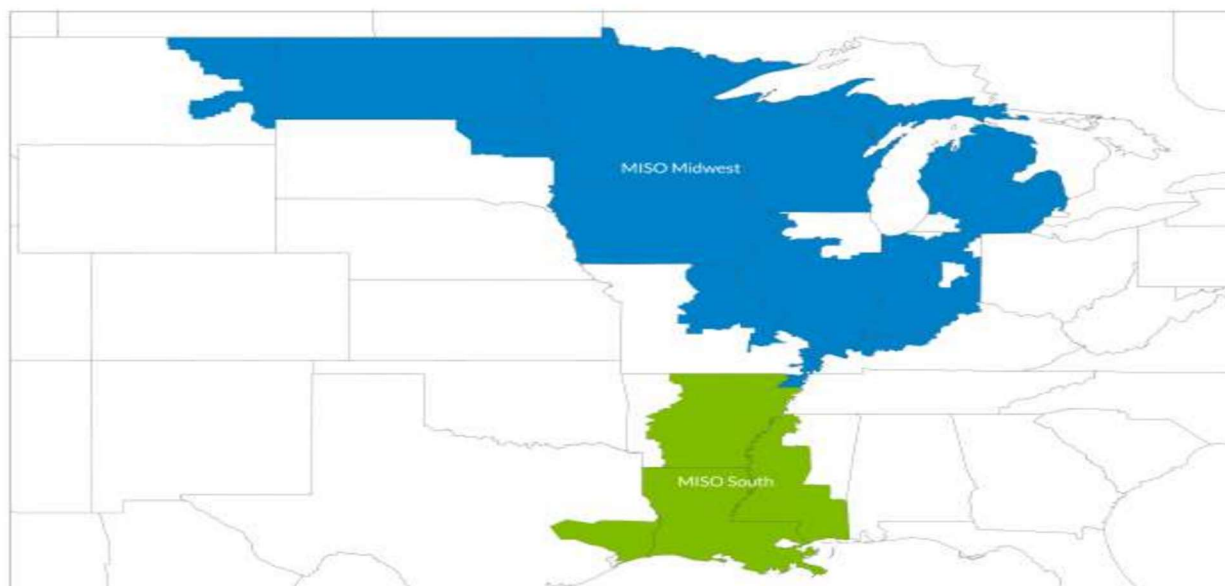
transmission line versus a new developer without existing assets. This process facilitated through Attachment O allows for transmission rates to be based on the actual costs of providing reliable transmission services. By adhering to the standardized methodology outlined in Attachment O, transmission owners within the MISO region can consistently and accurately determine their revenue requirements, thereby supporting the operation and maintenance of the transmission network.

MISO oversees a diverse range of transmission projects to ensure the durability and effectiveness of the electrical grid across its service area as part of its Transmission Expansion Plan (“MTEP”) and Long-Range Transmission Plan (“LRTP”). These projects are categorized based on their specific goals and benefits. Among these are the Multi-Value Projects (“MVP”), Market Efficiency Projects (“MEP”), and Baseline reliability projects (“BRPs”), which each have distinct objectives and impacts. The revenue requirements for each of these transmission projects vary based on the type of project due to differences in cost allocation and capital intensity. MVPs are designed to address broad regional needs and provide multiple benefits, including improving grid reliability, supporting public policy requirements, and facilitating the integration of renewable energy. To qualify as an MVP, a project must demonstrate that it provides significant value across the MISO region. The distribution of revenue requirements for new transmission projects is a systematic process designed to ensure fair cost-sharing among users of the transmission system.

A unique aspect of MVPs is that 100% of their costs can be regionally allocated and applied to different regions within the MISO footprint such as the MISO Midwest Subregion, the MISO South Subregion, or the entire MISO system-wide footprint. This broad allocation is based on the premise that MVPs provide regional benefits such as improved reliability and reduced congestion that extend beyond individual transmission zones. The regional cost-sharing mechanism for MVPs is facilitated through Schedule 26-A of the MISO tariff. Schedule 26-A outlines how the costs of MVPs are distributed among transmission owners and customers proportional to the benefits received by each transmission zone. The MVP costs are allocated based on the MVP Usage Rate, which reflects the usage of the MVPs by the transmission customers (refer to appendix section B.4 for further detail on this calculation).

For Multi-Value Projects, they typically have higher revenue requirements because they involve significant capital investments in constructing new transmission lines and substantial infrastructure upgrades. MISO's approach to allocating MVP costs is characterized by the "postage stamp" methodology, wherein costs are allocated uniformly across all load-serving entities (LSEs) within the subregions of the MISO footprint, generally being split into the Midwest and Southern subregions (refer below to the cost allocation subregions per Attachment XX of the MISO tariff).

**Map of MVP Cost Allocation Subregion Boundaries**



*Source: MISO Tariff Attachment XX*

This regional cost allocation reflects the principle that the benefits of MVPs are shared by all users of the grid. Attachments O and MM support this regional cost allocation by ensuring that the revenue requirements for new MVP projects are calculated in a manner that reflects the true costs of providing transmission services. The revenue requirement calculated in Attachment MM for MVP projects is subtracted from the revenue requirement calculated in Attachment O. This subtraction prevents double-counting of costs and ensures that the costs associated with MVPs are properly allocated. By subtracting the share of MVP costs that have been allocated across the region, the revenue requirement reflects the net amount the transmission owner needs to recover through network transmission rates. The resulting

annual transmission revenue requirement from Attachments O and MM ensure that transmission owners can recover their costs in a transparent and predictable manner.

# Appendix B

## MISO Cost Allocation

### **B.1 Background**

In MISO markets, cost allocation is a critical process for distributing costs associated with electricity generation, transmission, and related services among market participants. MISO employs various methodologies for cost allocation in ensuring that the costs of maintaining a dependable power grid are equitably shared. The process of allocating transmission costs involves distributing the expenses associated with building, maintaining, and upgrading the transmission infrastructure among the various market participants, such as utilities, generators, and consumers.

### **B.2 MISO Cost Allocation Procedures for New Transmission Projects**

Once transmission projects are identified, MISO employs various Attachments within its tariff to determine how costs are allocated. Cost allocation for these projects is guided by specific methodologies outlined in MISO's tariff which distribute costs based on the benefits received by different regions and stakeholders. For instance, Attachment FF outlines the general principles for cost allocation, categorizing projects into types, with each category having its own set of criteria and benefits influencing how costs are allocated. Primarily, MISO employs a combination of cost causation and beneficiary-pays principles to distribute costs. This means those who need new transmission investments or benefit from the grid's enhanced reliability and efficiency are allocated a proportionate share of the costs. The principles of cost allocation used by MISO are overseen and approved by the FERC ensuring that all cost allocation methods and recovery mechanisms are just, reasonable, and non-discriminatory.

MISO allocates the costs and revenues associated with new transmission facilities under both the Long-Range Transmission Planning (LRTP) and the MISO Transmission Expansion Plan (MTEP) through structured methodologies designed to ensure equitable distribution among the various jurisdictions it oversees. Current infrastructure, future energy demand forecasts, and the identification of projects

needed to maintain and strengthen the grid are evaluated in identifying necessary transmission projects under such planning procedures. Cost allocation for these projects follows a methodology that considers factors such as regional and interregional benefits. The benefits of this cost allocation approach, facilitated by Attachment O of the MISO tariff, are significant for consumers. The role of existing assets in allocating regional transmission project costs under MISO is crucial for ensuring that cost distribution is fair and reflective of the current infrastructure landscape. Existing assets refer to the already established transmission facilities and infrastructure that are in place within the MISO region. These assets play a significant role in determining how new project costs are allocated among stakeholders. If a new project leverages or enhances the capabilities of existing infrastructure, the cost allocation can be adjusted to reflect the degree of improvement or reinforcement provided by the new project. This means that areas with substantial existing infrastructure that benefit from incremental upgrades may bear a different portion of the costs compared to regions where entirely new infrastructure is required. This existing infrastructure allows for a streamlined implementation process, often reducing the overall costs and improving the effectiveness of the transmission projects.

When a new developer enters a state within MISO's region to initiate a transmission project, the new developer works within MISO's structured framework. New developers may find more difficulties in integrating their projects seamlessly into the current grid, potentially causing delays and driving up costs, leading to higher initial costs and longer implementation timelines. This can result in less optimal solutions that do not fully capitalize on the existing infrastructure's capabilities, ultimately providing fewer immediate benefits to the state and its stakeholders.

### **B.3 Differences Between Incremental/Marginal and Full Cost Allocation in MISO Markets**

In the context of the MISO markets, cost allocation methodologies are critical for determining how the financial responsibilities of new transmission facilities are distributed among stakeholders. The two primary approaches to cost allocation are incremental/marginal cost allocation and full cost allocation.

Incremental or marginal cost allocation focuses on additional costs being assigned to the entities or activities that directly cause the need for additional investments or system upgrades. In the context of MISO markets, incremental cost allocation is used for various types of projects, such as Generator

Interconnections and Market Efficiency Projects (MEPs). For such projects, the financial impact of decisions is directly linked to those driving the need for new investments, thereby aligning costs with the underlying economic activities. For Generator Interconnections, incremental cost allocation assigns the costs of necessary network upgrades to the generators requesting the interconnection. For MEPs, which aim to reduce congestion and improve market operations, incremental cost allocation assigns costs based on the economic benefits provided. This approach is different from full cost allocation in that it focuses on the additional costs required to accommodate specific changes or developments in the grid.

Full cost allocation is generally used for large-scale projects that provide broad regional benefits, where the advantages extend beyond the immediate area of implementation. This approach shares the costs of large-scale transmission projects, which often provide widespread regional benefits, across all beneficiaries irrespective of their direct involvement in causing the need for the investment. One of the primary applications of full cost allocation in MISO markets is for Multi-Value Projects (MVPs), with BRPs (Baseline Reliability Projects) also utilizing full cost allocation when the benefits of the project extend beyond a localized area. As MVPs provide many benefits that enhance the efficiency and sustainability of the electric grid, the full cost allocation method for MVPs ensures that the costs are distributed among all load-serving entities within the MISO region. By spreading the financial burden across all beneficiaries, this approach supports the development of essential infrastructure that enhances grid reliability, reduces congestion, and facilitates the integration of renewable energy sources.

Under MISO cost allocation methodologies, incumbent transmission providers—those with established networks and multiple transmission projects—can use a full cost allocation approach for MVP projects. These providers include their fixed and A&G costs within their total O&M costs, which are then allocated across all projects based on each project's percentage of net plant value. The existing personnel, technology, and infrastructure can support additional projects without a proportional rise in administrative overhead, leading to a decreased cost allocation rate per project. Consequently, customers benefit from a lower share of fixed and A&G costs as they are spread over a larger asset base.

Nonincumbent transmission providers, which often do not benefit from the same level of established infrastructure and multiple projects, adopt an incremental/marginal cost allocation approach.

For these providers, each new project must bear its own costs, including a higher proportion of fixed and A&G expenses. Therefore, the incremental cost approach allocates costs based directly on the additional expenditures incurred by introducing a new project and could lead to the Attachment O of the nonincumbent mirroring the Attachment MM as both would include the full extent of the incurred costs without spreading them over a larger asset base.

While the cost allocation for non-O&M costs remains consistent across both incumbents and nonincumbents, the treatment of O&M costs, particularly the inclusion and allocation of A&G expenses, diverges significantly. Incumbent providers with multiple projects can distribute costs more efficiently, benefiting their customers, whereas nonincumbents must rely on incremental cost allocation to ensure financial transparency and viability for each new project.

#### **B.4 Regional Cost Sharing**

As outlined in Attachment FF of the MISO tariff, MISO employs a portfolio-based approach to the cost-sharing of Multi-Value Projects, with the portfolio being made up of the MVPs that provide transmission upgrades across the MISO footprint and allocates those costs regionally. By considering projects as part of a portfolio, MISO implements cost-sharing mechanisms that aim to equitably distribute the financial burden across the region and promote the prioritization of projects that provide the greatest overall benefits. Multi-Value Projects under MISO allocate costs on either a sub-regional or system-wide basis. The MISO footprint includes both its Midwest and Southern regions, with the costs of MVPs either allocated among the Midwest or Southern region, or across both on a system-wide basis depending on the degree of benefits a particular project provides.

Long Range Transmission Projects (L RTPs) must meet one of three criteria defined in Attachment FF of the MISO Tariff to be considered an MVP. In addition to the three criteria defined below, the project must have a cost greater than or equal to \$20 million, must include construction or improvement of transmission facilities operating at voltages above 100kV, and must be evaluated as part of a portfolio of projects whose benefits are spread broadly across the footprint.



#### Criterion 1

*A Multi-Value Project must be developed through the transmission expansion planning process for the purpose of enabling the Transmission System to reliably and economically deliver energy in support of documented energy policy mandates or laws that have been enacted or adopted through state or federal legislation or regulatory requirement that directly or indirectly govern the minimum or maximum amount of energy that can be generated by specific types of generation. The MVP must be shown to enable the transmission system to deliver such energy in a manner that is more reliable and/or more economic than it otherwise would be without the transmission upgrade* Criterion 1

#### Criterion 2

*Criterion 2. A Multi-Value Project must provide multiple types of economic value across multiple pricing zones with a Total MVP Benefit-to-Cost ratio of 1.0 or higher where the Total MVP Benefit -to-Cost ratio is described in Section II.C.7 of this Attachment FF. The reduction of production costs and the associated reduction of LMPs resulting from a transmission congestion relief project are not additive and are considered a single type of economic value*

#### Criterion 3

*Criterion 3. A Multi-Value Project must address at least one Transmission Issue associated with a projected violation of a NERC or Regional Entity standard and at least one economic-based Transmission Issue that provides economic value across multiple pricing zones. The project must generate total financially quantifiable benefits, including quantifiable reliability benefits, in excess of the total project costs based on the definition of financial benefits and Project Costs provided in Section II.C.7 of Attachment FF.*

Schedule 26-A under the MISO tariff pertains to the cost allocation for Multi-Value Projects (MVPs). Schedule 26-A outlines the methodology for distributing the costs associated with these MVPs among the various entities that benefit from them. The MISO region is split into Local Balancing Authorities (LBAs), with each LBA being responsible for maintaining the electricity balance within their specific geographic areas by managing the supply and demand of electricity in real time. Under Schedule 26-A, the costs of large-scale transmission projects, the MVPs, are allocated in a way that reflects the benefits received by the various LBAs. Each LBA's MVP Usage Rate is then ultimately calculated in accordance with Schedule 26-A.

The MVP Usage Rate (MUR) ensures that 100% of MVP costs are allocated across the MISO footprint, primarily either for the Midwest or Southern subregions. This is facilitated through Schedule 26-A, where the MVP Usage Rate for the MISO Midwest and MISO South regions, as well as the system-wide footprint, is calculated by dividing the total MVP Annual Revenue Requirements by the sum of Monthly Net Actual Energy Withdrawals, Real-Time Export Schedules, Real-Time Through Schedules, among other factors. The applicable Monthly MVP Revenue Requirements are calculated by multiplying the Total MVP Annual Revenue Requirements by a weighting factor. This factor is based on the applicable withdrawals, with withdrawals being the amount of electricity consumed or taken off the grid by an entity within the MISO footprint, for the month in the prior year divided by the total monthly withdrawals in the prior year. The weighting factors for each month are derived from prior year withdrawals and are calculated to ensure the costs are proportionally distributed based on actual usage. The MUR is

ultimately then calculated by multiplying the Total MVP Annual Revenue Requirements by the weighting factor.

### **B.5 ATC Customers' Share of MVP Usage**

In accordance with MISO Schedule 26-A, ATC's annual customer MVP usage rate is based off their customer's share of the MVP energy withdrawals. Of the thirty-two Local Balancing Authorities within MISO's Midwest region, six are considered within ATC's jurisdiction. As such, the portion of MVP costs allocated to ATC's region each year would be based on the percentage of total MVP usage the local balancing authorities within ATC's jurisdiction account for across the Midwest MISO footprint. The calculation begins with the total annual revenue requirement for all MVPs, with this then being allocated to each load-serving entity in proportion to their share of the total energy consumption within the MISO subregion. The allocated costs are then incorporated into the transmission rates paid by customers in each region, with the entities that consume more energy contributing a larger share to the cost recovery of MVPs. These charges are reviewed and adjusted annually to reflect changes in project costs and energy consumption patterns. Refer to section 5.3 of the report for further detail regarding ATC's cost share within the framework of constructing a new transmission line in Wisconsin based off data from MISO's Schedule 26-A.

### **B.6 Transmission O&M and Other Expense Cost Allocation to Network Customers and MVP projects**

Under MISO cost allocation methodologies network service providers apply an allocation factor to transmission O&M costs (from Attachment O) to determine the amount of such costs to allocate to the hypothetical MVP project. The O&M allocation factor is based on the project's percentage of accumulated depreciation, as a percentage of the total accumulated depreciation for the transmission provider. In addition, certain other costs (non-transmission O&M, common and general plant depreciation expense and taxes other than income) are allocated to the new project based on its proportion of gross transmission plant to the transmission provider's total gross transmission plant.

Under the cost allocation practices within MISO, customers of a network service provider will benefit from additional projects being built by their network operator that qualify as MVP projects as the overall O&M and Other costs (which do not noticeably increase for the hypothetical new MVP project) are allocated to the MVP project over a larger asset base (the network service provider's transmission plant and accumulated depreciation), producing an overall reduction in Attachment O O&M and Other costs to existing customers. As discussed in the previous sections of this Appendix, the costs allocated to the MVP revenue requirement are paid by all MISO Midwest region customers, reducing the total share of the costs paid by the network customers for the transmission operator.

# Appendix C

## Year by Year Cost/Benefit to ATC's Existing Wisconsin Network Customers Based on ATC's Calculated Revenue Requirements for Hypothetical New MVP Transmission Line

The Company's calculations of the revenue requirements using MISO cost allocation guidelines for a hypothetical new MVP Transmission line under various scenarios are included in this Appendix. Each scenario walks through, column by column, the determination of revenue requirements to be included in Attachment MM (to recover the costs of the hypothetical new MVP transmission line) and, under Scenario One, the impacts of the hypothetical new transmission line costs on Attachment O revenues for ATC's existing Wisconsin network customers. The assumptions used to determine these amounts are included below. The scenarios are:

Scenario One: ATC constructs and operates the hypothetical new MVP transmission line.

Scenario Two: A non-incumbent competitor constructs and operates the hypothetical new MVP transmission line with the same construction and operating costs as in Scenario One.

Scenario Three: A non-incumbent competitor constructs and operates the hypothetical new MVP transmission line but is able to construct and operate at 20% less cost than in Scenarios One and Two.

The calculations show the revenue requirement impacts necessary to recover the construction and operating costs of the hypothetical new transmission line as well as the revenue requirement impact on ATC's existing Wisconsin network customers whose current costs of service (as shown in Attachment

O) are reduced for O&M and Other Expenses allocated from Attachment O recovery to the hypothetical new MVP transmission line.

In Scenario One, ATC’s existing plant, accumulated depreciation, O&M, Other Expenses are shown as these amounts are used to determine amounts of O&M and Other Expenses to allocate to the hypothetical new transmission line. In Scenarios Two and Three it is assumed the competitor does not serve existing Wisconsin network customers so there are no Wisconsin Attachment O plant, accumulated depreciation, O&M and Other Expenses to reduce for allocations to the hypothetical new MVP transmission line.

The underlying assumptions developed by ATC used for the hypothetical new MVP transmission line are below and further detailed in section 5.2:

Depreciation rate	2.5%	(Assum. 1)
Cost escalation rate	3.0%	(Assum. 2)
ATC customer share of Schedule 26A	13.13%	(Assum. 3)
Miles of new transmission line	200	(Assum. 4)
Construction cost per mile	3,000,000	(Assum. 5)
Annual transmission O&M per mile	3,000	(Assum. 6)
Annual depreciation rate	2.5%	(Assum. 7)
Cost escalation rate	3.0%	(Assum. 8)









As explained throughout this report, the revenue requirement is calculated by multiplying the Company's rate base times a rate of return to produce a "return on rate base" and then the estimated depreciation expense and operating costs (necessary to operate and maintain service) is added to produce the overall cost of service/revenue requirement.

- Columns A, B and C show the components of existing net plant, prior to the addition of a new transmission line. For ATC these represent the projected 2024 balances of existing plant. For the new developer scenarios, as a new developer is assumed to not have any existing plant within ATC's service area, these balances are zero. These columns are necessary to calculate O&M and Other Expense cost allocations to the hypothetical new MVP transmission line under MISO cost allocation guidance.
- Columns D, E and F show the components of net plant for the new transmission line.
- Columns G, H and I add the new transmission line net plant to the existing net plant to arrive at the existing net plant transmission investment plus the new transmission line net plant producing the combined net plant balances. As discussed above, only in Scenario One are there existing Attachment O balances (to serve existing Wisconsin network customers) as the competitors in Scenarios Two and Three are assumed to be new entrants in Wisconsin.
- Column J shows the existing O&M costs. This amount is escalated each year based on the assumptions. As the new developer is assumed to not have any existing projects within MISO, this balance is zero in the new developer scenarios.
- Column K shows the estimated O&M costs associated with the new transmission line. This amount is escalated each year based on the expense growth assumption.
- Column L sums the O&M costs, existing plus new transmission line, to produce total O&M costs.

- Column M is an estimate of other expenses to be recovered. Other Expenses include non-transmission O&M, common and general depreciation expense and taxes other than income. As in Column J, the amount is assumed to be zero for a new developer as they are not expected to have existing projects within MISO.

The allocation factors in the following columns were calculated in accordance with the attachment MM under MISO rules. Calculations were performed to determine the O&M and other expenses attributable to the new transmission line which will reduce these costs for existing Wisconsin network customers.

- Column N is the calculation of the O&M Allocation factor. It is the combined O&M (Column L) divided by the combined (existing and new transmission line) accumulated depreciation (Column H).
- Column O applies the O&M factor to the accumulated depreciation on the new transmission line. This represents a portion of the credit that existing customers will benefit from as it will offload this portion of O&M expense.
- Column P is the calculation of the factor to calculate the percentage of other operating costs that can be offloaded to the new transmission line. It is the other operating costs (Column M) divided by the combined gross transmission plant (Column G). As there are no other costs for the new developer outside of the new transmission project, this amount is zero in the new developer scenarios.
- Column Q applies the other operating expense factor (Column P) to the gross transmission plant for the new transmission line (Column D). For the new developer scenarios, there are no other projects, this allocation factor is not applicable.
- Column R is the sum of the O&M calculated in Column O and the Other operating expense calculated in Column Q. This represents the assumed amounts of ATC's O&M and other operating costs that will be allocated to the new line.

- Column S is the assumed return percentage on investment using an estimated WACC. The Assumed WACC are the same across years in each of the three scenarios.
- Column T is the carrying charge of the net transmission plant based on the balance of net plant for the new transmission line (Column S times Column F).
- Column U is annual depreciation expense on the new transmission line based on the assumed useful life.
- Column V is the revenue requirement on the new transmission line. It is sum of the Annual Expense charge (Column R), Annual return charge (Column T), and depreciation expense (Column U) attributable to the new line.
- Column W is the portion of the new transmission line that will be charged to existing ATC customers in accordance with MVP framework in attachment FF under MISO Rules.
- Column X is the amount of the new transmission line charged to existing ATC customers under the MVP cost allocation framework in accordance with attachment FF.
- Column Y is the reductions of O&M expense for existing network customers recovered through Attachment O. This amount, based on the allocated O&M for the project (Column R) of O&M and Other Expense charges is instead recovered from all customers in the MISO Midwest region. In the case of Scenario One with ATC as the developer, this has the effect of reducing existing customer revenue requirements.
- Column Z shows the net cost or benefit to existing ATC customers as compared to the scenario with no transmission line being built. It is the amount charged for the new line (Column X) less the credit current customers will receive on Attachment O (Column Y).