

SECTOR IN-DEPTH

11 September 2024



Analyst Contacts

Jeffrey F. Cassella +1.212.553.1665
VP-Sr Credit Officer
jeffrey.cassella@moodys.com

Michael G. Haggarty +1.212.553.7172
Associate Managing Director
michael.haggarty@moodys.com

CLIENT SERVICES

Americas 1-212-553-1653
Asia Pacific 852-3551-3077
Japan 81-3-5408-4100
EMEA 44-20-7772-5454

Regulated Electric and Gas Utilities – US

Potential for higher energy costs spurs efforts to address affordability concerns

As power supply ramps up to meet rising load forecasts, the potential for higher electricity prices may leave US regulated utilities with greater credit exposure to social risk. Although [natural gas prices have declined](#) from their recent peak in 2022 and interest rates have stabilized and appear likely to fall, electricity prices will continue to rise in some regions to pay for elevated utility investments to upgrade aging infrastructure and harden networks to withstand extreme weather events. Over the longer term, rising baseload power demand from the proliferation of data centers, growing industrial needs and electrification will apply further upward pressure on electricity prices.

Affordability is a key credit consideration and social risk for regulated electric and gas utilities because their rates are subject to a public regulatory process that can sometimes lead to adverse outcomes if regulators feel that customers have become too burdened. Most regulated utilities have moderate credit exposure to social risk, as is reflected in their [social issuer profile scores](#). Demographic and societal trends are a common risk for all utilities because of public concerns about service affordability and environmental issues that could lead to adverse regulatory or political intervention. Persistently elevated electric and gas prices could increase credit exposure to social risk, particularly during periods of high inflation.

After remaining largely range-bound for about a decade, average US electricity prices surged in 2022 and continued to rise through 2024 even as natural gas prices declined (see Exhibit 1).

Exhibit 1

Electricity prices have increased roughly 30% since 2022

Average US electricity prices per kilowatt-hour (kWh) since 2011



Source: US Bureau of Labor Statistics

As utilities seek to pass through higher capacity payments and new investment costs to customers, regulators will continue to be mindful of the scale of the rate increases they approve, sometimes with negative credit consequences. For example, in August 2023,

the Connecticut Public Utility Regulatory Authority's (PURA) [final order](#) in [The United Illuminating Company's](#) (Baa1 stable) first rate case since 2016 approved an incremental revenue increase of \$23 million over one year. This was less than one-fifth of the \$131 million increase over three years that the utility had requested, with the PURA citing customer affordability as a contributing factor behind its decision.

Utilities may seek to mitigate customer bill impact after spike in PJM capacity prices

[July's nearly tenfold jump](#) in [PJM Interconnection LLC's](#) (Aa2 stable) capacity auction price to \$270 per megawatt-day across nearly all of its regional zones for the 2025-26 planning year will prompt regulated utilities in PJM to consider ways of mitigating the impact on customer bills (see Exhibit 2). Although purchased power is largely a pass-through cost for regulated utilities in the PJM market and capacity prices have much less of an impact than energy prices, state regulators are sensitive to the overall affordability of electric and gas service, especially for residential customers. This will be a particular focus in the wake of the PJM auction results. According to a report released by Maryland's Office of People's Counsel¹, the jump in PJM capacity prices could increase electricity bills in the state by as much as 24% depending on location.

Exhibit 2

Auction prices for the 2025-26 planning year surged in most PJM zones

Capacity prices in PJM Interconnection regional zones by planning year (\$ per megawatt-day)

	2021/22	2022/23	2023/24	2024/25	2025/26
RTO	\$140	\$50	\$34	\$29	\$270
EMAAC	\$166	\$98	\$49	\$55	\$270
MAAC	\$140	\$96	\$49	\$49	\$270
ATSI	\$171	\$50	\$34	\$29	\$270
BGE	\$200	\$127	\$70	\$73	\$466
DPL-South	\$166	\$98	\$70	\$426	\$270
COMED	\$196	\$69	\$34	\$29	\$270
DOM	-	-	-	-	\$444

Auction periods start in June and conclude in May of the following year.

Source: PJM Interconnection

[PPL Corporation](#) (Baa1 stable), which operates in PJM through its subsidiary [PPL Electric Utilities Corporation](#) (A3 stable), said last month that it expects to partially mitigate the impact of higher capacity prices on customer bills through its continued focus on reducing operating costs and socializing transmission costs across all customers in PJM, which will increasingly include large data centers.

[FirstEnergy Corp.](#) (Baa3 stable), another utility holding company with regulated subsidiaries in PJM, said in July that the higher capacity costs may be partially offset in some jurisdictions by declining energy costs, which had risen because of the surge in natural gas prices following Russia's invasion of Ukraine in 2022.

Elevated capital spending will also continue to pressure affordability while slowing carbon transition

Over the longer term, the regulated utility sector's [elevated capital expenditures](#) will also continue to increase customer bills. [Most of the capital spending](#) is focused [on transmission and distribution investments](#) primarily aimed at [hardening infrastructure](#) against severe weather and integrating new renewable generation. Some utilities are also investing in new renewable generation capacity like wind, solar and battery storage to meet demand for more carbon-free generation resources. In addition, some leading technology companies seek to power their data centers with renewable energy as part of their broader net-zero strategies². Over time, this may require additional utility investments in renewables to meet this demand.

At the same time, near-term efforts to meet [growing power demand from data centers](#) may delay the scheduled early retirement of some fossil-fuel plants whose closures were aimed at meeting decarbonization targets. In many cases, extending the life of existing power plants or building new natural-gas-fired generation are the most cost-effective ways to satisfy rising data center demand.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on <https://ratings.moody's.com> for the most updated credit rating action information and rating history.

Vertically integrated utilities serving major data center markets [are already preparing to invest heavily in new generation](#). For example, [Virginia Electric and Power Company's](#) (VEPCO, A2 negative) [May 2023 integrated resource plan \(IRP\)](#) included various alternatives it is considering to serve surging data center demand, which could include the construction of about 3 GW in wind capacity, 11 GW in solar capacity and about 1 to 3 GW of storage capacity over a 15-year horizon³.

Similarly, in April, the Georgia Public Service Commission (PSC) approved [Georgia Power Company's](#) (Baa1 positive) IRP update, which detailed plans to build new fossil-fuel power plants with up to 1.4 GW of generating capacity to serve sharply rising demand from data centers and other large customers. With Georgia Power customers already facing three consecutive years of rate increases to pay for previously announced investments⁴, affordability remains a concern for regulators. After the recent passage of state legislation that lowered Georgia Power's state corporate tax rate, the PSC voted last week to expedite the return of about \$122 million to the utility's customers beginning in January 2025⁵.

Endnotes

- [1 Bill and Rate Impacts of PJM's 2025/2026 Capacity Market Results & Reliability Must-Run Units in Maryland](#), Office of People's Counsel, August 2024
- [2 Inside Google Cloud: Announcing 'round-the-clock clean energy for cloud](#), 14 September 2020
- [3](#) Depending upon which of the alternative paths are pursued, VEPCO could also add 1, 3 or 6 GW in natural gas capacity and 0, 1 or nearly 2 GW of small modular nuclear reactor capacity, assuming the technology is available and affordable
- [4 Georgia Public Service Commission approves Georgia Power's amended 2022 rate request](#), 20 December 2022
- [5 Georgia Public Service Commission approves motion to deliver \\$122 million in savings to Georgia Power customers beginning in January](#), 5 September 2024

© 2024 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED OR OTHERWISE MADE AVAILABLE BY MOODY'S (COLLECTIVELY, "MATERIALS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S MATERIALS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S MATERIALS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES OR OTHERWISE MAKES AVAILABLE ITS MATERIALS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND MATERIALS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR MATERIALS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT. FOR CLARITY, NO INFORMATION CONTAINED HEREIN MAY BE USED TO DEVELOP, IMPROVE, TRAIN OR RETRAIN ANY SOFTWARE PROGRAM OR DATABASE, INCLUDING, BUT NOT LIMITED TO, FOR ANY ARTIFICIAL INTELLIGENCE, MACHINE LEARNING OR NATURAL LANGUAGE PROCESSING SOFTWARE, ALGORITHM, METHODOLOGY AND/OR MODEL.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the credit rating process or in preparing its Materials.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service, Inc. and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moody's.com under the heading "Investor Relations — Corporate Governance — Charter Documents - Director and Shareholder Affiliation Policy."

Moody's SF Japan K.K., Moody's Local AR Agente de Calificación de Riesgo S.A., Moody's Local BR Agência de Classificação de Risco LTDA, Moody's Local MX S.A. de C.V., I.C.V., Moody's Local PE Clasificadora de Riesgo S.A., and Moody's Local PA Clasificadora de Riesgo S.A. (collectively, the "Moody's Non-NRSRO CRAs") are all indirectly wholly-owned credit rating agency subsidiaries of MCO. None of the Moody's Non-NRSRO CRAs is a Nationally Recognized Statistical Rating Organization.

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657 AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for India only: Moody's credit ratings, Assessments, other opinions and Materials are not intended to be and shall not be relied upon or used by any users located in India in relation to securities listed or proposed to be listed on Indian stock exchanges.

Additional terms with respect to Second Party Opinions (as defined in Moody's Investors Service Rating Symbols and Definitions): Please note that a Second Party Opinion ("SPO") is not a "credit rating". The issuance of SPOs is not a regulated activity in many jurisdictions, including Singapore. JAPAN: In Japan, development and provision of SPOs fall under the category of "Ancillary Businesses", not "Credit Rating Business", and are not subject to the regulations applicable to "Credit Rating Business" under the Financial Instruments and Exchange Act of Japan and its relevant regulation. PRC: Any SPO: (1) does not constitute a PRC Green Bond Assessment as defined under any relevant PRC laws or regulations; (2) cannot be included in any registration statement, offering circular, prospectus or any other documents submitted to the PRC regulatory authorities or otherwise used to satisfy any PRC regulatory disclosure requirement; and (3) cannot be used within the PRC for any regulatory purpose or for any other purpose which is not permitted under relevant PRC laws or regulations. For the purposes of this disclaimer, "PRC" refers to the mainland of the People's Republic of China, excluding Hong Kong, Macau and Taiwan.