

Transmission Strategy Services



Helping public power utilities and cooperatives realize the full revenue potential of their transmission assets

MCR Transmission Strategy Services



MCR provides transmission strategy support to public power entities, G&T and T&D cooperatives and independent developers in various RTOs. Our services include:

Transmission Formula Rate Analysis

- Formula Rate Review for Existing Transmission Owners
- Development of Annual Transmission Revenue Requirements ("ATRR") for New Transmission Owners
- Review/Challenge to Incumbent Formula Rate Costs
- Staff Education Workshops on Formula Rates

FERC Filings

- Section 205 Rate Filings and Testimony
- Transmission Incentive Rate Filings and Testimony
- Cost of Capital Expert Testimony
- Intervention and Settlement Support

Strategic Economic Analysis

- Analysis of Joint Zone Investments and Joint Pricing Zone Agreements & 7-Factor Tests
- Economic Evaluation of New Transmission Projects
- Valuation/Accounting for Purchase or Sale of Assets
- Development of Transmission Business Plans
- RTO Membership Evaluations

Transmission Cost/Rate Competitiveness

- Peer Cost Comparison by FERC Account
- Rate Strategy and Transmission Revenue Forecasting
- Transmission Capital Investment & Metric Comparisons

MCR's Approach

We find and generate value for our clients. We invest time upfront to understand client's unique issues and how we can create value.

Over the last 17 years, MCR has helped its transmission clients realize tens of millions of dollars of additional revenue.

"MCR has the full package; MCR brings the subject matter expertise, knowledge of transmission rates, rate structure, finance & accounting, and FERC policy."—Sr. VP, cooperative

Visit MCR's website at www.mcr-group.com to read client stories about MCR's work in these areas with our public power and cooperative clients

Selection of MCR Transmission White Papers

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Going on the Offensive to Counter **Dramatic Increases in Transmission Rates** Transmission Investing for Public Power and **G&T Utilities**

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Is Transmission in SPP Still a Solid Business? **MISO Transmission Rates in Joint Zones** Will the Transmission Rate Express Train

Jim Pardikes, Ron Kennedy, Chris Nagle

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1. Executive Summary

11. Viewing Transmission Differently...

MISO transmission rates have been rapidly escalating only to slow in recent years as transmission investment growth has moderated, the number of new transmission owners slowed, and the impacts of the corporate tax cut have played out. In 2021, however, MISO average transmission zonal rates increased by a stunning 17.7%, largely due to a 7.2% increase in transmission investment, a 4.1% decrease in load and the ending of deferred tax refunds. Looking to the next five years, MCR forecasts that zonal rates in joint pricing zones will increase by an average of 6.5% per year, well above the projected five-year inflation rate of 3.17%. We forecast that nine of the 20 joint pricing zones in MISO will see average annual rate increases over the next five years of at least 7%. These forecasted rate increases result from an expanding rationale for transmission investment as "resiliency" combines with social, political and regulatory changes; increasing capital, O&M and A&G costs due to rising inflation; and a continued hunger for earnings growth

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Download these white papers at www.mcr-group.com/transmission

Transmission Formula Rate Analysis

Formula Rate Reviews for Existing Transmission Owners



WHAT WE DO: MCR conducts reviews of transmission formula rates, (MISO Attach. O, SPP/PJM Attach. H) to substantiate costs and optimize revenue.

WHAT OUR CLIENTS ARE SAYING: "MCR was able to point out significant areas where we weren't recovering all we could; and, in one case, those numbers were substantial."—CFO, joint action agency

"MCR were very knowledgeable... we wanted to tap into that knowledge...I got a great sense of integrity from them."—CFO, G&T

"The improved cost recovery from the Attachment O Review is a windfall for us; the return on investment was immediate and substantial. MISO approved all changes this year from the Review."—GM, municipal

Development of ATRR for New Transmission Owners



WHAT WE DO: MCR develops cost data to support full RTO revenue recovery for new transmission owners ("TOs"), which involves, for example, developing MISO's Attachment O and Attachment H in SPP and PJM.

WHAT OUR CLIENTS ARE SAYING: "The onsite meetings allowed staff to ask questions and better understand why things are being done or why certain data was needed for the Attachment H. I was very impressed with how it went...asking questions and getting answers." — CEO, JAA

"MCR came to our office and walked through the entire transmission formula rate with me and my colleagues to make sure going forward we knew what was required of us. It felt like they went above and beyond what a normal consulting firm does." —Director of Finance, municipal utility

Review/Challenge to Incumbent Formula Rate Costs



WHAT WE DO: MCR reviews neighboring utility transmission costs or RTO cost calculations to ensure transmission charges are appropriate.

WHAT OUR CLIENTS ARE SAYING: "MCR went through the cost data with a fine-tooth comb and asked the incumbent IOU some very hard questions."

—Financial Planning Manager, joint action agency

"Trust but verify ... MCR is that verification. And if you don't have the verification of your incumbent utility formula rates, you could easily pay much too much."—Partner, Washington, DC-based law firm

"MCR are in-depth experts on the Attachment O... I was flabbergasted MCR was able to gather so much information. They had all the appropriate questions for the IOU."—Director of Finance, municipal utility

Staff Education Workshops on Transmission Formula Rates



WHAT WE DO: MCR conducts workshops to educate client staff on formula rates and the implications of business changes on ATRR.

WHAT OUR CLIENTS ARE SAYING: "MCR provided a workshop to educate us on the components of the Attachment O and the process, so we are much more confident when we are interacting with MISO and surrounding transmission owners."—CFO, joint action agency

"They helped us understand our true costs to managing transmission... they've demystified how we recover our Attachment O costs."—GM, municipal utility

FERC Filings



Section 205 Rate Filings and Testimony

WHAT WE DO: MCR provides expert FERC testimony for Section 205 rate filings, including ATRR filings for TOs in various RTOs, such as MISO, SPP, PJM, NYISO and CAISO. Our expertise includes formula rate template changes, cost of capital, projected test years and regulatory asset recovery.

WHAT OUR CLIENTS ARE SAYING: "Their knowledge helped improve our collection of transmission costs through an adjustment to the tariff template,

a strategy they developed, and we were able to get implemented. It was a very helpful, innovative and unique solution to put us on a more even playing field with peer transmission owners." —CFO, JAA

"MCR wrote testimony. Having MCR's name behind us was a huge plus to get SPP and FERC on board. You can tell MCR has a trust from everybody, a respect within the industry."—Finance Director, municipal

Transmission Incentive Rate Filings and Testimony



WHAT WE DO: MCR provides analytics, formula rates and testimony for transmission rate incentive applications to FERC. This includes requests for hypothetical capital structures, CWIP, abandoned plant and regulatory assets.

WHAT OUR CLIENTS ARE SAYING: "MCR helped us justify a hypothetical capital structure for FERC...a successful filing with no intervention."

—Transmission Planning Manager, G&T

"It was absolutely critical we get incentive rates approved by FERC; otherwise, our investment wouldn't have made economic sense. What impressed me is MCR was proactive about helping us understand what we needed, the process and what the timelines would be."—Vice President, joint action agency

Cost of Capital Expert Testimony



WHAT WE DO: MCR provides expert testimony and analytics to support proposed cost of capital for new and existing formula rates for public power, including margin requirement, ROE and capital structure. MCR has also successfully supported clients responding to FERC Deficiency Notices.

WHAT OUR CLIENTS ARE SAYING: "MCR created an innovative analysis based on our historical debt service coverage that compared it to a

traditional IOU ROE analysis, which allowed us to make a reasonable filing at FERC that was ultimately accepted."—Transmission Planning Manager, joint action agency

"MCR's cost of capital testimony was content-rich, succinct, and effective."—VP of Transmission, JAA

Intervention and Settlement Support



WHAT WE DO: MCR provides our clients analytical and intervention response support during intervention, settlement, mediation and hearings.

WHAT OUR CLIENTS ARE SAYING: "They helped us vet out issues before we finalized positions; they were willing to tell us what we may not have wanted to hear but needed to hear. With their help, we were successful attaining precedent-setting outcomes."—CEO, joint action agency

"MCR helped clarify the issues...and their comments to my draft protest were very helpful."—Partner, DC-based law firm

Strategic Economic Analysis

Analysis of Joint Zone Agreements and FERC 7-Factor Analysis



WHAT WE DO: MCR provides analytical support in negotiations with incumbents on joint pricing zone agreements and the appropriate share of eligible transmission investment in a joint pricing zone.

WHAT OUR CLIENTS ARE SAYING: "MCR walked us through the 7-factor process and helped make sure things were consistent."—Mgr., Acctg,/Fin., Muni

"MCR takes on challenges I don't think other consultants are willing to do...[they] kept us disciplined and realistic about strategies we should consider."—CEO, joint action agency

Economic Evaluation of New Transmission Projects



WHAT WE DO: MCR analyzes cash flows of proposed transmission projects. MCR's Transmission Project Evaluation Tool™ highlights how value is created under various cost allocation and recovery scenarios and helps prioritize capital.

WHAT OUR CLIENTS ARE SAYING: "MCR presented to our Board, which is made up of everyday citizens, and did an excellent job of explaining the results and a very complicated tariff to our Board."—General Manager, municipal utility

"MCR helped us analyze the benefits and costs of becoming a TO and investing in new transmission. MCR was very timely, was within budget and met or exceeded our expectations."—Trans. Planning Mgr., JAA

Valuation/Accounting for Purchase or Sale of Assets



WHAT WE DO: MCR validates the accounting/recording of historical asset costs used to value of transmission assets and also provides asset valuations.

WHAT OUR CLIENTS ARE SAYING: "MCR looked at the valuation analysis from three very different angles and explained their final choice for valuation. No party contested any of the analysis." —City Mgr. municipal utility

"MCR's asset valuation analysis was very comprehensive." —General Manager, municipal utility

Development of Transmission Business Plans



WHAT WE DO: MCR works with clients to define transmission-related issues, goals and strategies, including providing analytic support of potential projects.

WHAT OUR CLIENTS ARE SAYING: "I'm a return customer, because MCR possesses an excellent understanding of transmission as a business and how to create value from investing in transmission. They were very useful in helping our people build a concrete and actionable plan."—CEO, G&T

RTO Membership Evaluations



WHAT WE DO: MCR conducts economic analysis using MCR's RTO Evaluation Model™ to assess whether to become a transmission owner in an RTO.

WHAT OUR CLIENTS ARE SAYING: "They have done this for others and brought that history and knowledge base and were able to guide us through potential pitfalls that we might run into."—General Manager, municipal utility

"MCR guided us through considerations logically, so we could easily ask what

would cause MCR to have a different opinion. They provided recommendations and rationale that was easy to follow."—Vice President, municipal

Transmission Cost and Rate Competitiveness

Transmission Peer Cost Comparisons by FERC Account



WHAT WE DO: MCR conducts transmission cost comparisons with peer utilities by FERC account for transmission owners to identify potential areas warranting cost reduction and/or differences in the recording of costs.

WHAT OUR CLIENTS ARE SAYING: "MCR has the full package; MCR brings the subject matter expertise, knowledge of transmission rates, rate structure, finance & acctg., and FERC policy. MCR understands our peers, where to grab the cost data, and how to analyze it."—Sr. VP, cooperative

"MCR has a wealth of knowledge of transmission formula rates, FERC accounts and the transmission industry." — General Manager, municipal utility

Transmission Rate Strategy and Revenue Forecasting



WHAT WE DO: MCR develops forecasts of ATRR and transmission rates for its clients to assess their rate competitiveness and better understand the levers to close the gap and manage future rate increases. ATRR forecasts are developed under various transmission strategy and investment scenarios. Analyses also include evaluating generator interconnection investment options such as utility-funded and customer-funded investment.

WHAT OUR CLIENTS ARE SAYING: "Their analysis looked for

opportunities. I always felt their analysis was leading to something worthwhile. I never once doubted the thoroughness or accuracy of their analysis." —CEO, joint action agency

"We needed help evaluating the cash flow of a proposed transmission project. MCR produced a revenue forecast analysis and helped us use their evaluation tool." — Director of Transmission Planning, G&T

Transmission Capital Investment and Metric Comparisons



WHAT WE DO: MCR maintains a proprietary database of transmission capital investment, load and comparative cost metrics for TOs and industry segments in various RTOs. This information provides analytical support in cost competitive analyses, MCR expert testimony in FERC filings and in negotiations with incumbents on the appropriate share of transmission investment in a joint pricing zone.

WHAT OUR CLIENTS ARE SAYING: "MCR's investment database and analytics were critical for us, as we lacked these capabilities in-house. MCR was given a specific task: to perform an analysis of historical transmission levels in key RTOs and then present their results and policy recommendations in supporting testimony that we planned to include as part of our comments in a FERC administrative proceeding; they delivered exactly what we were looking for, on schedule, and within budget."—Vice President of Government Affairs, independent transmission developer

"MCR will come up with ideas we hadn't thought about and they'll make suggestions based on what's going on, especially in the co-op and muni area. More often than not, MCR has an immediate answer; they definitely know the business."—Manager of Transmission Planning, G&T

MCR Transmission Strategy Services

Working with MCR: Industry Knowledge and Value



At MCR, our collective knowledge is our most prized asset. We have helped our transmission clients create tens of millions of dollars in value and broken new regulatory ground with landmark decisions in FERC rulings.

WHAT OUR CLIENTS ARE SAYING: "Engaging MCR is one of the true investments a utility can make that will really pay off... I'll tell you there's a lot more utilities that could use this kind of help. The upfront cost is certainly worth the reward."—General Manager, municipal utility

"MCR has an expertise that was very difficult or even impossible to find."—GM, municipal utility

"MCR does an outstanding job; they are professional; they know the business, the people, and how to get things done. We always get the same timely, positive results."—General Manager, municipal utility

"Our attorneys in Washington DC said MCR was at the top of the list of companies to help us with our transmission cost analysis." —Financial Planning Manager, joint action agency

"I was very impressed with MCR's professionalism and ethics."—VP Government Affairs, independent transmission developer

I felt they knew MISO's intent and thought process; so that was really helpful."—Mgr. Acct. & Fin., muni.

"MCR is always available to answer questions. This is part of the added value."—CFO, joint action agency

Working with MCR: Collaboration



Before a project begins, we work with our clients to determine the exact issues they are facing. We work jointly towards a solution, sharing our knowledge along the way. After completion, we don't just disappear; we stay connected to ensure our clients are better off than before the project began.

WHAT OUR CLIENTS ARE SAYING: "They were extremely professional. They did a very good job in project management and were excellent

facilitators of a large team. Time together was always time well spent." — CEO, G&T

"There were never surprises once we got going on the project. MCR employs very personable people, very easy to talk to."—General Manager, municipal utility

"They worked on really tight deadlines and were incredibly responsive."—Partner, DC-based law firm

"I enjoyed working with them. They were good team players working with senior staff, FERC attorneys, etc. They were very important contributors to our success."—CEO, joint action agency

"I was extremely impressed with how diligent they were in keeping everyone in the loop and meeting those timelines. They did a great job of checking in with me."—Director of Finance, municipal utility

"MCR has become more than just a consultant; they've become a partner. MCR's expertise has allowed us to move forward with our strategic plan on transmission." —General Manager, municipal utility

"We couldn't have asked for better support or better consultants to work with." —General Manager, municipal utility

MCR Transmission Strategy Practice Leadership



Jim Pardikes is a Vice President at MCR and leads the Transmission Strategy Practice. He has 35 years of experience consulting to the utility industry. His expertise includes expert cost of capital testimony for Section 205 and incentive filings along with asset eligibility, and asset valuation. Jim regularly presents to Boards and senior teams and has written extensively

on the drivers of transmission investments and the case for transmission incentives. Jim can be reached in the office at 847-504-2549, on mobile phone at 847-226-2084, or by email at jpardikes@mcr-group.com.

"Jim has a way of getting to the core concept; he's able to present it in a way that's understandable. He has a confidence when he's presenting, which is quite valuable."—Transmission Planning Manager, G&T



Ron Kennedy is a Director with MCR. He has over 21 years of experience in consulting to the utility industry. His expertise includes formula rates, Section 205 rate filings, rate incentives, evaluation of RTO membership, asset valuation, asset eligibility and financial evaluation of transmission projects. Ron is experienced in presenting to executive teams and Boards

of Directors. Ron can be reached at rkennedy@mcr-group.com.

"Ron knows those FERC accounts like the back of his hand." —Vice President, JAA



Nikhil Tarlapally is a Consultant with MCR. Nikhil has over six years of utility experience. His expertise includes financial forecasting, and the economic analysis of various transmission, generation and renewables projects. He has supported rate case filings, provided multi-year revenue requirements analyses and reviewed testimonies. He has also helped support the annual development of the MCR Transmission Investment white papers, including development of capital investment metrics. Nikhil can be reached at ntarlapally@mcr-group.com

About MCR

Transforming utility company performance through deep industry insights and innovative solutions

MCR is a management consulting firm serving the utilities industry. For 23 years we have delivered exceptional results for utilities. Our consulting experts possess deep industry knowledge and are dedicated to the relentless pursuit of creating value for our clients. We bring together teams of our experts to deliver successful client work through the following practice areas:

Transmission Strategy

Formula Rate Analysis
FERC Filings
Strategic Economic Analysis
Cost and Rate Competitiveness

Regulatory Services

Rate Case Support & Strategic
Analysis
Cost of Service
Rate Design
Expert Testimony
Regulatory Support

Financial Advisory

Financial Forecasting
Regulatory Analysis
Enterprise Risk Management
Strategic Planning
Capital Allocation

Energy Efficiency ("EE")

Strategy, Stakeholder Engagement Program Planning & Design Program Implementation Independent Evaluation of EE Implementation Solicitations

Nuclear Generation

Zero-Base Budgeting
Process Improvement
Capitalization Policies
Capital Portfolio Optimization
Capital Project Evaluation
Life Cycle Management Planning
Long Range Planning
Management Reporting
Staffing Implementation

Utility Transformation

New Technology Strategy &
Product Development—Electric
Vehicles and C&I Customer Onsite
Product Development
Enhanced Customer Experience—
Customer Experience Strategy and
Roadmap and Product Financing
Strategy

To learn more, visit www.mcr-group.com

For further information on the Transmission Strategy practice, please contact:

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