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Second Party Opinion

Ameren Missouri Securitization Funding I LLC's $476 Million Securitized Utility Tariff Bonds Series 2024-A

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Location: United States **Sector:** Power Generation

Alignment With Principles

Aligned = ✓ Conceptually aligned = ○ Not aligned = ✕

✓ Green Bond Principles, ICMA, 2021 (with June 2022 Appendix 1)

See Alignment Assessment for more detail.

Dark green

Activities that correspond to the long-term vision of a low-carbon climate resilient future.

Our Shades of Green Analytical Approach >

Strengths

Ameren Missouri's transaction promotes the deployment of renewable energy, which is key to achieving a low-carbon and climate-resilient future. Eligible projects include solar and wind assets and energy storage, which promote the company's energy transition goals, reduce greenhouse gas (GHG) emissions, and decrease air pollution.

Weaknesses

While proceeds will not be allocated to decommissioning activities, the structure of the eligible transaction is linked to Ameren Missouri's recently shuttered Rush Island coal generation facility. The U.S. District Court found that the facility exceeded regulatory maximums for sulfur dioxide emissions for 14 years until its retirement in October 2024**.** Ameren Missouri retired the plant 15 years before the end of its useful life.

Areas to watch

As Ameren Missouri phases out some of its fossil fuel assets, there have been recent adjustments to the company's transition strategy and the company will still have coal exposure. Ameren Missouri has recently delayed plans to retire one of its coal assets (Sioux) as a result of the Rush Island retirement, and the Labadie plant in Missouri is one of the highest sulfur dioxide emitters in the country. As these plants eventually reach the end of their useful lives, risks around continuity of supply, pricing for rate-payers, and a just transition for employees will increase in importance.

Eligible Green Projects Assessment Summary

Ameren Missouri Securitization Funding I, LLC is a special purpose vehicle (SPV), fully owned by Ameren Missouri and formed to issue the $476 million securitized utility tariff bonds. The SPV will use the proceeds of the bond issuance to purchase the securitized utility tariff property from Ameren Missouri, which includes the right to impose, bill, charge, collect, and receive an irrevocable non-bypassable charge paid by existing or future retail customers. Ameren Missouri will then allocate an amount equal to those proceeds to eligible renewable energy projects. In line with the ICMA Green Bond Principles, we view this transaction as a Secured Green Standard Bond, as net proceeds of the secured bond will be allocated exclusively to the eligible green projects.

Based on the project category shades of green detailed below, the expected allocation of proceeds, and consideration of environmental ambitions reflected in Ameren Missouri Securitization Funding I, LLC's Series 2024-A bonds, we assess the transaction as Dark green.

Eligible projects under the issuer's green finance transaction are assessed based on their environmental benefits and risks, using Shades of Green methodology.

Renewable energy	**Dark green**
Investments in the development, construction, maintenance, and operation of projects that develop, transmit, and deliver renewable energy sources, including solar and other wind projects, including associated energy storage infrastructure	
The purchase of renewable energy pursuant to long-term power purchase agreements entered into prior to the commencement, or, in the case of repowering projects, the re-commencement, of commercial operation of the renewable project.	

See Analysis Of Eligible Projects for more detail.

Issuer Sustainability Context

This section provides an analysis of the issuer's sustainability management and the embeddedness of the financing framework within its overall strategy.

Company Description

Ameren Corp., together with its subsidiaries, operates as a public utility holding company in the United States. The company operates through four segments: Ameren Missouri, Ameren Illinois Electric Distribution, Ameren Illinois Natural Gas, and Ameren Transmission. Ameren Missouri engages in rate-regulated electric generation, transmission, and distribution activities and rate-regulated natural gas distribution. The company generates electricity through coal, nuclear, and natural gas, as well as renewable sources, such as wind, hydroelectric, methane gas, and solar. It serves residential, commercial, and industrial customers. The company was founded in 1881 and is headquartered in St. Louis, Mo.

Material Sustainability Factors

Climate transition risk

Power generation is the largest direct source of GHG emissions globally, making this sector highly susceptible to the growing public, political, legal, and regulatory pressure to accelerate climate goals. Public awareness of the urgency for climate action has reached a turning point. In turn, policymakers and regulators are more often pushing for a faster transition to lower-carbon energy, especially as these technologies become more mature and cost competitive. Over the past decade, we have seen multibillion-dollar impairments for most polluting assets, reflecting their weaker economics as taxes increase and they are displaced by new, cleaner technologies. In addition, more stringent decarbonization rules may sometimes restrict their license to operate. Coal poses a dual challenge because it stands as the primary contributor to global electricity production and the biggest emitter of CO2 both in absolute terms and per kilowatt-hour of electricity, according to the International Energy Agency. This presents a distinct obstacle when transitioning to energy systems with reduced carbon emissions. Despite growing pressure from some governments and businesses to phase down coal, this source of energy will still contribute to more than one-third of the overall electricity production, according to existing energy plans globally. Without carbon capture, utilization, and storage (CCUS) technology, the only reductions in emissions may come from improvements in efficiency.

Pollution

The combustion of fossil fuels generates other air emissions--notably, sulfur oxides (SOx), nitrogen oxides (NOx), particulates, and volatile organic compounds (VOCs)--and regulated waste (especially for coal generators), creating additional regulatory risks, potentially higher operating costs, and potential legal liabilities. These pollutants contribute to global warming, and other air pollutants can contribute to acid rain, weather extremes, and atmospheric circulation. Pollution can have devastating effects on ecosystems, and pollution of water bodies and soil from industrial discharges can pose risks to human health through the food chain. Though the figure is projected to decrease in the coming years, air pollution led to 4.4 million premature deaths in 2022, according to the International Energy Agency. Data from the World Health Organization (WHO) shows that almost all of the global population breathes air that exceeds WHO guideline limits and contains high levels of pollutants, with low- and middle-income populations exposed to the highest levels of pollution.

Access and Affordability

The affordability and reliability of networks are under pressure from climate-related risks, exacerbating the materiality for stakeholders. Energy is key to supporting human health and well-being and global economic development. Service disruptions or steep price increases are likely to be amplified by the energy transition and physical climate risks. These dynamics can affect households' purchasing power and the competitive strengths of local industries, which make this highly material for stakeholders. While utility bills are rising, they tend to rise at a rate lower than inflation. In addition, regulators continue to allow

utilities to use mechanisms to smooth volatility and to offer income assistance programs, which underpins a more moderate impact.

Impact on communities

Utilities play a key role in supporting communities and economies through their provision of essential services such as energy. Fossil fuel plant retirements and renewable development related to climate goals plus the adverse community health impacts from fossil plant emissions intensify the materiality for stakeholders. Fossil fuel retirements can upend local economies and garner wide public attention. Toxic air emissions from plants can lead to severe and long-lasting health consequences for local communities, including premature death. Moreover, sites with high renewable potential are often in or near communities unaccustomed to power technology and near indigenous groups, which can prompt strong local opposition.

Issuer And Context Analysis

The eligible projects aim to address climate transition and pollution risk, two of Ameren Missouri's most material sustainability factors. The eligible projects to which Ameren Missouri will allocate the proceeds of the transaction will increase the company's generation of solar energy, aiding the company's transition away from fossil fuel generation sources. The structure of the transaction is connected to the issuer's early retirement of the Rush Island Energy Center, a coal-fired generation facility, and this plant's closure may also alleviate risks related to air pollution.

Ameren Missouri aims to achieve net zero emissions by 2045, primarily by decreasing its reliance on coal assets and increasing generation of wind, solar, and natural gas. The company also has interim targets to reduce its scope 1 and 2 emissions by 60% by 2030 and 85% by 2040 (from a baseline of 2005). As of 2022, Ameren Missouri has achieved a 32% reduction in CO2 emissions since 2005. However, while the company reports on a range of scope 3 emission metrics, it has not specified a target for scope 3 emissions. We note that the company has partnered with an external advisor to assess the feasibility of scope 3 targets. Ameren Missouri aims to increase total renewables and storage capacity by 5,500 megawatts (MW) through 2036, with a focus on solar, wind, and new battery storage. In addition, the company plans to add 2,000 MW of new natural gas-fired generation by 2033. Although the plan envisions a parallel reduction in fossil fuel energy generation through the retirement of coal and gas-fired generation plants, the company will remain exposed to emissions from coal through at least 2042. Ameren Missouri addresses physical climate risks by developing measures to strengthen the resilience of its utility systems and power plants. Most of the company's infrastructure is located in Missouri, which has exposure to physical climate risks such as extreme weather events, droughts, and floods. To manage these risks at the project level, Ameren Missouri implements measures such as system hardening, emergency planning, and emergency response systems.

The value of this transaction is associated with the non-depreciated book value of the retired Rush Island facility. The company remains exposed to air pollution emissions in its energy generation and distribution activities because of its continued reliance on coal. The company failed to install emissions controls after commissioning major modifications at the Rush Island Energy Center in 2007 and 2010. In 2011, the U.S. Department of Justice (DOJ) filed suit against Ameren Missouri for violations of the Clean Air Act occurring at its Rush Island facility. The U.S. District Court found that the Rush Island Energy Center failed to meet regulatory pollution limits, and the plant continued operations for 14 years after this finding. Instead of installing pollution control filters at the facility in accordance with the court's decision, Ameren Missouri decided to retire Rush Island in October 2024. The plant was decommissioned 15 years before the end of its useful life. While we view Rush Island's early retirement positively from an emissions and pollution standpoint, coal assets present clear risks related to pollution, GHG emissions, and the health and safety of nearby communities, and Ameren Missouri has pushed back its plans to retire one of its other coal assets--which does meet regulatory requirements--as a consequence of the Rush Island retirement. In November 2024, Ameren Missouri reached a settlement with the

DOJ for the air pollution related to the retired coal facility, pursuant to which Ameren Missouri has agreed to fund programs to provide electric buses and charging stations to St. Louis-area schools and to provide air purifiers to eligible residential customers. The estimated cost of these programs is $64 million.

Aside from GHGs, Ameren Missouri's activities also result in other atmospheric pollutants, which the company manages in line with regulation. The primary sources of air emissions from Ameren Missouri are fossil-fueled energy centers. A smaller amount of emissions is also attributed to natural gas and electricity delivery operations. These emissions include NOx, SO2, and dust. The Labadie energy center was the largest emitter of sulfur dioxide in the U.S. in 2023, and Rush Island, when fully operational, was the sixth-largest emitter of the pollutant in the country, according to S&P Global Market Intelligence. To mitigate these risks, the company has invested in air scrubbers, low-sulfur coal, and optimizing other emissions control equipment at coal-fired plants. In addition, the company has leak detection sensors that are used to monitor, alarm operators, and, in some cases, isolate methane leaks if they exist. Ameren adheres to the Environmental Protection Agency's Coal Combustion Residual Rule, which contains technical standards for the design, operation, and closure of landfills and basins located at coal-fired plants. According to the issuer, expert-led investigations since 2012 have proven that the basins do not affect public drinking water, private wells, or local rivers and that ash basins present no risk to the public.

Ameren Missouri has experienced community opposition due to its management of the public health and workforce implications of the energy transition. Some of this opposition was due to the violation of the Clean Air Act with its Rush Island facility. Ameren Missouri reports that it engages directly with local communities to mitigate health, safety, and outage risks related to its projects. Ameren Missouri adheres to an emergency response plan designed to restore power and natural gas services following emergency events to ensure continuity of supply to its ratepayers and stakeholders. Reliability of supply is also a key concern for Ameren Missouri. To ensure continued access to power for its customers, Ameren plans to invest in battery storage, combined-cycle, and simple cycle natured gas-fired plants, which allow for the use of hydrogen fuel and carbon capture to mitigate emissions.

We believe the eligible projects will not result in major concerns from an access and affordability standpoint because the transaction is structured to have a minimal effect on ratepayers in the medium term. The closure of the Rush Island plant will have utility tariff implications for the surrounding communities, potentially leading to an increase in energy bills in the short term, but the issuer has informed us that rates will decline by more than the securitization charge on June 1, when Rush Island costs are taken out of base rates. Ameren Missouri anticipates that depending on regulation, production tax credits may rise annually as more renewable resources are integrated, resulting in additional savings for customers. As part of its energy efficiency initiatives, Ameren Missouri has invested in electric smart meters, which provide customers with a better view of their energy consumption and promote more efficient energy use. In Missouri, 85% of customers currently have smart meters, with full deployment expected by the end of 2024. Like its peers, Ameren Missouri has an energy assistance program that partners with local community action agencies that are authorized to administer the Low Income Home Energy Assistance Program, helping customers stay current on their energy statements.

Alignment Assessment

This section provides an analysis of the transaction's alignment to Green Bond principles.

Alignment With Principles

Aligned = ✓ Conceptually aligned = o Not aligned = ×

✓ Green Bond Principles, ICMA, 2021 (with June 2022 Appendix 1)

✓ Use of proceeds

We assess all the transaction's green project categories as having a green shade, and the issuer commits to allocating the net proceeds issued under the transaction exclusively to eligible green projects. Please refer to the Analysis of Eligible Projects section for more information on our analysis of the environmental benefits of the expected use of proceeds.

✓ Process for project evaluation and selection

Ameren Missouri's transaction documentation outlines the process for project selection and evaluation, including the projects' alignment with the company's sustainability objectives and internal policies and guidelines. The process will include the identification, evaluation, and management of relevant environmental and social risks in line with Ameren Missouri's enterprise risk management program, which ensures that risks are identified, reported, and managed in an effective manner.

✓ Management of proceeds

An SPV will issue the bonds and transfer the proceeds to Ameren Missouri, which will then allocate an amount equal to the net proceeds to the eligible green projects. Ameren Missouri will use the proceeds to reimburse itself for expenses incurred relating to eligible projects within the past 12 months, which exceed the amount of the bond proceeds from this transaction. The company expects to allocate all proceeds before the end of 2024, but it notes that allocation reporting may require additional time while staying within the reporting commitments. Ameren Missouri's accounting team ensures that there is no double-counting of proceeds allocated toward green projects.

✓ Reporting

Within 12 months of the issuance of the securitized utility tariff bonds, Ameren Missouri commits to publish a notice regarding its progress on allocating the net proceeds to eligible projects on the company's website. The notice will include an allocation report, an attestation report from an independent accountant, and the anticipated environmental benefits of the eligible projects, but the issuer does not list sample impact metrics in the documentation. If an amount equal to the net proceeds of the issuance is not fully allocated as of the date of this first notice, the company commits to provide notices and attestation reports annually until full allocation of proceeds occurs.

Analysis Of Eligible Projects

This section provides details of our analysis of eligible projects, based on their environmental benefits and risks, using the Shades of Green methodology.

Overall Shades of Green assessment

Based on the project category shades of green detailed below, the expected allocation of proceeds, and consideration of environmental ambitions reflected in Ameren Missouri's securitized utility tariff bonds series 2024-A, we assess the transaction as Dark green.

Activities that correspond to the long-term vision of a low-carbon climate resilient future.

Our Shades of Green Analytical Approach >

Green project categories

Renewable energy

Assessment	Description
Dark green	Investments in the development, construction, maintenance, and operation of projects that develop, transmit, and deliver renewable energy sources, including solar and other wind projects, including energy storage infrastructure, and The purchase of renewable energy pursuant to long-term power purchase agreements entered into prior to the commencement, or, in the case of repowering projects, the re-commencement, of commercial operation of the renewable project.

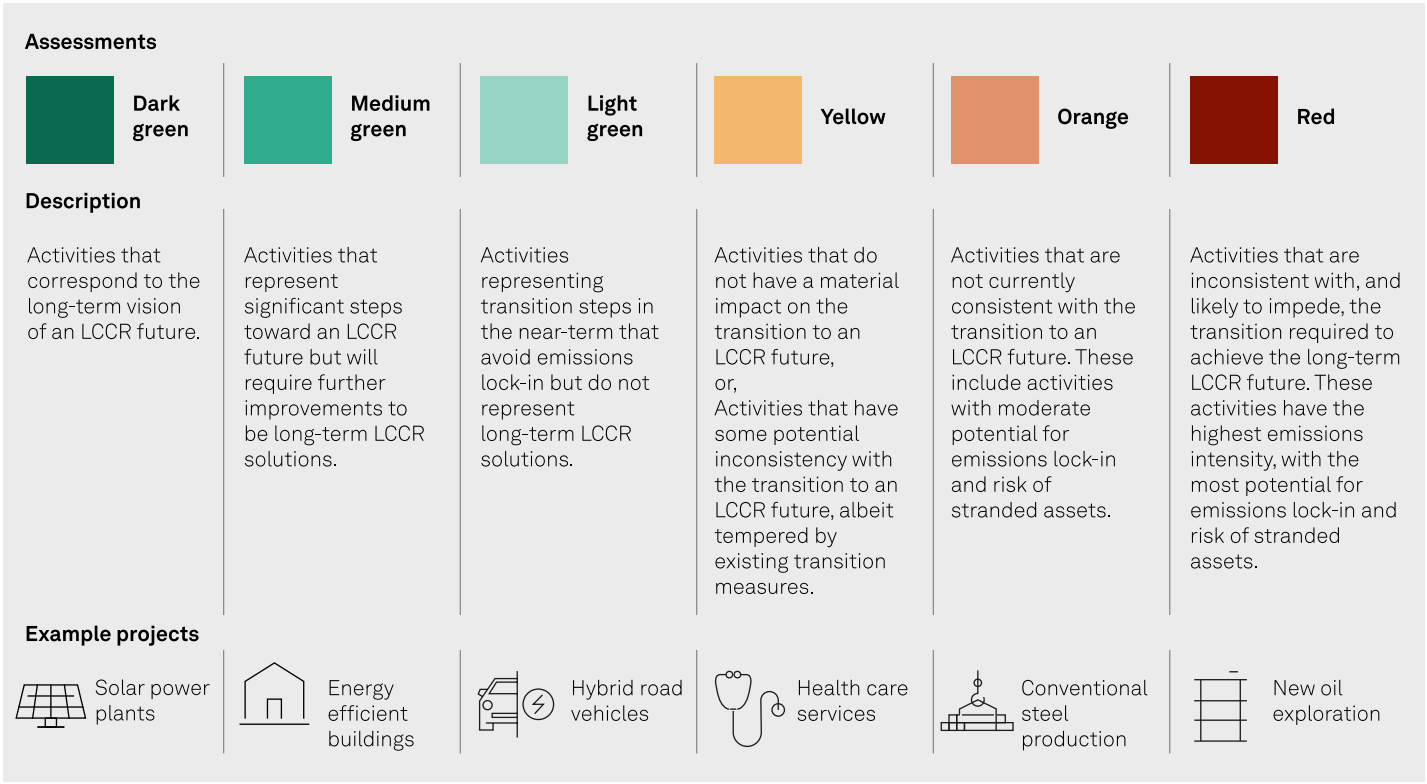
Analytical considerations

- Renewable energy sources such as solar photovoltaics and wind are key elements in limiting global warming to well-below 2°C. Still, these projects may cause land use change and adversely affect local biodiversity and are exposed to physical risks. Energy storage also plays a key role in net-zero energy systems by providing the necessary flexibility and adaptability to balance the intermittency of most renewable energy sources. Batteries require significant amounts of metals such as lithium, cobalt, or copper. The mining of these metals can harm the environment by disrupting natural habitats, causing pollution, and its water and energy intensive nature.
- The company's investments in solar and wind projects support Paris Agreement modelled pathways. These imply that almost all electricity is supplied from zero or low-carbon sources by 2050. As a result, we assess these projects as Dark green. According to the International Energy Agency as of 2023, most of the U.S.' electricity supply comes from natural gas and nuclear energy (42% and 18%, respectively) while renewables such as wind and solar make up a smaller percentage (10% and 5%, respectively). Before the closure of Rush Island, Ameren Missouri's energy supply was primarily coal (55%) and nuclear (26%), but we note that the proportion of coal in the company's energy mix has decreased nearly 20% since 2021. Ameren Missouri aims to achieve net zero carbon emissions by 2045.
- Renewable energies like solar and wind projects can have a negative impact on local biodiversity. Ameren Missouri's biodiversity policy includes avian, bat, pollinator, and waterway protection programs that aim to prevent or reduce impacts on biodiversity from company actions and ongoing operations wherever possible. During facility construction and maintenance activities, Ameren Missouri reports that it works closely with the U.S. Fish & Wildlife Service and other agencies to minimize potential impacts on threatened or endangered species. We note that these policies and initiatives are entity-wide, and the transaction documentation does not outline specific biodiversity management practices for the eligible projects.
- The company's integrated resource plan outlines its intentions to add 2,800 MW of renewable generation by 2030, which includes 1,800 MW of solar and 1,000 MW of wind generation projects. The renewable energy projects will become a part of

the company's overall generation portfolio, and electricity will be sold to individual customers and directly to the wholesale market. This electricity will support the company's clients but also presents diverse environmental risks and benefits, as its end use is ultimately unknown.

- With respect to physical climate risks, the issuer identifies and evaluates the impact of climate change on its operations and commits to continue to do so for future projects.

S&P Global Ratings' Shades of Green



Note: For us to consider use of proceeds aligned with ICMA Principles for a green project, we require project categories directly funded by the financing to be assigned one of the three green Shades.

LCCR--Low-carbon climate resilient. An LCCR future is a future aligned with the Paris Agreement; where the global average temperature increase is held below 2 degrees Celsius (2 C), with efforts to limit it to 1.5 C, above pre-industrial levels, while building resilience to the adverse impact of climate change and achieving sustainable outcomes across both climate and non-climate environmental objectives. Long term and near term--For the purpose of this analysis, we consider the long term to be beyond the middle of the 21st century and the near term to be within the next decade. Emissions lock-in--Where an activity delays or prevents the transition to low-carbon alternatives by perpetuating assets or processes (often fossil fuel use and its corresponding greenhouse gas emissions) that are not aligned with, or cannot adapt to, an LCCR future. Stranded assets--Assets that have suffered from unanticipated or premature write-downs, devaluations, or conversion to liabilities (as defined by the University of Oxford).

Related Research

- Analytical Approach: Second Party Opinions: Use of Proceeds, July 27, 2023
- FAQ: Applying our Integrated Analytical Approach for Use-of-Proceeds Second Party Opinions, July 27, 2023
- Analytical Approach: Shades of Green Assessments, July 27, 2023
- S&P Global Ratings ESG Materiality Maps, July 20, 2022

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