

FirstEnergy Transmission Affiliates Pre-Qualification Submittal for Designated Transmission Entity Status

Submitted to PJM on June 26, 2023

(Revised and Updated June 26, 2023)

Table of Contents

<u>Section</u>	<u>Title</u>
(A)	Name and Address of the Entity with Point of Contact (include parent company, affiliates or partners)
(B)	Technical & Engineering Qualifications
(C)	Demonstrated experience of the entity or its affiliate to develop, construct, maintain and operate transmission facilities
(D)	Prior record of the entity or its affiliate to adhere to standardized construction, maintenance and operating practices
(E)	Capability of the entity or its affiliate to adhere to standardized construction, maintenance and operating practices
(F)	Financial statements of the entity or its affiliate; to include most recent fiscal quarter, most recent three fiscal years or period of existence of the entity
(G)	Commitment by the entity to execute the Consolidated Transmission Owners Agreement
(H)	Evidence demonstrating the ability of the entity to address and timely remedy failure of the facilities
(I)	Evidence of the entity's ability to acquire rights of way

(A) Name and Address of Parent and Affiliates with Point of Contact

Parent:

FirstEnergy Corp. (FirstEnergy)
76 South Main Street
Akron, OH 44308

Affiliates – FirstEnergy Transmission Owners:

American Transmission Systems, Incorporated
(ATSI)
76 South Main Street
Akron, OH 44308

Trans-Allegheny Interstate Line Company (TrAILCo)
800 Cabin Hill Drive
Greensburg, PA 15601

Jersey Central Power & Light Company (JCP&L)
300 Madison Avenue
Morristown, NJ 07962

Mid-Atlantic Interstate Transmission, LLC
(MAIT)
76 South Main Street
Akron, OH 44308

Monongahela Power Company (Mon Power)
5001 Nasa Boulevard
Fairmont, WV 26554

The Potomac Edison Company (Potomac Edison)
10802 Bower Avenue
Williamsport, Maryland 21795

West Penn Power Company (West Penn Power)
800 Cabin Hill Drive
Greensburg, PA 15601

Contact Representative for Parent and Transmission Affiliates:

Primary: Jeremy Hay
Director, Portfolio Management
FirstEnergy Service Company
76 South Main Street
Akron, OH 44380
330-384-2748
jwhay@firstenergycorp.com

Alternate: Sally Thomas
Director, Transmission Planning & Protection
FirstEnergy Service Company
76 South Main Street
Akron, OH 44380
(330) 384-4975
ssimmons@firstenergycorp.com

Corporate Structural Summary:

FirstEnergy is a regional energy provider headquartered in Akron, Ohio. Its subsidiaries and affiliates are involved in the transmission, distribution and sale of electricity, as well as energy management and other energy-related services. FirstEnergy is a publicly traded corporation. JCP&L, Mon Power, Potomac Edison, and West Penn Power are wholly-owned direct subsidiaries of FirstEnergy. ATSI, MAIT and TrAILCo are wholly-owned direct subsidiaries of FirstEnergy Transmission, LLC (FET). FirstEnergy holds an 80.1% ownership interest in FET, and North American Transmission Company II L.P., an investment vehicle controlled by Brookfield Asset Management Inc., owns a 19.9% interest in FET.

FirstEnergy has 10 utility operating companies, forming one of the nation's largest investor-owned electric systems based on six million customers served within a nearly 65,000 square-mile area of Ohio, Pennsylvania, Maryland, West Virginia, Virginia, New Jersey and New York. In addition, FirstEnergy has three multi-state stand-alone transmission companies. FirstEnergy has \$45 billion in total assets with approx. \$12.5 billion in annual revenues and is ranked 343 out of Fortune Magazine's top 500 U.S. Companies for 2022.

FirstEnergy, through its affiliates ATSI, TrAILCo, JCP&L, MAIT, MonPower, Potomac Edison and West Penn Power are PJM members. FirstEnergy representatives are actively involved in various PJM Committees, Sub- Committees, Task Forces, User Groups, Working Groups and Stakeholder Groups.

The seven FirstEnergy Transmission Owners – ATSI, TrAILCo, JCP&L, MAIT, Mon Power, Potomac Edison and West Penn Power – operate approximately 24,000 miles of transmission lines connecting the Midwest and Mid-Atlantic regions. (For the purposes of this Submittal, the transmission line and other transmission facilities of the FirstEnergy Transmission Owners will be collectively referred to as “FirstEnergy Transmission System”.)

ATSI owns, operates and maintains 7,894 circuit-miles of transmission lines, substations and other transmission facilities operated at nominal voltages of 345 kV, 138 kV and 69 kV located solely in the ATSI Zone of PJM. The ATSI system has tie-lines to the neighboring transmission systems of American Electric Power (AEP), Dayton Power and Light, International Transmission Company, Duquesne Light Company (DLCO), Cleveland Public Power, Buckeye Power, Inc., American Municipal Power, Inc. and ATSI affiliate, West Penn Power and Mon Power. The ATSI system was integrated into PJM on June 1, 2011. As a result, PJM became the Reliability Coordinator, Balancing Authority, Transmission Operator and Transmission Planner for all ATSI 100 kV and above facilities. ATSI is permitted by Attachment H-21 of the PJM OATT to recover costs for its transmission facilities. ATSI does not own or operate any distribution or generation facilities.

TrAILCo owns, operates and maintains 262 circuit-miles of transmission lines, substations and other transmission facilities operated at nominal voltages of 500 kV, 345 kV, 230 kV, 138 kV and 115 kV,¹ including the Trans-Allegheny Interstate Line which became commercially operational on May 19, 2011, and the Black Oak SVC which became commercially operational in December 2007. Currently, TrAILCo's operating assets are located in the Allegheny Power Zone, with projects in the MAIT zones. TrAILCo is interconnected to the neighboring transmission systems of Dominion Virginia Power (DVP), AEP and TrAILCo affiliates Mon Power, Potomac Edison and West Penn Power. PJM is the Reliability Coordinator, Balancing Authority, Transmission Operator and Transmission Planner for all TrAILCo 100 kV and above facilities. TrAILCo is permitted by Attachment H-18 of the PJM OATT to recover costs for facilities it may own, operate and maintain in the Allegheny Power, MAIT, Zones. TrAILCo does not own or operate any distribution or generation facilities.

MAIT was formed in June 2016 from the combined transmission assets of Metropolitan Edison Company (Met-Ed) and Pennsylvania Electric Company (Penelec), both FET Operating Companies. MAIT received regulatory approvals to become a PJM Transmission Owner on January 31, 2017. MAIT owns and operates all the FERC-jurisdictional assets previously owned by Met-Ed and Penelec, consisting of 4,265 circuit miles of transmission lines with nominal voltages of 500kV, 345kV, 230kV, 138kV, 115kV, 69kV, and 46kV in the PJM region. Collectively, MAIT has tie-lines with neighboring transmission systems of PPL Electric Utilities (PP&L), Philadelphia Electric Company (PECO), New York State Electric & Gas, National Grid, Allegheny Power Cooperative (AEC) and FirstEnergy affiliates ATSI, Jersey Central Power & Light (JCP&L), Potomac Edison and West Penn Power. MAIT does not own or operate any distribution or generation facilities. PJM is the Reliability Coordinator, Balancing Authority, Transmission Operator and Transmission Planner for all MAIT 100kV and above facilities. MAIT is permitted by Attachment H-28 of the PJM OATT to recover costs for its transmission facilities.

JCP&L owns, operates and maintains 2,595 circuit miles of transmission lines, substations and other transmission facilities operated at nominal voltages of 500 kV, 230 kV, 115 kV and 34.5 kV. JCP&L has tie-lines with neighboring transmission systems of PP&L, Long Island Lighting Company, Central Hudson Gas & Electric Company, Public Service Electric & Gas, Atlantic City Electric Company and affiliate MAIT. JCP&L is permitted by Attachment H-4 of the PJM

¹ TrAILCo owns and operates limited 765 kV facilities but does not own any 765 kV transmission lines

OATT to recover costs for its transmission facilities. PJM is the Reliability Coordinator, Balancing Authority, Transmission Operator and Transmission Planner for all JCP&L 100 kV and above facilities. JCP&L also owns and operates distribution facilities.

Potomac Edison owns, operates and maintains 1,221 circuit miles of transmission lines, substations and other transmission facilities operated at nominal voltages of 500 kV, 230 kV, 138 kV and 115 kV. Potomac Edison has tie-lines with neighboring transmission systems of DVP, Potomac Electric Power Company and affiliates MAIT, Mon Power, TrAILCo and West Penn Power. PJM is the Reliability Coordinator, Balancing Authority, Transmission Operator and Transmission Planner for all Potomac Edison 100 kV and above facilities. Potomac Edison is permitted by Attachment H-11 of the PJM OATT to recover costs for its transmission facilities. Potomac Edison also owns and operates distribution facilities but does not own or operate any generation facilities.

Mon Power owns, operates and maintains 1,700 circuit miles of transmission lines, substations and other transmission facilities operated at nominal voltages of 500 kV, 345 kV and 138 kV.² Mon Power has tie-lines with neighboring transmission systems of AEP, DVP and affiliates ATSI, Potomac Edison, TrAILCo and West Penn Power. PJM is the Reliability Coordinator, Balancing Authority, Transmission Operator and Transmission Planner for all Mon Power 100 kV and above facilities. Mon Power is permitted by Attachment H-11 of the PJM OATT to recover costs for its transmission facilities. Mon Power also owns and operates distribution and generation facilities.

West Penn Power owns, operates and maintains 1,699 circuit miles of transmission lines, substations and other transmission facilities operated at nominal voltages of 500 kV, 345 kV, 230 kV, 138 kV and 115 kV. West Penn has tie-lines with neighboring transmission systems of AEP, DLCO and affiliates ATSI, TrAILCo, MAIT, Mon Power, Potomac Edison and TrAILCo. PJM is the Reliability Coordinator, Balancing Authority, Transmission Operator and Transmission Planner for all West Penn Power 100 kV and above facilities. West Penn Power is permitted by Attachment H-11 of the PJM OATT to recover costs for its transmission facilities. West Penn Power also owns and operates distribution facilities but does not own or operate any generation facilities.

FirstEnergy is proceeding with the consolidation of the Pennsylvania Companies into a new, single operating entity, which will be known as FirstEnergy Pennsylvania Electric Company (FE PA). The PA Consolidation will require, among other steps: (a) the transfer of certain Pennsylvania-based transmission assets owned by West Penn Power to Keystone Appalachian Transmission Company (KatCo), a newly formed transmission-only company, (b) the transfer of Class B equity interests of MAIT currently held by Penelec and MetEd to FirstEnergy (and ultimately transferred to FET as part of the FET Minority Equity Interest Sale), (c) the formation of FE PA and (d) the merger of each of the assets and liabilities of the Pennsylvania Companies into FE PA. Following completion of the PA Consolidation, FE PA will be FE's only regulated utility in Pennsylvania encompassing the operations previously conducted individually by the Pennsylvania Companies. Consummation of the PA Consolidation is contingent upon numerous conditions, including the approval of the NYPSC, PPUC and FERC. Subject to receipt of such

² Mon Power owns and operates limited 765 kV facilities but does not own any 765 kV transmission lines.

regulatory approvals, FirstEnergy expects that the PA Consolidation will close by early 2024.

KATCo intends to finance its ongoing capex program with cash from operations, and, when needed, on a short-term basis with its access to FirstEnergy's regulated money pool. On a long-term basis, KATCo intends to finance its plant-in-service with long term capital consisting of equity and long-term debt in combination that is supported by regulatory requirements and investment grade credit metrics. KATCo will continue with its current practice of issuing debt through capital markets. KATCo's equity financing will come from either retained earnings or equity infusions from its parent, FirstEnergy Corp.

(B) Technical and Engineering Qualification

The FirstEnergy Transmission System spans seven states and five PJM Transmission Zones and consists of approximately 24,000 miles of transmission lines. To assure that the system is operated reliably, assessments of the system are conducted annually by the FirstEnergy Transmission Owners and PJM. This is accomplished by evaluating system reliability against the federally mandated Reliability Standards established by the North American Electric Reliability Corporation (NERC) and approved by the Federal Energy Regulatory Commission (FERC), the PJM reliability criteria, and the FirstEnergy Transmission Planning Criteria.

The PJM assessment process follows the rigorous Regional Transmission Expansion Planning Protocol which develops the Regional Transmission Expansion Plan (RTEP) focusing on five-year and 15-year timeframes with the results shared through the PJM stakeholder process. Representatives of the FirstEnergy Transmission Owners actively participate in the PJM planning process and use this process to evaluate system conditions for future years. Results of these studies drive system upgrades to the overall PJM transmission system, including the FirstEnergy Transmission System.

In addition, the FirstEnergy Transmission Owners perform internal studies that assess the FirstEnergy Transmission System and associated sub-transmission systems through near-term and long-term planning windows. These internal studies identify thermal, voltage, voltage stability and dynamic stability issues on the transmission and sub-transmission systems. The PJM and FirstEnergy assessments ensure the FirstEnergy Transmission System and associated sub-transmission systems are operated in a reliable and secure manner. Models are created representing a wide variety of load levels and stressed conditions depending on the type of study being performed. When a potential criteria violation is identified, further study is initiated to determine if it can be resolved by a formal operating procedure and if a system upgrade is warranted. If a system upgrade is determined to be needed and is authorized by management, the upgrade is installed subject to any necessary PJM reviews.

As mentioned previously both the PJM RTEP and the FirstEnergy Transmission Owners' internal assessments identify potential projects throughout the FirstEnergy Transmission System footprint which are further reviewed and upgrades implemented where required to improve the reliability of the FirstEnergy transmission and sub-transmission systems.

The FirstEnergy Transmission Owners have significant experience as Transmission Owners in

responding to PJM's directives to build RTEP projects, and have never failed to build projects that PJM has determined are needed for reliability or market efficiency of the PJM transmission system. The FirstEnergy Transmission Owners build, operate and maintain their transmission facilities reliably and safely and in accordance with all governmental regulations as well as applicable industry requirements.

FirstEnergy has three main transmission design offices staffed with engineers and designers.³ At these locations, FirstEnergy-trained and experienced engineers perform design, procurement and regulatory permitting activities necessary for the construction and modification of transmission lines and substations ranging from 34.5 kV up to 500 kV.⁴

In addition to these professionals, FirstEnergy has a cadre of trained and experienced personnel dedicated to transmission system construction, operation and maintenance stationed throughout the entire FirstEnergy transmission system footprint. FirstEnergy also operates two control centers with highly trained NERC/PJM certified Operators and support staff that performs outage coordination studies from six months out to real-time in conjunction and collaboration with PJM to ensure system reliability at all times for maintenance and capital project execution. Additional field engineers and support personnel provide a comprehensive suite of energy services that drive transmission construction. This is accomplished through their combined experience and knowledge of the technical, engineering and infrastructure requirements for transmission construction, including the power engineering services necessary for transmission lines, substation facilities, protection and controls. Overall, FirstEnergy's personnel have extensive direct, hands-on experience with all phases of design, build, maintenance and operation of the transmission system.

Working in coordination with PJM, FirstEnergy professionals work to develop the best, most cost-effective solution to the reliability and market efficiency needs of the transmission system based on PJM's determination of the need for reliability and market efficiency improvements. Proactively over the years, FirstEnergy engineers have worked with PJM through multiple iterations of studies, cost estimates, right-of-way (ROW) and other regulatory considerations to ensure the final plans for construction of RTEP projects are the most effective and cost efficient. Over the years, FirstEnergy has developed an excellent working relationship with PJM Staff to facilitate discussions and reviews of the electrical need and the proposed solution for various transmission projects and has worked successfully with PJM to produce the best outcome.

FirstEnergy has long-term alliances with several design firms including Burns & McDonnell, Black & Veatch and GPD. FirstEnergy's in-house staff is currently supplemented by over 1,000 full time equivalents from these and other firms for design work to perform necessary support on projects when in-house staff is unavailable to complete the work in a timely manner. In addition, FirstEnergy maintains lists of certified contractors with proven records of building transmission projects. When these contractors are retained to construct a project, FirstEnergy professionals provide oversight management of the construction process including cost control, quality review

³ FirstEnergy's design offices are located in Akron, Ohio; Reading, Pennsylvania; and Greensburg, Pennsylvania.

⁴ FirstEnergy engineers have professional licenses in the states in which FirstEnergy operates transmission facilities.

and completion times.

FirstEnergy plans to build a series of PJM RTEP projects to enhance reliability across its five PJM Transmission Zones. This initiative, known as “Energizing the Future,” will include transmission projects – new or rebuilt high voltage power lines, new substations and the installation of specialized voltage regulating equipment. PJM has determined the projects are needed to enhance system reliability as the result of the deactivation of certain generating facilities.

One of FirstEnergy’s past transmission line construction successes is the 500 kV Trans-Allegheny Interstate Line (TrAIL) approved by PJM in 2006. TrAIL consists of 661 structures and extends 180 miles from southwestern Pennsylvania across West Virginia to northern Virginia. The project includes the construction of the 502 Junction Substation and modifications to other substations. The project was energized on May 19, 2011 two weeks prior to the June 1, 2011 in-service date set by PJM. This new line was needed to meet the demand for electricity in the mid-Atlantic region and prevent overloading on the transmission grid.

FirstEnergy Transmission Senior Management Team

FirstEnergy Transmission’s senior management team is dedicated to the safe, reliable and efficient delivery of electricity through the FirstEnergy Transmission System. These individuals manage a dedicated full-time workforce of professional engineers, legal and business personnel focused on the planning, construction, operation and maintenance of the transmission system.

Mark D. Mroczynski is Acting Vice President of Operations for FirstEnergy. He has responsibility for energy delivery, compliance with FERC transmission requirements, Information Technology and External and Community Affairs while leading FirstEnergy’s 10 utility operating companies and its three stand-alone transmission companies. Mr. Mroczynski began his career at FirstEnergy in 2004 as supervisor of Technical Services for the Bruce Mansfield Power Plant and became manager of Technical Services for Consolidated Coal Plants in 2006. Mr. Mroczynski was named director, Operations Support, for Ohio Edison and Penn Power in 2008 and became executive director, Transmission Programs in 2013. Mr. Mroczynski was promoted to his current position in May 2023. Prior to joining FirstEnergy, Mr. Mroczynski spent 18 years with J&L Specialty Steel, serving in a number of operations management and supply chain positions. Mr. Mroczynski received a Bachelor of Science degree in mechanical engineering from The University of Akron, and a Master of Business Administration degree from Kent State University. Mr. Mroczynski is a professional engineer in Ohio and Pennsylvania. He is a Director of Grid Assurance LLC and Jersey Central Power and Light, and is a founding director of the Association of Iron & Steel Technology.

Olenger Pannell is Vice President, Compliance & Regulated Services and Chief FERC Compliance Officer for FirstEnergy Service Company. Prior to his promotion in February 2022, he served as Director, FERC & State Regulatory Compliance. Mr. Pannell has worked for FirstEnergy for more than 22 years and has held numerous management positions in Business Planning and Development, Financial Planning and Analysis, Strategic Planning and Reporting and Accounting. Mr. Pannell has a Bachelor of Business Administration degree from The Ohio State University.

Carl J. Bridenbaugh is Vice President of Transmission for FirstEnergy Service Company. In his current position, Mr. Bridenbaugh is responsible for transmission operations, system planning and protection, transmission line and substation maintenance, asset and project management and transmission substation and line design. He also is FirstEnergy's interface with transmission organizations such as NERC, PJM and RFC. Mr. Bridenbaugh began his career with Ohio Edison Company, a FirstEnergy operating company, in 1988 as a transmission planning engineer and has held positions in the FirstEnergy organization as Manager, Transmission Planning and Director, Transmission Operations. Prior to promotion to his current position, Mr. Bridenbaugh was Director of Transmission Planning and Protection. Prior to joining Ohio Edison Company, he was an application engineer with General Electric Company. Mr. Bridenbaugh received a bachelor's degree in Electrical Engineering from the University of Detroit Mercy and a Master's Degree in Electrical Engineering from Union College. He is a Registered Professional Engineer in Ohio.

Jeremy Hay is currently Acting Vice President of Construction and Design Services for FirstEnergy Service Company. Prior to this position, Mr. Hay was Director of Transmission Substation and Design since 2019. In April 2017, Mr. Hay was named General Manager of Portfolio Management including responsibility for new project development that managed transmission projects from scoping to start of construction. In July 2014 Mr. Hay was Manager of Transmission Portfolio Management that developed, justified and prioritized annual investments across the transmission and distribution companies. Prior to that, in April 2011 Mr. Hay assumed the role of Manager of Substation Services for the Ohio Edison Company, and from 2009 to 2011 Mr. Hay was a Senior Engineer for the Transmission and Substation Department. Mr. Hay has a Bachelor of Science in Electrical Engineering Technology Degree from the University of Pittsburgh at Johnstown and is a registered Professional Engineer in the state of Pennsylvania. His experience at FirstEnergy includes Asset Management, Substation Services, Portfolio Development and Transmission and Substation Design.

FirstEnergy Transmission Organization

The transmission function within FirstEnergy includes hundreds of highly skilled professionals organized in the following key departments:

- Asset and Record Controls
- Transmission and Substation Design
- Transmission and Substation Services
- Transmission Planning and Protection
- Transmission Operations
- Portfolio Management

(C) Demonstrated experience of the entity or its affiliate, partner, or parent company to develop, construct, maintain, and operate transmission facilities. Including a list or other evidence of transmission facilities

previously developed regarding construction, maintenance, or operation of transmission facilities both inside and outside of the PJM Region.

Through a series of several strategic mergers and asset transactions over the past 18 years, the most recent of which was completed in February 2011, FirstEnergy has grown its diverse and sizeable asset base. FirstEnergy is now uniquely positioned as the nation's largest contiguous electric system with complementary assets across its transmission and distribution operations. These assets are in a prime location within PJM.

FirstEnergy's vision is to be a leading regional energy provider, recognized for operational excellence, outstanding customer service and a commitment to safety; the choice for long-term growth, investment value and financial strength; and a company driven by its leadership, skills, diversity and the character of its employees.

Through the FirstEnergy Transmission Owners, FirstEnergy expects to invest approximately \$1.7 to \$1.9 billion over the next several years in its transmission system across its five PJM Transmission Zones. From 2014 to 2022 FirstEnergy invested \$10.4 billion on regulatory required and reliability enhancement projects (*i.e.*, grid improvement projects). These investments are driving significant performance improvements. With the implementation of our "Energizing the Future" program, FirstEnergy Transmission has achieved a 47 percent reduction in the number of customers interrupted by transmission-related outages, an 81% reduction in mis-operations, and a 40% reduction in transmission line outages serving ATSI. For MAIT, FET achieved a 30% reduction in the number of customers interrupted by transmission-related outages, a 62% reduction in mis-operations, and a 19% reduction in transmission line outages, with the expectation of similar results as the program expands across the service territory.

Since 2014, we have completed 600 to 700 new transmission projects per year focused on four areas of investment: regulatory required projects, upgrading or replacing aging equipment to strengthen our facilities against severe weather; enhancing system performance through technology upgrades; and adding operational flexibility that enables grid operators to more swiftly respond to changing grid conditions and energy resources.

As part of this effort, we have replaced or rebuilt more than 900 miles of transmission lines across our service area. FirstEnergy Transmission has also installed approximately 1,250 miles of new fiber optic-cable across our system to improve network communications and enable grid operators to react immediately to disturbances on the system by quickly isolating damage and rerouting power from other sources. This advanced, secure, communications network improves real-time monitoring and predictive maintenance of our substation equipment and alerts us to problems before they impact service to our customers.

Additionally, ATSI built a new transmission operations facility in Akron, Ohio. The center features advanced computer systems to monitor grid reliability across the FirstEnergy Transmission System. The transmission and substation operations of several FirstEnergy utilities are now operated out of the new transmission operations facility to maximize efficiency.

Portfolio Management and Project Management Departments

FirstEnergy's Portfolio Management and Project Management departments, comprised of transmission specialists, schedulers, engineers and project and construction managers, have three main responsibilities: (1) to develop and facilitate strategies and processes to maximize the value of FirstEnergy's transmission and distribution assets; (2) to manage the process and facilitate the development of FirstEnergy's transmission capital portfolio; and (3) to provide project management and construction site management support for FirstEnergy's capital projects. The Portfolio Management group facilitates Energy Delivery's capital portfolio development process and provides corporate governance for the basic criteria and systems used in its development for both Distribution and Transmission. A Project Development group has been created which is expected to further vet more complex projects to minimize execution issues. This group also has responsibility for budgeting, forecasting and reporting the FET Capital portfolio as well as ensuring appropriate accounting and timely financial close out of Transmission projects. The Project Management groups manage large transmission projects and work with each FirstEnergy Transmission Zone's project management to ensure capital projects are appropriately managed. The Project Management group staff are located across FirstEnergy territories and execute transmission capital projects to meet financial and operational objectives. These workgroups are accountable for planning and executing FirstEnergy's 'Energizing the Future' program. Long range plans are developed to balance the resources of the reliability program with needs to implement PJM-RTEP projects.

Asset and Records Controls

The Asset and Records Controls group is responsible for managing asset monitoring & health, asset data management & inventory, and compliance implementation strategy & procedures across all transmission and distribution field assets. Additionally, this group develops asset strategies and processes including those associated with spare equipment levels and total life-cycle analyses. Asset Management also manages Cascade which is FirstEnergy's asset management system.

Transmission and Substation Design Department

The mission of the Transmission and Substation Design organization is to support regional operations and bulk transmission on design and technical activities associated with capital projects. Additionally, this group provides design and technical support on projects associated with electricity delivery to retail customers and, upon request, for projects undertaken by the generation business unit. This group also maintains engineering and material schedules, coordinates equipment specification and evaluation, drawing management, transmission system wireless communication attachment process and the PJM transmission interconnection study process.

Transmission and Substation Services Department

FirstEnergy's transmission and substation maintenance programs are designed to ensure the reliability and integrity of transmission infrastructure and substation equipment to safeguard employees and the public and to meet all state and federal regulatory requirements. These

programs include preventive maintenance and corrective maintenance practices. Preventive maintenance is typically time and/or condition based. Corrective maintenance is used to address equipment deficiencies that are identified during or outside of a preventive maintenance program. All preventive maintenance and corrective maintenance practices are based on accepted electric utility practices, manufacturer's specifications, NESC, ASTM, ANSI and IEEE standards, Electric Power Research Institute Copper Book on power transformers, expertise from FirstEnergy engineers, managers, supervisors and other subject matter experts in the industry. Maintenance practices are designed to provide guidance to field personnel for the maintenance and testing of transmission infrastructure and substation equipment and to ensure compliance with federal and state regulations.

FirstEnergy utilizes a combination of manufacturer's guidelines, utility industry transmission benchmarking, condition assessment and reliability evaluations to determine maintenance programs and intervals, and to determine when substation equipment should be repaired or replaced. The expected remaining life of equipment, in addition to other factors, is taken into consideration when determining whether to repair, replace or refurbish equipment. FirstEnergy retains maintenance records and/or inspection results as required by all federal and state regulations.

FirstEnergy engineers assigned to the Transmission and Substation Services Department are responsible for commissioning infrastructure, equipment, relay and control installations, which includes releasing these assets for service. In addition to commissioning responsibilities, the Transmission and Substation Services Department engineers participate in equipment failure investigations and system mis-operations.

Transmission Planning and Protection Department

The Transmission Planning and Protection Department is responsible for planning as well as protecting the FirstEnergy Transmission System and associated sub-transmission systems in the PJM footprint. This analysis ensures compliance with NERC, PJM and FirstEnergy reliability standards and criteria. Transmission Planning routinely performs studies and makes system enhancement recommendations for transmission (*i.e.*, the PJM RTEP process) and sub-transmission system changes, new load connections and new generation connections. Transmission Protection provides relay system requirements, relay settings and operational event analysis for FirstEnergy transmission and sub-transmission protection systems. The Transmission Planning and Protection Department activities drive the FirstEnergy transmission capital budget. In support of these activities, and by working with PJM and RFC, the Transmission Compliance, Data, and Models group is responsible to develop and maintain load flow, short circuit and dynamic stability models.

Transmission Operations Department

The Transmission Operations group operates two control centers comprised of three operating areas with direct responsibility for the operation of over 24,000 circuit-miles of transmission lines with voltages ranging from 34.5 kV to 500 kV. The two control centers are staffed 24/7 by 84 NERC and PJM certified Transmission System Operators and Shift Supervisors.

FirstEnergy maintains a state-of-the-art Energy Management System (EMS) that allows for the monitoring and control of the bulk electric system. FirstEnergy personnel have experience in designing and managing data acquisition systems that are integrated into the bulk transmission assets. These systems acquire data made available to FirstEnergy transmission control centers and transmit FirstEnergy data to PJM to assist in its role as Reliability Coordinator. The three control centers also utilize state-of-the-art large-screen visualization, which affords the Transmission System Operators effective situational awareness of the status of the FirstEnergy Transmission System.

FirstEnergy has been recognized as a NERC-approved continuing education provider and maintains an internal training department dedicated to Transmission System Operator training and credential maintenance. FirstEnergy Transmission Operations also maintains a power network analysis engineering group responsible for the review and support of real-time network analysis and EMS network model maintenance. FirstEnergy is committed to a culture of compliance in its Transmission Operations Compliance and Procedures group, which is responsible for procedure development and regulatory compliance.

(D) Previous record of the entity or its affiliate, partner, or parent company to adhere to standardized construction, maintenance and operating practices

Standardized Construction Maintenance and Operation Practices

FirstEnergy's transmission construction, maintenance and operation standards and practices are currently publicly posted on the PJM website at: pjm.com/planning/design-engineering/maac-to-guidelines.

The standards and practices documents posted at the above website are as follows:

- Transmission System Design Criteria
- Substation Bus Configuration and Substation Design Requirements
- Spare Equipment Philosophy
- Design, Application, Maintenance and Operations Technical Requirements
- Ratings Guides
- Installation & Commissioning
- Inspection, Testing and Acceptance

(E) Capability of the entity or its affiliate, partner, or parent company to adhere to standardized construction, maintenance and operating practices

FirstEnergy has a long history of proven adherence to all state, federal and industry practices and requirements. FirstEnergy has well-established design standards across its system for implementation of new and retrofit projects. These standards are based on industry, local, state and federal requirements in addition to good utility practice. These standards are reviewed and revised on a regular basis. Additionally, FirstEnergy has documented standards, and materials for timely emergency restoration following failures of both substation and transmission line equipment. All identified project design solution alternatives are thoroughly reviewed during the conceptual design layout period and include constructability review. FirstEnergy was involved in the creation and intent to post the standard Technical Guidelines and Recommendations outlined in response to part (D) above.

(F) Financial statements of the entity or its affiliate, partner, or parent company. Please provide the most recent fiscal quarter, as well as the most recent three fiscal years, or the period of existence of the entity, if shorter, or such other evidence demonstrating an entity’s current and expected financial capability acceptable to the Office of the Interconnection

The following document is provided:

Standard & Poors Rating Agency Report (February 10, 2023) for the following FirstEnergy Companies:

- American Transmission Systems, Incorporated
- FirstEnergy Transmission LLC
- Jersey Central Power & Light Company
- Mid-Atlantic Interstate Transmission, LLC
- Monongahela Power Company
- The Potomac Edison Company
- Trans-Allegheny Interstate Line Company
- West Penn Power Company

(G) Commitment by the entity to execute the Consolidated Transmission Owners Agreement, if the entity becomes a Designated Entity.

All of the FirstEnergy Transmission Owners companies are signatories to the Consolidated Transmission Owners Agreement (CTOA) and active participants in the Transmission Owners Sector of PJM and the CTOA’s Administrative Committee, Legal Issues Team, PJM Liaison Committee and various working groups. The FirstEnergy Transmission Owners commit to remaining signatories to the CTOA while they are transmission owning members of PJM.

Met-Ed, JCP&L and Penelec were transmission owning members of PJM and signatories to a predecessor transmission owners’ agreement prior to FERC’s designation of PJM as an Independent System Operator and later as a Regional Transmission Organization. Met-Ed, JCP&L and Penelec were members of the original PJM power pool and have remained members of PJM as it has evolved over the past fifty-plus years. Mon Power, Potomac Edison and West Penn Power, doing business as Allegheny Power, became signatories to a predecessor transmission owners’ agreement on December 15, 2005. Subsequently, Met-Ed, JCP&L, Penelec, Mon Power, Potomac Edison and West Penn Power became signatories to the CTOA when it replaced the predecessor transmission owner agreements. TrAILCo became a signatory

to the CTOA on November 8, 2007 followed by ATSI becoming a CTOA signatory on December 17, 2009. MAIT became a signatory to the CTOA on January 31, 2017.

(H) Evidence demonstrating the ability of the entity to address and timely remedy failure of facilities.

The FirstEnergy Transmission Owners have a strong record of responding quickly and safely to service interruptions. Most recently, this was demonstrated by FirstEnergy's response to Hurricane Sandy, which struck FirstEnergy's service area on October 29, 2012. Sandy ranks as the most damaging weather event faced by FirstEnergy. By comparison, Sandy disrupted service to nearly 2.6 million FirstEnergy customers which is more customers than Hurricane Irene and the October 2011 snowstorm combined and more than twice as many customers as the 2011 Summer derecho. By the time Sandy's wind and rains ceased and floodwaters receded, the super storm had crossed every state served by FirstEnergy.

Sandy's hurricane-force winds and rains hammered FirstEnergy's operating companies in New Jersey, Pennsylvania and parts of Maryland. In addition, FirstEnergy service areas in western Maryland and parts of West Virginia were blanketed with up to three feet of snow and wind gusts of up to 80 mph. In Ohio, FirstEnergy's service area along the Lake Erie shoreline experienced high winds and rain.

FirstEnergy's transmission and distribution utilities responded to the catastrophic destruction caused by Sandy with the largest mobilization of crews, equipment, material and support in FirstEnergy history. While the regional dispatch offices of FirstEnergy's utilities directed local restoration efforts, FirstEnergy's emergency operations center in Akron, Ohio, supported the overall service restoration effort.

More than 20,000 workers, comprised of FirstEnergy employees, other utility personnel and contractors, joined the massive service restoration effort. Linemen, hazard responders, damage assessors, and other service and support personnel were engaged in restoring service to customers. Companywide, crews responded to more than 65,000 reports of lines down and other hazards. During the restoration effort, approximately 20,000 damaged crossarms, 6,300 utility poles and 4,600 transformers were replaced and 700 miles of wire hung. Overall, FirstEnergy's three customer contact centers received 1.5 million outage calls, the most ever taken in a single service restoration event.

In the face of many challenges, crews restored service to more than half of the affected FirstEnergy customers within three days and two-thirds of customers within five days. More than 95 percent of the affected FirstEnergy customers in Pennsylvania, Ohio, West Virginia and Maryland had service restored within eight days of Hurricane Sandy coming ashore. By day 13 over 95 percent of JCP&L's customers had their service restored.

In addressing large-scale outages, securing outside utility crews, electrical contractors and tree contractors can be challenging as utilities impacted by the storm are pursuing the same pool of utility workers and support personnel. To bring in sufficient crews to tackle the historic rebuild effort in a safe and timely manner, FirstEnergy worked with six mutual-aid assistance groups, including Mid-Atlantic Mutual Assistance, the New York Mutual Assistance Group,

Southeastern Electric Exchange, Great Lakes Mutual Assistance, Midwest Mutual Assistance and Western Region Mutual Assistance. Additionally, the Dept. of Energy volunteered personnel and contractors from the Bonneville Power Administration, Western Area Power Administration and Southwestern Power Administration. In all, workers were recruited from more than 30 states and Canada, coming from as far away as Oregon and California.

As part of the restoration process, 13 helicopters flew about 10,000 miles to perform aerial patrols on FirstEnergy's transmission, sub-transmission and distribution systems. Crews worked 16 hours with eight hours mandatory rest until the job was done. And, despite challenging work conditions, no significant safety incidents occurred.

Effective communication with key state personnel was vital to the successful service restoration effort. In New Jersey, JCP&L implemented its recently enhanced emergency communications plan during Sandy, providing information updates to local officials, the Board of Public Utilities (BPU), legislators and the governor, including participation in twice-daily calls with the BPU president and governor. In Ohio, daily communications were provided to the governor, the chairman of the Public Utilities Commission of Ohio, and the mayor of Cleveland. In Pennsylvania, updates were provided to local officials, the Public Utility Commission, the General Assembly and the governor's staff. In Maryland, frequent status updates were provided to the governor and his administration's energy advisor, and included helicopter tours of storm-ravaged Garrett County to show the extent of the damage to the electrical infrastructure.

In 2023, the Edison Electric Institute (EEI) recognized FirstEnergy with an Emergency Recovery Award – this time for the Company's response in restoring power to more than 287,000 Ohio and West Virginia customers following severe weather that produced three confirmed tornadoes and extreme temperatures in June 2022. This is the 17th consecutive year that FirstEnergy has been recognized by EEI for our storm response efforts. From June 13-16, portions of the northcentral Ohio and West Virginia service areas served by Ohio Edison and Mon Power, respectively, bore the brunt of three major thunderstorm events with wind speeds greater than 80 miles per hour, followed by a multi-day heat wave that recorded heat indices above 105 degrees. More than 1,800 line workers, forestry crews and support personnel worked safely to minimize the outage time for customers, ultimately replacing 263 poles, 149 transformers and about 25 miles of wire.

FirstEnergy's ability to have skilled resources available to restore transmission facilities is measured by the industry standard of outage duration. FirstEnergy's outage duration was better than first quartile in four of the past six years (based on PJMs "2006-2012 Performance Metrics Comparison" report).⁵

(I) Description of the experience of the entity in acquiring rights of way (ROW)

To address the right-of-way (ROW) requirements of the large FirstEnergy Transmission System,

⁵ For the two years that FirstEnergy did not meet these criteria, associated long-duration outages were a result of the SF6 buss failure at Smithburg and, as noted above, the major storms that occurred across its service territory in 2011

FirstEnergy has a substantial full-time internal staff responsible for ROW acquisition. The Real Estate Department's ROW/Real Estate Projects group has personnel throughout the FirstEnergy transmission zones with numerous ROW acquisition efforts underway at all times.

Presently, FirstEnergy has hundreds of millions of dollars in planned transmission upgrades and improvements underway for which the necessary ROW have been or are being acquired. This follows an additional several hundred million dollars in transmission completed in recent years for which substantial ROW acquisition also was required.

FirstEnergy has the ability to exercise eminent domain in the states covered by its transmission zones. The FirstEnergy ROW group has considerable experience working within the eminent domain construct to timely effect construction of RTEP projects. FirstEnergy also benefits from participation in the International Right of Way Association and the American Association of Professional Landmen, maintaining Staff and contractor certifications. In addition, FirstEnergy collaborates with peer utilities on real estate matters through the North American Transmission Forum (NATF).

Research Update:

FirstEnergy Corp. Outlook Revised To Positive From Stable On Asset Sale; Actions Taken On Subsidiaries

February 10, 2023

Rating Action Overview

- FirstEnergy Corp. (FE) announced that it will sell a 30% interest in its subsidiary FirstEnergy Transmission LLC (FET) to Brookfield Super-Core Infrastructure Partners for \$3.5 billion, pending regulatory approvals. We expect that management will use the proceeds in a credit supportive manner.
- Therefore, we revised our outlook on FE and subsidiaries FET, American Transmission Systems Inc. (ATSI), Trans-Allegheny Interstate Line Co. (TrAIL), Mid-Atlantic Interstate Transmission LLC (MAIT), Ohio Edison Co., Toledo Edison Co., Pennsylvania Electric Co., Metropolitan Edison Co., Pennsylvania Power Co., West Penn Power Co., Jersey Central Power & Light Co. (JCP&L), Cleveland Electric Illuminating Co. (CEI), and Allegheny Generating Co. (AGC) to positive from stable. We affirmed all ratings.
- We affirmed our ratings on Monongahela Power Co. (MP) and Potomac Edison Co. (PE) with stable outlooks because rating upside is limited by their stand-alone credit profiles (SACP).
- The positive outlook on FE reflects our expectation that the company will improve its funds from operations (FFO) to debt to consistently above 12% following close of the 30% FET minority stake sale. The outlook also reflects the prospect for further rating improvement should the company's financial measures strengthen while it continues to meet its obligations under its deferred prosecution agreement (DPA), which ends, subject to FE fulfilling all DPA obligations, in July 2024.

PRIMARY CREDIT ANALYST

Sloan Millman, CFA, FRM
New York
+ 1 (212) 438 2146
sloan.millman
@spglobal.com

SECONDARY CONTACTS

Obioma Ugboaja
New York
+ 1 (212) 438 7406
obioma.ugboaja
@spglobal.com

David S De Juliis
Toronto
+1 (416) 276-2610
david.de.juliis
@spglobal.com

Rating Action Rationale

FE's agreement for a second minority stake sale in FET is likely to significantly improve FE's credit measures. Though the sale still requires regulatory approvals from the U.S. Federal Energy Regulatory Commission, Pennsylvania Public Utility Commission, and Virginia State Corporation Commission, we anticipate it will close in the first quarter of 2024. Upon close, FE will receive at least half of the \$3.5 billion sales proceeds in cash and the remainder in an 18-month vendor take-back note guaranteed by Brookfield that could include two six-month extensions. We expect FE will use most of the proceeds to reduce debt and about \$1 billion for 2024 and 2025

capital spending. As such, we expect financial measures to gradually improve. Under our base case, we assume full consolidation of FET's debt and cash flows, and we expect FE's consolidated 2024 FFO to debt will improve to 12%. When the vendor take-back note is ultimately paid, we expect further financial improvement to consistently greater than 13%.

We revised our outlook on most of FE's subsidiaries to positive from stable and affirmed the ratings. This includes FET, ATSI, TrAIL, MAIT, Ohio Edison, Toledo Edison, Pennsylvania Electric, Metropolitan Edison, Pennsylvania Power, West Penn Power, JCP&L, CEI, and AGC. The positive outlooks reflect the positive outlook on parent FE, our assessments of these subsidiaries' SACPs, their group status, and the insulating measures that allow us to rate some of the subsidiaries higher than the FE group credit profile.

Following the FET sale announcement, we revised downward the group status on MP and PE to strategically important from core. This does not affect our ratings on MP or PE, issue ratings, or SACPs. Our revised assessment follows FE's second minority interest sale of its utility assets, increasing our view that FE could sell additional assets to strengthen credit quality. While MP and PE are successful utility operators, have FE's long-term commitment, and remain important to FE's long-term strategy, we no longer view these subsidiaries as highly unlikely to be sold, instead viewing them as unlikely to be sold. This reflects their relatively small size and that they operate outside of FE's primary service territories of Ohio, Pennsylvania, and New Jersey.

We revised the SACP for CEI to 'bbb' from 'bbb+'. We expect its financial measures to more consistently reflect the lower end of the range for the significant financial risk profile category. This is primarily because of refunds and bill reduction benefits for CEI's customers from the 2021 settlement with many parties of multiple proceedings before the Public Utilities Commission of Ohio. Accordingly, we lowered the SACP one notch.

Outlook- FE

The positive outlook on FE reflects our expectation that at the close of the company's minority asset sale financial measures will improve. Specifically, we expect FFO to debt consistently above 12%. The outlook also incorporates the prospect for a further upgrade should financial measures strengthen while the company continues to meet its obligations under its DPA, which ends, subject to FE fulfilling all DPA obligations, in July 2024..

Downside scenario

We could affirm the ratings on FE and revise the outlook to stable over the next 12-24 months should:

- FE's FFO to debt remain below 12%; and
- FE not meet its obligations under its DPA.

Upside scenario

We could raise the ratings on FE over the next 12-24 months if:

- Upon close of the FET minority stake sale the company uses proceeds in a credit supportive manner, such that FFO to debt is consistently above 12%; or

- FE meet its obligations under its DPA.

Outlook– FET, ATSI, TrAIL, MAIT, AGC, West Penn Power, Metropolitan Edison, Pennsylvania Power, Pennsylvania Electric, Toledo Edison, and Ohio Edison

The positive outlook reflects the positive outlook on parent FE.

Downside scenario

We could affirm these ratings and revise the outlooks to stable over the next 12-24 months if we do the same to FE.

Upside scenario

We could raise the ratings on these subsidiaries over the next 12-24 months if we do the same on FE.

Outlook– JCP&L

The positive outlook on JCP&L reflects the positive outlook on FE, our expectations that JCP&L's stand-alone FFO to debt will be 13%-16%, and that JCP&L will continue to gradually reduce business risk primarily through the disproportionate growth of its lower-risk transmission business.

Downside scenario

We could affirm the ratings on JCP&L and revise the outlook to stable over the next 12-24 months if:

- We do the same for FE; or
- JCP&L's business risk does not improve as expected.

Upside scenario

We could raise the ratings on JCP&L over the next 12-24 months if:

- We upgrade FE, reflecting that it fully met its obligations under the DPA; and
- JCP&L continues to gradually decrease business risk while maintaining its current financial measures.

Outlook– CEI

The positive outlook on CEI reflects the positive outlook on FE and our expectations that CEI's stand-alone FFO to debt will remain consistently greater than 12%.

Downside scenario

We could affirm the ratings on CEI and revise the outlook to stable over the next 12-24 months if we do the same for FE.

Upside scenario

We could raise the ratings on CEI over the next 12-24 months if CEI maintains its stand-alone financial measures and we upgrade FE, reflecting that it fully met its obligations under the DPA.

Outlook– MP and PE

The stable outlooks reflect our expectations for their generally effective management of regulatory risk to continue while they maintain stand-alone FFO to debt of 13%-16%.

Downside scenario

We could downgrade MP and PE if:

- Their stand-alone FFO to debt weakens consistently below 13% while we maintain the rating on FE; or
- Although highly unlikely at this time, we downgrade FE.

Upside scenario

We could upgrade MP and PE if:

- We upgrade FE; and
- MP's and PE's stand-alone financial measures consistently improve, such that FFO to debt is greater than 17%.

Liquidity

We assess FE's liquidity as adequate, with sources covering uses by 1.1x over the coming 12 months. Furthermore, we project its sources will cover uses even if forecasted consolidated EBITDA declines 10%. We believe the predictable regulatory frameworks for FE provide manageable cash flow stability even in times of economic stress, supporting our use of slightly lower thresholds to assess liquidity. In addition, FE can absorb high-impact, low-probability events, reflecting that the company maintains about \$4.5 billion in committed credit facilities through 2026, and our belief that the company can lower its high capital spending (averaging about \$3.6 billion annually) during stressful periods. This indicates limited need for refinancing under such conditions. Furthermore, our assessment reflects FE's generally prudent risk management, sound relationships with its banking group (which includes over 10 well-established banks), and a satisfactory standing in the credit markets (credit default swap spreads in line with investment-grade peer utilities).

Overall, we believe FE should withstand adverse market circumstances over the next 12 months

with sufficient liquidity to meet its obligations. FE has its next large long-term debt maturities in 2023, with about \$350 million coming due, and we expect it to proactively address these well in advance of the scheduled due dates.

Principal liquidity sources:

- Credit facility availability of about \$4.5 billion;
- Cash FFO of about \$2.7 billion; and
- Cash on hand of about \$200 million.

Principal liquidity uses:

- Capital spending of about \$3.4 billion;
- Dividends of about \$900 million; and
- Debt maturities of about \$350 million.

Environmental, Social, And Governance

ESG credit indicators: E-2, S-2, G-4

Issue Ratings - Subordination Risk Analysis

Capital structure

FE's capital structure consists of about \$21 billion of debt, of which about \$4.7 billion is first-mortgage bonds at the subsidiaries, \$11.2 billion is unsecured debt at the subsidiaries, and the remainder is unsecured debt at the holding company.

Analytical conclusions

We rate the senior unsecured debt at FE one notch lower than the issuer credit rating, reflecting its subordination to other priority debt that comprises over 50% of the debt structure.

Ratings Score Snapshot

FirstEnergy Corp.

Issuer credit rating: BBB-/Positive/--

Business risk: Excellent

- Country risk: Very low
- Industry risk: Very low
- Competitive position: Strong

Financial risk: Aggressive

- Cash flow/leverage: Aggressive

Anchor: bbb

Modifiers

- Diversification/portfolio effect: Neutral (no impact)
- Capital structure: Neutral (no impact)
- Financial policy: Neutral (no impact)
- Liquidity: Adequate (no impact)
- Management and governance: Fair (no impact)
- Comparable rating analysis: Negative (-1 notch)

Stand-alone credit profile: bbb-

- Group credit profile: bbb-

FirstEnergy Transmission LLC

Issuer credit rating: BBB-/Positive/--

Business risk: Excellent

- Country risk: Very low
- Industry risk: Very low
- Competitive position: Strong

Financial risk: Intermediate

- Cash flow/leverage: Intermediate

Anchor: a+

Modifiers

- Diversification/portfolio effect: Neutral (no impact)
- Capital structure: Neutral (no impact)
- Financial policy: Neutral (no impact)
- Liquidity: Adequate (no impact)
- Management and governance: Fair (-1 notch)
- Comparable rating analysis: Negative (-1 notch)

Stand-alone credit profile: a-

- Group credit profile: bbb-
- Entity status within group: Strategically important (-3 notches from SACP)

Allegheny Generating Co.

Issuer credit rating: BB+/Positive/--

Business risk: Satisfactory

- Country risk: Very low
- Industry risk: Moderately high
- Competitive position: Satisfactory

Financial risk: Significant

- Cash flow/leverage: Significant

Anchor: bb+

Modifiers

- Diversification/portfolio effect: Neutral (no impact)
- Capital structure: Neutral (no impact)
- Financial policy: Neutral (no impact)
- Liquidity: Adequate (no impact)
- Management and governance: Fair (no impact)
- Comparable rating analysis: Neutral (no impact)

SACP: bb+

- Group credit profile: bbb-
- Entity status within group: Moderately strategic (no impact)

American Transmission Systems Inc.

Issuer credit rating: BBB/Positive/--

Business risk: Excellent

- Country risk: Very low
- Industry risk: Very low
- Competitive position: Strong

Financial risk: Intermediate

- Cash flow/leverage: Intermediate

Anchor: a+

Modifiers

- Diversification/portfolio effect: Neutral (no impact)
- Capital structure: Neutral (no impact)

- Financial policy: Neutral (no impact)
- Liquidity: Adequate (no impact)
- Management and governance: Fair (-1 notch)
- Comparable rating analysis: Neutral (no impact)

Stand-alone credit profile: a

- Group credit profile: bbb-
- Entity status within group: Insulated (-3 notches from SACP)

Cleveland Electric Illuminating Co.

Issuer credit rating: BBB/Positive/--

Business risk: Excellent

- Country risk: Very low
- Industry risk: Very low
- Competitive position: Strong

Financial risk: Significant

- Cash flow/leverage: Significant

Anchor: a-

Modifiers

- Diversification/portfolio effect: Neutral (no impact)
- Capital structure: Neutral (no impact)
- Financial policy: Neutral (no impact)
- Liquidity: Adequate (no impact)
- Management and governance: Fair (-1 notch)
- Comparable rating analysis: Negative (-1 notch)

Stand-alone credit profile: bbb

- Group credit profile: bbb-
- Entity status within group: Insulated (no impact)

Jersey Central Power & Light Co.

Issuer credit rating: BBB/Positive/NR

Business risk: Strong

- Country risk: Very low
- Industry risk: Very low

- Competitive position: Satisfactory

Financial risk: Significant

- Cash flow/leverage: Significant

Anchor: bbb

Modifiers

- Diversification/portfolio effect: Neutral (no impact)
- Capital structure: Neutral (no impact)
- Financial policy: Neutral (no impact)
- Liquidity: Adequate (no impact)
- Management and governance: Fair (no impact)
- Comparable rating analysis: Neutral (no impact)

Stand-alone credit profile: bbb

- Group credit profile: bbb-
- Entity status within group: Insulated (no impact)

Metropolitan Edison Co.

Issuer credit rating: BBB/Positive/NR

Business risk: Excellent

- Country risk: Very low
- Industry risk: Very low
- Competitive position: Strong

Financial risk: Significant

- Cash flow/leverage: Significant

Anchor: a-

Modifiers

- Diversification/portfolio effect: Neutral (no impact)
- Capital structure: Neutral (no impact)
- Financial policy: Neutral (no impact)
- Liquidity: Adequate (no impact)
- Management and governance: Fair (-1 notch)
- Comparable rating analysis: Neutral (no impact)

Stand-alone credit profile: bbb+

- Group credit profile: bbb-
- Entity status within group: Insulated (-1 notch from SACP)

Mid-Atlantic Interstate Transmission LLC

Issuer credit rating: BBB/Positive/--

Business risk: Excellent

- Country risk: Very low
- Industry risk: Very low
- Competitive position: Excellent

Financial risk: Intermediate

- Cash flow/leverage: Intermediate

Anchor: a+

Modifiers

- Diversification/portfolio effect: Neutral (no impact)
- Capital structure: Neutral (no impact)
- Financial policy: Neutral (no impact)
- Liquidity: Adequate (no impact)
- Management and governance: Fair (-1 notch)
- Comparable rating analysis: Neutral (no impact)

Stand-alone credit profile: a

- Group credit profile: bbb-
- Entity status within group: Insulated (-3 notches from SACP)

Monongahela Power Co.

Issuer credit rating: BBB/Stable/NR

Business risk: Strong

- Country risk: Very low
- Industry risk: Very low
- Competitive position: Satisfactory

Financial risk: Significant

- Cash flow/leverage: Significant

Anchor: bbb

Modifiers

- Diversification/portfolio effect: Neutral (no impact)
- Capital structure: Neutral (no impact)
- Financial policy: Neutral (no impact)
- Liquidity: Adequate (no impact)
- Management and governance: Fair (no impact)
- Comparable rating analysis: Neutral (no impact)

Stand-alone credit profile: bbb

- Group credit profile: bbb-
- Entity status within group: Insulated (no impact)

Ohio Edison Co.

Issuer credit rating: BBB/Positive/A-2

Business risk: Excellent

- Country risk: Very low
- Industry risk: Very low
- Competitive position: Strong

Financial risk: Modest

- Cash flow/leverage: Modest

Anchor: aa

Modifiers

- Diversification/portfolio effect: Neutral (no impact)
- Capital structure: Neutral (no impact)
- Financial policy: Neutral (no impact)
- Liquidity: Adequate (no impact)
- Management and governance: Fair (-1 notch)
- Comparable rating analysis: Negative (-1 notch)

Stand-alone credit profile: a+

- Group credit profile: bbb-
- Entity status within group: Insulated (-4 notches from SACP)

Pennsylvania Electric Co.

Issuer credit rating: BBB/Positive/NR

Business risk: Excellent

- Country risk: Very low
- Industry risk: Very low
- Competitive position: Strong

Financial risk: Significant

- Cash flow/leverage: Significant

Anchor: a-

Modifiers

- Diversification/portfolio effect: Neutral (no impact)
- Capital structure: Neutral (no impact)
- Financial policy: Neutral (no impact)
- Liquidity: Adequate (no impact)
- Management and governance: Fair (-1 notch)
- Comparable rating analysis: Neutral (no impact)

Stand-alone credit profile: bbb+

- Group credit profile: bbb-
- Entity status within group: Insulated (-1 notch from SACP)

Pennsylvania Power Co.

Issuer credit rating: BBB/Positive/--

Business risk: Excellent

- Country risk: Very low
- Industry risk: Very low
- Competitive position: Strong

Financial risk: Intermediate

- Cash flow/leverage: Intermediate

Anchor: a+

Modifiers

- Diversification/portfolio effect: Neutral (no impact)
- Capital structure: Neutral (no impact)
- Financial policy: Neutral (no impact)
- Liquidity: Adequate (no impact)
- Management and governance: Fair (-1 notch)

- Comparable rating analysis: Neutral (no impact)

Stand-alone credit profile: a

- Group credit profile: bbb-
- Entity status within group: Insulated (-3 notches from SACP)

Potomac Edison Co.

Issuer credit rating: BBB/Stable/NR

Business risk: Strong

- Country risk: Very low
- Industry risk: Very low
- Competitive position: Satisfactory

Financial risk: Significant

- Cash flow/leverage: Significant

Anchor: bbb

Modifiers

- Diversification/portfolio effect: Neutral (no impact)
- Capital structure: Neutral (no impact)
- Financial policy: Neutral (no impact)
- Liquidity: Adequate (no impact)
- Management and governance: Fair (no impact)
- Comparable rating analysis: Neutral (no impact)

Stand-alone credit profile: bbb

- Group credit profile: bbb-
- Entity status within group: Insulated (no impact)

Toledo Edison Co.

Issuer credit rating: BBB/Positive/--

Business risk: Excellent

- Country risk: Very low
- Industry risk: Very low
- Competitive position: Strong

Financial risk: Significant

- Cash flow/leverage: Significant

Anchor: a-

Modifiers

- Diversification/portfolio effect: Neutral (no impact)
- Capital structure: Neutral (no impact)
- Financial policy: Neutral (no impact)
- Liquidity: Adequate (no impact)
- Management and governance: Fair (-1 notch)
- Comparable rating analysis: Neutral (no impact)

Stand-alone credit profile: bbb+

- Group credit profile: bbb-
- Entity status within group: Insulated (-1 notch from SACP)

Trans-Allegheny Interstate Line Co.

Issuer credit rating: BBB/Positive/--

Business risk: Excellent

- Country risk: Very low
- Industry risk: Very low
- Competitive position: Excellent

Financial risk: Modest

- Cash flow/leverage: Modest

Anchor: aa

Modifiers

- Diversification/portfolio effect: Neutral (no impact)
- Capital structure: Neutral (no impact)
- Financial policy: Neutral (no impact)
- Liquidity: Adequate (no impact)
- Management and governance: Fair (-1 notch)
- Comparable rating analysis: Neutral (no impact)

Stand-alone credit profile: aa-

- Group credit profile: bbb-
- Entity status within group: Insulated (-5 notches from SACP)

West Penn Power Co.

Issuer credit rating: BBB/Positive/--

Business risk: Excellent

- Country risk: Very low
- Industry risk: Very low
- Competitive position: Strong

Financial risk: Intermediate

- Cash flow/leverage: Intermediate

Anchor: a+

Modifiers

- Diversification/portfolio effect: Neutral (no impact)
- Capital structure: Neutral (no impact)
- Financial policy: Neutral (no impact)
- Liquidity: Adequate (no impact)
- Management and governance: Fair (-1 notch)
- Comparable rating analysis: Negative (-1 notch)

Stand-alone credit profile: a-

- Group credit profile: bbb-
- Entity status within group: Insulated (-2 notches from SACP)

Related Criteria

- General Criteria: Hybrid Capital: Methodology And Assumptions, March 2, 2022
- General Criteria: Environmental, Social, And Governance Principles In Credit Ratings, Oct. 10, 2021
- General Criteria: Group Rating Methodology, July 1, 2019
- Criteria | Corporates | General: Corporate Methodology: Ratios And Adjustments, April 1, 2019
- Criteria | Corporates | General: Reflecting Subordination Risk In Corporate Issue Ratings, March 28, 2018
- General Criteria: Methodology For Linking Long-Term And Short-Term Ratings, April 7, 2017
- Criteria | Corporates | General: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Dec. 16, 2014
- General Criteria: Methodology: Industry Risk, Nov. 19, 2013
- General Criteria: Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013

- Criteria | Corporates | General: Corporate Methodology, Nov. 19, 2013
- Criteria | Corporates | Utilities: Key Credit Factors For The Regulated Utilities Industry, Nov. 19, 2013
- Criteria | Corporates | Utilities: Collateral Coverage And Issue Notching Rules For '1+' And '1' Recovery Ratings On Senior Bonds Secured By Utility Real Property, Feb. 14, 2013
- General Criteria: Methodology: Management And Governance Credit Factors For Corporate Entities, Nov. 13, 2012
- General Criteria: Principles Of Credit Ratings, Feb. 16, 2011

Ratings List

Ratings Affirmed; Outlook Action

	To	From
FirstEnergy Corp.		
FirstEnergy Transmission LLC		
Issuer Credit Rating	BBB-/Positive/--	BBB-/Stable/--
Allegheny Generating Co.		
Issuer Credit Rating	BB+/Positive/--	BB+/Stable/--
American Transmission Systems Inc.		
Trans-Allegheny Interstate Line Co.		
Toledo Edison Co.		
Pennsylvania Power Co.		
Mid-Atlantic Interstate Transmission LLC		
Cleveland Electric Illuminating Co.		
Issuer Credit Rating	BBB/Positive/--	BBB/Stable/--
Jersey Central Power & Light Co.		
West Penn Power Co.		
Pennsylvania Electric Co.		
Metropolitan Edison Co.		
Issuer Credit Rating	BBB/Positive/--	BBB/Stable/--
Ohio Edison Co.		
Issuer Credit Rating	BBB/Positive/A-2	BBB/Stable/A-2
Ratings Affirmed		
Monongahela Power Co.		
Potomac Edison Co.		
Issuer Credit Rating	BBB/Stable/--	

Issue-Level Ratings Affirmed; Recovery Ratings Unchanged

Cleveland Electric Illuminating Co.

Monongahela Power Co.

Ohio Edison Co.

Pennsylvania Power Co.

Potomac Edison Co.

Toledo Edison Co.

West Penn Power Co.

Senior Secured	A-
Recovery Rating	1+

Issue-Level Ratings Affirmed

FirstEnergy Corp.

Preferred Stock	BB
-----------------	----

FirstEnergy Corp.

FirstEnergy Transmission LLC

Senior Unsecured	BB+
------------------	-----

Jersey Central Power & Light Co.

Metropolitan Edison Co.

Mid-Atlantic Interstate Transmission LLC

Ohio Edison Co.

Pennsylvania Electric Co.

Trans-Allegheny Interstate Line Co.

American Transmission Systems Inc.

Cleveland Electric Illuminating Co.

Senior Unsecured	BBB
------------------	-----

Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria. Please see Ratings Criteria at www.standardandpoors.com for further information. Complete ratings information is available to subscribers of RatingsDirect at www.capitaliq.com. All ratings affected by this rating action can be found on S&P Global Ratings' public website at www.standardandpoors.com. Use the Ratings search box located in the left column.

Copyright © 2023 by Standard & Poor's Financial Services LLC. All rights reserved.

No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of Standard & Poor's Financial Services LLC or its affiliates (collectively, S&P). The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. S&P's opinions, analyses and rating acknowledgment decisions (described below) are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P does not act as a fiduciary or an investment advisor except where registered as such. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives. Rating-related publications may be published for a variety of reasons that are not necessarily dependent on action by rating committees, including, but not limited to, the publication of a periodic update on a credit rating and related analyses.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P reserves the right to assign, withdraw or suspend such acknowledgment at any time and in its sole discretion. S&P Parties disclaim any duty whatsoever arising out of the assignment, withdrawal or suspension of an acknowledgment as well as any liability for any damage alleged to have been suffered on account thereof.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.com (subscription), and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

STANDARD & POOR'S, S&P and RATINGSDIRECT are registered trademarks of Standard & Poor's Financial Services LLC.