

# **Ameren Corporation**

# 2024 CDP Corporate Questionnaire 2024

#### Word version

#### Important: this export excludes unanswered questions

This document is an export of your organization's CDP questionnaire response. It contains all data points for questions that are answered or in progress. There may be questions or data points that you have been requested to provide, which are missing from this document because they are currently unanswered. Please note that it is your responsibility to verify that your questionnaire response is complete prior to submission. CDP will not be liable for any failure to do so.

Terms of disclosure for corporate questionnaire 2024 - CDP

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#### C1. Introduction

(1.1) In which language are you submitting your response?

Select from:

English

(1.2) Select the currency used for all financial information disclosed throughout your response.

Select from:

**✓** USD

(1.3) Provide an overview and introduction to your organization.

#### (1.3.2) Organization type

Select from:

✓ Publicly traded organization

## (1.3.3) Description of organization

Ameren Corporation, headquartered in St. Louis, MO, is a public utility holding company whose primary assets are its equity interests in its subsidiaries. Ameren's principal subsidiaries are Ameren Illinois Company (AIC), Union Electric Company, doing business as Ameren Missouri (AMO) and Ameren Transmission Company of Illinois (ATXI). Ameren serves approximately 2.4 million electric and more than 900,000 natural gas customers across 64,000 square miles in Illinois and Missouri. In 2023, Ameren had total annual operating revenues of approximately 7.5 billion. AMO operates a rate-regulated electric generation, transmission and distribution business and a rate-regulated natural gas distribution business in Missouri. AIC operates rate-regulated electric transmission, electric distribution, and natural gas distribution businesses in Illinois. ATXI operates a rate-regulated electric transmission business. Ameren's net generating capacity, substantially all of which is owned by AMO, was approximately 10,000 MW as of 12/31/23. In 2023, AMO's energy supply was approximately 55% from coal, 26% from nuclear, 2% from hydro, 5% from wind,

[Fixed row]

(1.4) State the end date of the year for which you are reporting data. For emissions data, indicate whether you will be providing emissions data for past reporting years.

End date of reporting year	Alignment of this reporting period with your financial reporting period	Indicate if you are providing emissions data for past reporting years
12/31/2023	Select from:  ✓ Yes	Select from: ✓ No

[Fixed row]

# (1.4.1) What is your organization's annual revenue for the reporting period?

7500000000

# (1.5) Provide details on your reporting boundary.

Is your reporting boundary for your CDP disclosure the same as that used in your financial statements?
Select from:  ✓ Yes

[Fixed row]

(1.6) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

	Does your organization use this unique identifier?	Provide your unique identifier
ISIN code - equity	Select from: ✓ Yes	US0236081024
CUSIP number	Select from: ✓ Yes	023608102
Ticker symbol	Select from: ✓ Yes	AEE
SEDOL code	Select from: ☑ No	Rich text input [must be under 50 characters]
LEI number	Select from: ☑ No	Rich text input [must be under 50 characters]

[Add row]

# (1.7) Select the countries/areas in which you operate.

Select all that apply

✓ United States of America

# (1.16) In which part of the electric utilities value chain does your organization operate?

#### Electric utilities value chain

- ✓ Distribution
- ☑ Electricity generation
- ✓ Transmission

#### Other divisions

☑ Gas storage, transmission and distribution

- Microgrids
- ✓ Smart grids/demand response

(1.16.1) For your electricity generation activities, provide details of your nameplate capacity and electricity generation specifics for each technology employed.

Coal - Hard

## (1.16.1.1) Own or control operations which use this power generation source

Select from:

Yes

#### (1.16.1.2) Nameplate capacity (MW)

4867

# (1.16.1.3) Gross electricity generation (GWh)

20889.22

# (1.16.1.4) Net electricity generation (GWh)

19581.45

## (1.16.1.5) Comment

The 2023 reported values are based on units operating on coal at Labadie Energy Center; Meramec Energy Center (Units 3&4); Rush Island Energy Center; and Sioux Energy Center. Meramec Energy Center was retired in December 2022 so only net generation was included in 2023 while plant operations were winding down and the facility was still using power. Emissions intensity based on gross generation. Rush Island Energy Center closed in October, 2024.

#### Lignite

## (1.16.1.1) Own or control operations which use this power generation source

Select from:				
✓ No				
(1.16.1.5) Co	mment			
Ameren does not	have generating units th	at utilize lignite.		
Oil				

Select from:

✓ Yes

# (1.16.1.2) Nameplate capacity (MW)

230

# (1.16.1.3) Gross electricity generation (GWh)

0.93

# (1.16.1.4) Net electricity generation (GWh)

0

# (1.16.1.5) Comment

The 2023 reported values are based on units operating on oil at our energy centers. Four units operate on oil. Emissions intensity based on gross generation.

#### Gas

# (1.16.1.1) Own or control operations which use this power generation source

(1.16.1.1) Own or control operations which use this power generation source

Select from:

✓ Yes

## (1.16.1.2) Nameplate capacity (MW)

3143

## (1.16.1.3) Gross electricity generation (GWh)

418.73

# (1.16.1.4) Net electricity generation (GWh)

391.86

#### (1.16.1.5) Comment

The 2023 reported values are based on units operating on natural gas at our energy centers. Ameren Missouri operates a fleet of nine natural gas-fired energy centers in Missouri and Illinois, including Meramec Energy Center (Units 1&2). Meramec Energy Center was retired in December 2022, so only net generation was included in 2023 while plant operations were winding down and the facility was still using power. Emissions intensity based on gross generation.

#### Sustainable biomass

## (1.16.1.1) Own or control operations which use this power generation source

Select from:

✓ No

#### (1.16.1.5) Comment

Ameren does not have generating units that utilize biomass.

#### **Other biomass**

# (1.16.1.1) Own or control operations which use this power generation source

Select from:

**V** No

## (1.16.1.5) Comment

Ameren does not have generating units that utilize biomass.

#### Waste (non-biomass)

#### (1.16.1.1) Own or control operations which use this power generation source

Select from:

Yes

## (1.16.1.2) Nameplate capacity (MW)

14

#### (1.16.1.3) Gross electricity generation (GWh)

73.25

# (1.16.1.4) Net electricity generation (GWh)

59.53

## (1.16.1.5) Comment

The 2023 reported values are based on our landfill gas energy center: Maryland Heights Renewable Energy Center. Added to Ameren Missouri's fleet in 2012, this renewable energy center captures an otherwise untapped resource—methane gas from a landfill—and uses it to create clean, reliable electricity. This facility removes the siloxane, hydrogen sulfides and other non-hydrocarbons prior to combustion. Additionally, energy center equipment compresses and removes moisture from the previously wasted methane from decomposing trash at the adjacent Maryland Heights landfill. Emissions intensity based on gross generation.

#### Nuclear

# (1.16.1.1) Own or control operations which use this power generation source

Select	from
✓ Yes	

# (1.16.1.2) Nameplate capacity (MW)

1236

# (1.16.1.3) Gross electricity generation (GWh)

9603.82

# (1.16.1.4) Net electricity generation (GWh)

9169.79

## (1.16.1.5) Comment

2023 data based on our Callaway Energy Center. Nuclear is a non-carbon emitting energy resource. CO2e Emissions reported for Callaway auxiliary boiler.

#### Fossil-fuel plants fitted with carbon capture and storage

## (1.16.1.1) Own or control operations which use this power generation source

Select from:

✓ No

## (1.16.1.5) Comment

Ameren does not have fossil-fuel plants fitted with CCS.

#### Geothermal

## (1.16.1.1) Own or control operations which use this power generation source

Select from:

**V** No

# (1.16.1.5) Comment

Ameren does not have geothermal generating units.

#### Hydropower

# (1.16.1.1) Own or control operations which use this power generation source

Select from:

✓ Yes

## (1.16.1.2) Nameplate capacity (MW)

388

## (1.16.1.3) Gross electricity generation (GWh)

1029.68

# (1.16.1.4) Net electricity generation (GWh)

1011.04

## (1.16.1.5) Comment

The 2023 reported values are based on our hydroelectric generation resources: Keokuk Energy Center & Osage Energy Center. Hydroelectric power is a non-carbon emitting energy resource.

#### Wind

# (1.16.1.1) Own or control operations which use this power generation source

Select from:

√ Yes

# (1.16.1.2) Nameplate capacity (MW)

699

## (1.16.1.3) Gross electricity generation (GWh)

1972.85

# (1.16.1.4) Net electricity generation (GWh)

1965.6

## (1.16.1.5) Comment

The 2023 reported values are based on Ameren Missouri's wind and wind power purchase agreement. Wind is a non-carbon emitting energy resource.

#### Solar

# (1.16.1.1) Own or control operations which use this power generation source

Select from:

Yes

# (1.16.1.2) Nameplate capacity (MW)

17

# (1.16.1.3) Gross electricity generation (GWh)

22.38

# (1.16.1.4) Net electricity generation (GWh)

22.38

## (1.16.1.5) Comment

The 2023 reported values are based on Ameren Missouri's solar energy centers. Solar is a non-carbon emitting energy resource.

#### Marine

# (1.16.1.1) Own or control operations which use this power generation source

Select from:

✓ No

## (1.16.1.5) Comment

Ameren does not have marine generating units

#### Other renewable

# (1.16.1.1) Own or control operations which use this power generation source

Select from:

✓ No

## (1.16.1.5) Comment

Ameren does not have other renewable generating units.

#### Other non-renewable

# (1.16.1.1) Own or control operations which use this power generation source

Select from:

Yes

## (1.16.1.2) Nameplate capacity (MW)

### (1.16.1.3) Gross electricity generation (GWh)

340.4

# (1.16.1.4) Net electricity generation (GWh)

0

# (1.16.1.5) Comment

The 2023 reported values are based on Ameren Missouri's Taum Sauk Energy Center—a pumped hydroelectric energy center. The net generation includes energy input for pumping. The generation less pumping energy is the reported net generation value. The reported net generation value is a negative value.

#### Total

# (1.16.1.1) Own or control operations which use this power generation source

Select from:

✓ Yes

# (1.16.1.2) Nameplate capacity (MW)

11044

# (1.16.1.3) Gross electricity generation (GWh)

34351.26

# (1.16.1.4) Net electricity generation (GWh)

32071.54

## (1.16.1.5) Comment

The 2022 reported values are based on Ameren's generation. Emissions intensity based on gross generation. [Fixed row]

# (1.24.1) Have you mapped where in your direct operations or elsewhere in your value chain plastics are produced, commercialized, used, and/or disposed of?

## (1.24.1.1) Plastics mapping

Select from:

✓ No, and we do not plan to within the next two years

## (1.24.1.6) Explain why your organization has not mapped plastics in your value chain

Our primary business is generating and providing electricity and delivering natural gas to our customers. These processes do not produce plastics, but some plastics are used in packaging in our direct operations and supply chain. We have a waste management policy that includes intentions to reduce or eliminate waste (including medium and high density plastic), and the directive to work with suppliers to optimize materials and packaging to reduce waste when purchasing materials and equipment. We have implemented some measures to reduce plastic in some instances (i.e. using reusable bins instead of single-use packaging), and Ameren is developing a waste minimization program to reduce the quantity of waste generated by company operations. An inter-departmental team is working to better capture waste data and develop relevant reduction solution targets.

[Fixed row]

- C2. Identification, assessment, and management of dependencies, impacts, risks, and opportunities
- (2.1) How does your organization define short-, medium-, and long-term time horizons in relation to the identification, assessment, and management of your environmental dependencies, impacts, risks, and opportunities?

#### **Short-term**

## (2.1.1) From (years)

0

## (2.1.3) To (years)

5

## (2.1.4) How this time horizon is linked to strategic and/or financial planning

Oversight, accountability and risk management are important elements of an effective strategy for identifying and assessing climate-related risks. This time horizon is linked to Ameren's robust risk management and governance systems to identify, evaluate and manage short (from 0 to 5 years), medium (from 5 to 10 years), and long-term (from 10 to 30 years and beyond) climate-related risks, including risks related to regulatory changes, changes in customer behavior, reputation, and weather.

#### **Medium-term**

#### (2.1.1) From (years)

5

# (2.1.3) To (years)

10

#### (2.1.4) How this time horizon is linked to strategic and/or financial planning

Oversight, accountability and risk management are important elements of an effective strategy for identifying and assessing climate-related risks. This time horizon is linked to Ameren's robust risk management and governance systems to identify, evaluate and manage short (from 0 to 5 years), medium (from 5 to 10 years), and long-term (from 10 to 30 years and beyond) climate-related risks, including risks related to regulatory changes, changes in customer behavior, reputation, and weather.

#### Long-term

## (2.1.1) From (years)

10

## (2.1.2) Is your long-term time horizon open ended?

Select from:

✓ Yes

# (2.1.4) How this time horizon is linked to strategic and/or financial planning

Oversight, accountability and risk management are important elements of an effective strategy for identifying and assessing climate-related risks. This time horizon is linked to Ameren's robust risk management and governance systems to identify, evaluate and manage short (from 0 to 5 years), medium (from 5 to 10 years), and long-term (from 10 to 30 years and beyond) climate-related risks, including risks related to regulatory changes, changes in customer behavior, reputation, and weather.

[Fixed row]

# (2.2) Does your organization have a process for identifying, assessing, and managing environmental dependencies and/or impacts?

# (2.2.1) Process in place

Select from:

✓ Yes

#### (2.2.2) Dependencies and/or impacts evaluated in this process

Select from:

## (2.2.4) Primary reason for not evaluating dependencies and/or impacts

Select from:

☑ Other, please specify: Efforts are currently underway.

#### (2.2.5) Explain why you do not evaluate dependencies and/or impacts and describe any plans to do so in the future

Efforts are currently underway to develop a process to evaluate Ameren's impacts to biodiversity and strategies to minimize those impacts. [Fixed row]

# (2.2.1) Does your organization have a process for identifying, assessing, and managing environmental risks and/or opportunities?

Process in place		Is this process informed by the dependencies and/or impacts process?
Select from: ✓ Yes	Select from:  ✓ Both risks and opportunities	Select from: ✓ Yes

[Fixed row]

# (2.2.2) Provide details of your organization's process for identifying, assessing, and managing environmental dependencies, impacts, risks, and/or opportunities.

Row 1

# (2.2.2.1) Environmental issue

Select all that apply

✓ Climate change

# (2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

- ✓ Impacts
- Risks
- Opportunities

# (2.2.2.3) Value chain stages covered

Select all that apply

- ✓ Direct operations
- ✓ Upstream value chain
- ✓ Downstream value chain

# (2.2.2.4) Coverage

Select from:

✓ Full

# (2.2.2.7) Type of assessment

Select from:

✓ Qualitative and quantitative

# (2.2.2.8) Frequency of assessment

Select from:

✓ More than once a year

# (2.2.2.9) Time horizons covered

#### Select all that apply

- ✓ Short-term
- ✓ Medium-term
- ✓ Long-term

# (2.2.2.10) Integration of risk management process

#### Select from:

✓ Integrated into multi-disciplinary organization-wide risk management process

# (2.2.2.11) Location-specificity used

#### Select all that apply

- ✓ Site-specific
- ✓ Local
- ✓ Sub-national
- National

## (2.2.2.12) Tools and methods used

#### **Enterprise Risk Management**

☑ Enterprise Risk Management

#### International methodologies and standards

☑ IPCC Climate Change Projections

#### Other

- ✓ External consultants
- ✓ Materiality assessment
- ✓ Partner and stakeholder consultation/analysis
- ✓ Scenario analysis
- ☑ Other, please specify: Source Water Vulnerability Assessment

## (2.2.2.13) Risk types and criteria considered

#### **Acute physical**

- Drought
- ✓ Tornado
- Wildfires
- ✓ Heat waves
- ✓ Subsidence
- earthquakes

#### **Policy**

- ✓ Carbon pricing mechanisms
- ☑ Changes to international law and bilateral agreements
- ☑ Changes to national legislation
- ✓ Increased difficulty in obtaining operations permits

- ✓ Cold wave/frost
- ☑ Heavy precipitation (rain, hail, snow/ice)
- ✓ Flood (coastal, fluvial, pluvial, ground water)
- ✓ Storm (including blizzards, dust, and sandstorms)
- ✓ Other acute physical risk, please specify :Pollution incident, toxic spills,

#### Reputation

- ☑ Increased partner and stakeholder concern and partner and stakeholder negative feedback
- ✓ Negative press coverage related to support of projects or activities with negative impacts on the environment (e.g. GHG emissions, deforestation & conversion, water stress)

#### **Technology**

- ✓ Transition to lower emissions technology and products
- ✓ Unsuccessful investment in new technologies

#### Liability

- ☑ Exposure to litigation
- ✓ Non-compliance with regulations
- ☑ Other liability, please specify :Moratoria and voluntary agreement

## (2.2.2.14) Partners and stakeholders considered

Select all that apply

✓ NGOs
✓ Regulators

✓ Customers
✓ Local communities

☑ Employees

☑ Indigenous peoples

✓ Investors
✓ Other, please specify: Water utilities at a local level, other commodity

users/producers at a local level, other water users at the basin/catchment level

Suppliers

## (2.2.2.15) Has this process changed since the previous reporting year?

Select from:

✓ No

## (2.2.2.16) Further details of process

Oversight, accountability and risk management are important elements of an effective strategy for identifying and assessing climate-related risks. We have established robust risk management and governance systems to identify, evaluate and manage short (0 to 5 years), medium (5 to 10 years), and long-term (10 to 30 years and beyond) climate-related risks, including risks related to regulatory changes, changes in customer behavior, reputation, and weather. The Audit and Risk Committee (ARC) of Ameren's Board of Directors oversees our enterprise risk management (ERM) program. Ameren's ARC meets at least five times per year. The ARC relies on management through the Executive Leadership Team (ELT) to manage and report risks across the corporation. The ELT formed the Risk Management Steering Committee (RMSC) to oversee risk management and the ERM process. The RMSC is chaired by the CFO and comprised of eight senior executivessegment risk portfolio management, create solid ties to emergent risks, and incorporate detailed analysis of topical areas including environmental. The ERM program assists management in identifying, assessing, and managing risks and supports management in risk-based decision making, enabling achievement of corporate objectives in a manner consistent with Ameren's overall risk tolerance. Ameren's ERM process is a robust system whose primary objective is to assist management in identifying, evaluating, and mitigating risks in a timely fashion. It plays a critical role in the sustained, successful execution of Ameren's long-term strategy and achieving its goals to deliver superior long-term value to customers and shareholders. Risk level assessments are performed within the business on a consistent schedule and are based on a combination of both quantitative and qualitative metrics. The quantitative metrics include financial impacts: Capital expenditures, O&M costs, Earnings per Share, and Customer Affordability. Qualitative impacts include Reputation and Brand, Regulatory and Legal, People, and Safety and Security. In addition to the ERM program, Ameren management reports regularly on environmental compliance matters to the Nuclear, Operations and Environmental Sustainability Committee of Ameren's Board of Directors. Working closely with the Nuclear, Operations and Environmental Sustainability Committee, the full Board of Directors oversees environmental matters as they relate to policy and strategy, including those related to planning for the potential implications of climate-related risks.

#### Row 2

## (2.2.2.1) Environmental issue

Select all	that	appi	ly
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Water

# (2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

- Impacts
- ✓ Risks
- Opportunities

# (2.2.2.3) Value chain stages covered

Select all that apply

✓ Direct operations

## (2.2.2.4) Coverage

Select from:

✓ Full

# (2.2.2.7) Type of assessment

Select from:

✓ Qualitative and quantitative

# (2.2.2.8) Frequency of assessment

Select from:

Annually

# (2.2.2.9) Time horizons covered

Select all that apply

- ✓ Short-term
- ✓ Medium-term
- ✓ Long-term

# (2.2.2.10) Integration of risk management process

Select from:

✓ Integrated into multi-disciplinary organization-wide risk management process

# (2.2.2.11) Location-specificity used

Select all that apply

- ✓ Site-specific
- ✓ Local

## (2.2.2.12) Tools and methods used

#### **Enterprise Risk Management**

☑ Enterprise Risk Management

#### **Databases**

✓ Nation-specific databases, tools, or standards

## (2.2.2.13) Risk types and criteria considered

#### **Acute physical**

- Drought
- ✓ Heat waves
- ✓ Toxic spills
- ✓ Cold wave/frost
- ✓ Pollution incident

- ✓ Heavy precipitation (rain, hail, snow/ice)
- ✓ Flood (coastal, fluvial, pluvial, ground water)
- ☑ Storm (including blizzards, dust, and sandstorms)

#### **Chronic physical**

- ✓ Water availability at a basin/catchment level
- ☑ Water quality at a basin/catchment level

#### Reputation

- ✓ Increased partner and stakeholder concern and partner and stakeholder negative feedback
- ✓ Negative press coverage related to support of projects or activities with negative impacts on the environment (e.g. GHG emissions, deforestation & conversion, water stress)

#### Liability

☑ Other liability, please specify: Implications of water on your key commodities/raw materials, water regulatory frameworks, status of ecosystems and habitats, access to full-functioning, safely managed WASH services for all employees

# (2.2.2.14) Partners and stakeholders considered

Select all that apply

✓ NGOs

✓ Local communities

- Customers
- ✓ Investors
- Regulators

## (2.2.2.15) Has this process changed since the previous reporting year?

Select from:

✓ No

## (2.2.2.16) Further details of process

Ameren's Enterprise Risk Management (ERM) process is a robust system whose primary objective is to assist management in identifying, evaluating, and mitigating risks in a timely fashion. Ameren's ERM COSO framework's purpose is to assess potential risk magnitude in order to focus attention on priority threats and lay the groundwork for risk response. Risk level assessments are performed on a consistent schedule and using quantitative and qualitative metrics. Quantitative metrics include financial impacts: Capital expenditures, O&M costs, Earnings per Share, and Customer Affordability. Qualitative impacts include Reputation and Brand, Regulatory and Legal, People, and Safety and Security. Ameren's Board of Directors delegates the risk monitoring function to the Audit and Risk Committee (ARC).

The ARC relies on the Risk Management Steering Committee (RMSC) to oversee risk management across the Corporation. This committee meets monthly to discuss various risks and mitigation plans, is chaired by the CFO, and comprised of Senior Executives. We also have an Environmental Strategy Risk assessment, with risk held by our individual operating centers. Our internal Climate and Environmental Advocacy Team meets about monthly to discuss ongoing and emerging environmental topics including Air, Climate, Water, Land & Wildlife, Waste and Chemical Management in our direct operations. The risks are scored and summarized and (at a minimum) reported to the RMSC (or on as-needed basis) as well as among our stakeholders. Full coverage of our direct operations was chosen because the regions included in the assessment incorporated all of our direct operations, through 2030 (so 6 years). We conducted a Water Resilience Assessment (using WRI Aqueduct) to assess current and future availability of water resources. In connection with NPDES (wastewater discharge) permit renewals, we continually monitor intake and effluent water for a broad range of chemical constituents. We performed risk assessments of river water quality around ash basins as part of the CCR and ash basin studies related to potential exposure pathways from constituents of concern potentially leaching from ash basins into groundwater and then the rivers in order to reduce the risk of contamination to drinking water sources and prioritize the availability of clean drinking water (WASH) for our employees and communities.

#### Row 3

#### (2.2.2.1) Environmental issue

Select all that apply

✓ Biodiversity

# (2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

- ✓ Impacts
- Risks
- Opportunities

## (2.2.2.3) Value chain stages covered

Select all that apply

✓ Direct operations

#### (2.2.2.4) Coverage

Select from:

**▼** Full

# (2.2.2.7) Type of assessment

Select from:

✓ Qualitative and quantitative

# (2.2.2.8) Frequency of assessment

Select from:

Annually

# (2.2.2.9) Time horizons covered

Select all that apply

- ✓ Short-term
- ✓ Medium-term
- ✓ Long-term

# (2.2.2.10) Integration of risk management process

Select from:

✓ Integrated into multi-disciplinary organization-wide risk management process

# (2.2.2.11) Location-specificity used

Select all that apply

- ✓ Site-specific
- ✓ Local
- ✓ Sub-national
- National

# (2.2.2.12) Tools and methods used

#### Commercially/publicly available tools

☑ BISI – Biodiversity Indicators for Site-based impacts

#### **Enterprise Risk Management**

☑ Enterprise Risk Management

#### **Databases**

✓ Nation-specific databases, tools, or standards

#### Other

☑ Other, please specify: Partnerships to enhance biodiversity

## (2.2.2.14) Partners and stakeholders considered

Select all that apply

- ✓ Investors
- ✓ Local communities
- ✓ NGOs
- Regulators

# (2.2.2.15) Has this process changed since the previous reporting year?

Select from:

✓ No

#### (2.2.2.16) Further details of process

Ameren's Enterprise Risk Management (ERM) process is a robust system whose primary objective is to assist management in identifying, evaluating, and mitigating risks in a timely fashion. Ameren's ERM COSO framework's purpose is to assess potential risk magnitude in order to focus attention on priority threats and lay the groundwork for risk response. Risk level assessments are performed on a consistent schedule and using quantitative and qualitative metrics. Quantitative metrics include financial impacts: Capital expenditures, O&M costs, Earnings per Share, and Customer Affordability. Qualitative impacts include Reputation and Brand, Regulatory and Legal, People, and Safety and Security. Ameren's Board of Directors delegates the risk monitoring function to the Audit and Risk Committee (ARC). The ARC relies on the Risk Management Steering Committee (RMSC) to oversee risk management across the Corporation. This committee meets monthly to discuss various risks and mitigation plans, is chaired by the CFO, and comprised of Senior Executives. We also have an Environmental Strategy Risk assessment, with risk

held by our individual operating centers. Our internal Climate and Environmental Advocacy Team meets about monthly to discuss ongoing and emerging environmental topics including Air, Climate, Water, Land & Wildlife, Waste and Chemical Management in our direct operations. The risks are scored and summarized and (at a minimum) reported to the RMSC (or on as-needed basis) as well as among our stakeholders. Full coverage of our direct operations was chosen because the regions included in the assessment incorporated all of our direct operations, through 2030 (so 6 years). We conducted a Water Resilience Assessment (using WRI Aqueduct) to assess current and future availability of water resources. In connection with NPDES (wastewater discharge) permit renewals, we continually monitor intake and effluent water for a broad range of chemical constituents. We performed risk assessments of river water quality around ash basins as part of the CCR and ash basin studies related to potential exposure pathways from constituents of concern potentially leaching from ash basins into groundwater and then the rivers in order to reduce the risk of contamination to drinking water sources and prioritize the availability of clean drinking water (WASH) for our employees and communities.

(2.2.7) Are the interconnections between environmental dependencies, impacts, risks and/or opportunities assessed?

(2.2.7.1) Interconnections between environmental dependencies, impacts, risks and/or opportunities assessed

Select from:

[Add row]

Yes

#### (2.2.7.2) Description of how interconnections are assessed

Ameren has established risk management and governance systems to identify, evaluate and manage short, medium, and long-term climate-related risks, including risks related to regulatory changes, changes in customer behavior, reputation and weather. The Audit and Risk Committee (ARC) of Ameren's Board of Directors (BOD) oversees our enterprise risk management (ERM) program. The ARC meets at least five times a year and relies on the Executive Leadership Team (ELT) to manage and report risks across the corporation. The ELT formed the Risk Management Steering Committee (RMSC) to oversee the ERM process. The RMSC is chaired by the CFO and comprised of eight senior executives and meets monthly throughout the year. The goals of the ERM program are to enhance the ERM structure, further enable cross segment risk portfolio management, create solid ties to emergent risks, and incorporate detailed analysis of topical areas including environmental. Each enterprise risk has an internal owner who periodically reviews and updates the risk and risk mitigation plan. Risks and opportunities are assessed using a consistent risk framework and methodology. The ERM process is a robust system whose primary objective is to assist management in identifying, evaluating, and mitigating risks in a timely fashion. It plays a critical role in the sustained, successful execution of our long-term strategy and achieving goals to deliver superior long-term value to customers and shareholders. The ERM COSO framework assesses potential risk impacts to prioritize the most important threats and to lay the groundwork for risk response. Risk level assessments are performed within the business on a consistent schedule based on a combination of both quantitative and qualitative metrics. Quantitative metrics include financial impacts: Capital expenditures, O&M costs, Earnings per Share, and Customer Affordability. Qualitative impacts include Reputation & Brand, Regulatory & Legal, People, and Safety & Security. All risks are aggregated to corporate Risk Heat Map categories. Each category is assessed and determined to be a high, medium or low risk. The overall risk assessment of each risk category is discussed with the ELT and reviewed and approved by the RMSC at least annually and those that are considered high or medium risks are discussed with the full BOD or a committee each year. This process helps senior management identify risks/opportunities, mitigation strategies and potential financial implications. Recommendations are communicated to the appropriate business segments and the ELT. In addition to the ERM program, management reports regularly on environmental compliance matters to the Nuclear,

Operations and Environmental Sustainability Committee (NOESC) of the BOD. Working closely with the NOESC, the full BOD oversees environmental matters as they relate to policy and strategy, including those related to planning for the potential implications of climate-related risks.

[Fixed row]

#### (2.3) Have you identified priority locations across your value chain?

## (2.3.1) Identification of priority locations

Select from:

✓ Yes, we are currently in the process of identifying priority locations

## (2.3.2) Value chain stages where priority locations have been identified

Select all that apply

✓ Direct operations

### (2.3.3) Types of priority locations identified

#### Sensitive locations

- ✓ Areas important for biodiversity
- ✓ Areas of limited water availability, flooding, and/or poor quality of water

## (2.3.4) Description of process to identify priority locations

In our effort to be good stewards of the thousands of acres of land we maintain, the Ameren Biodiversity Policy guides us in preserving natural habitats, supporting conservation efforts and minimizing our impacts on wildlife as much as practicable. We focus on where we can make the most impact in our service territory – rivers, pollinators, birds and bats for any voluntary enhancement projects. Ameren works closely with the U.S. Fish and Wildlife Service and other agencies as required to review any construction projects and avoid or minimize potential impacts, where possible, and mitigate impacts if they are impossible to avoid. We conduct desktop review of publicly available information and databases to assess priority locations.

## (2.3.5) Will you be disclosing a list/spatial map of priority locations?

Select from:

☑ No, we have a list/geospatial map of priority locations, but we will not be disclosing it

#### (2.4) How does your organization define substantive effects on your organization?

#### **Risks**

## (2.4.1) Type of definition

Select all that apply

Qualitative

Quantitative

## (2.4.6) Metrics considered in definition

Select all that apply

✓ Likelihood of effect occurring

## (2.4.7) Application of definition

Ameren's ERM system defines substantive risk based on the significant qualitative and quantitative risk assessment impact level. Ameren's ERM COSO framework considers probability and impact, both on a 1-5 scale. The overall risk level is determined based on the probability and the highest impact resulting in a risk score of low (1-9), medium (10-18), or high (19-25). ERM defines substantive when quantitative impacts reach a significant level when a risk occurs at CapEx or O&M reaching greater than or equal to 50M, Earnings Impact (onetime) at greater than 200M, and/or Customer Affordability CAGR of greater than 0.75%. Qualitative impacts reach substantive at a significant impact level when a risk occurs and, for example, enterprise level assets are damaged, an event reaches national news coverage, there is reputational damage to Ameren, and/or the workforce becomes disengaged and higher levels of turnover are occurring. [Add row]

(2.5) Does your organization identify and classify potential water pollutants associated with its activities that could have a detrimental impact on water ecosystems or human health?

## (2.5.1) Identification and classification of potential water pollutants

Select from:

✓ Yes, we identify and classify our potential water pollutants

# (2.5.2) How potential water pollutants are identified and classified

Ameren evaluates water-related issues regularly as part of the overall business strategy and financial planning. These are driven by the Clean Water Act and include thermal discharges, organism entrainment and impingement, effluent constituent limitations, and coal combustion residual (CCR) requirements. Ameren identifies and classifies potential water pollutants based on environmental regulatory requirements and the compliance methodologies that are in place for such requirements. We also respond to interactions with our customers and stakeholders. We maintain current National Pollutant Discharge Elimination System (NPDES) permits and comply with applicable state water quality standards. The NPDES process follows the pollutant list found in the Code of Federal Regulations at 40 CFR 401.15. The state permitting agency and Ameren work together to determine the applicable industrial processes present. We identify potential water pollutants that may include: hydrocarbons, CCR, radiation, thermal discharges, and additional pollutants included on the federal Clean Water Act (CWA). Dedicated water quality personnel routinely monitor effluent quality and prepare reports to regulatory agencies. Potential regulatory changes and business risks and opportunities are identified, and regularly reported to teams including senior executives throughout Ameren. We performed ecological and human health risks assessments associated with operations and management at our coal facilities. [Fixed row]

(2.5.1) Describe how your organization minimizes the adverse impacts of potential water pollutants on water ecosystems or human health associated with your activities.

#### Row 1

### (2.5.1.1) Water pollutant category

Select from:

✓ Oil

# (2.5.1.2) Description of water pollutant and potential impacts

Hydrocarbons: Toxicity studies have identified alkyl benzenes and naphthalene as chemicals of concern in hydrocarbons because of their water solubility and rapid partitioning into aquatic organisms. For hydrocarbons to constitute a threat to human health or the environment, concentration levels must exist above a health based screening level and there must be a pathway of actual exposure.

### (2.5.1.3) Value chain stage

✓ Direct operations

# (2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

- ☑ Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience
- ✓ Industrial and chemical accidents prevention, preparedness, and response
- ☑ Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

### (2.5.1.5) Please explain

Ameren's strategy is to comply with permitting and regulatory requirements and minimizing the impact of operations on the environment. The EPA regulates direct discharges from our facility operations and issues NPDES Permits. Routine analysis of effluent is used to verify compliance to the standards. Each Ameren facility with 1,320 gallons or more of oil storage has instituted a Spill Prevention Control and Countermeasures (SPCC) Plan to aid the facility in preventing oil spills, leaching, and leakages from reaching navigable waters. Monthly SPCC inspections evaluate oil storage areas for compliance with the plan. Ameren's SPCC Plans also have response procedures to manage and minimize the impact of a spill. Spill kits and clean up material are maintained near locations of potential spills. Ameren employees involved in this part of the business receive annual spill response training and drills to maintain emergency preparedness. Success is measured through the speed of response to potential spill emergencies, and our compliance with permit standards. We strive for 100% compliance.

#### Row 2

# (2.5.1.1) Water pollutant category

Select from:

✓ Inorganic pollutants

# (2.5.1.2) Description of water pollutant and potential impacts

Coal Combustion Residuals (CCR) is defined as fly ash, bottom ash, boiler slag, and flue gas desulfurization materials generated from burning coal to make electricity. CCRs are regulated as non-hazardous solid waste under the Resource Conservation and Recovery Act. CCR contains mostly silicon, iron, and aluminum with trace amounts of mercury, cadmium, boron, and arsenic among other metals. Without proper management, these contaminants can pollute waterways, ground water, drinking water, and could damage the habitat of local threatened and endangered fish. For a pollutant to constitute a threat to human health or the environment, concentration levels must exist above a health-based screening level and there must be a pathway of actual exposure. It is important to comply with the various federal and state regulatory programs related to CCR management in order to ensure minimal impact to human health and the environment.

### (2.5.1.3) Value chain stage

Select all that apply

✓ Direct operations

### (2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

- ✓ Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience
- ☑ Reduction or phase out of hazardous substances
- ☑ Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements
- ✓ Upgrading of process equipment/methods

### (2.5.1.5) Please explain

In 2023 Ameren has three coal -fired energy centers that manage CCR in various impoundments and landfills, regulated by the National Pollutant Discharge Elimination System (NPDES). To maintain low risk of leaching or leakages, ongoing off-site sampling adjacent to our energy centers confirms that public water supply resources comply with drinking water standards. We regularly monitor for groundwater impacts to comply with permitting requirements and to minimize risk regarding public or environmental health. In 2018, we conducted ecological and human health risks assessments associated with our operations and CCR management at all coal-fired energy centers, which considered discharges to both receiving surface waters and adjacent ground waters. The studies concluded surface impoundments do not present a risk to human health or the environment. As of 2019 Ameren has permanently discontinued wet transport of coal ash at 8 of its 12 coal combustion units in operation then and has transitioned all units operating past 2022 to dry ash handling. The remaining four units retired in 2022, reducing additional creation of CCR at this location. The dry handing of CCR uses lower volumes of water, enhancing the efficiency of water use and further reducing the risk of surface and groundwater contamination in future. Technical reports concerning CCR, annual groundwater monitoring reports, and extensive answers to the community's comments and questions, are available on Ameren's web site.

#### Row 3

# (2.5.1.1) Water pollutant category

Select from:

☑ Other nutrients and oxygen demanding pollutants

## (2.5.1.2) Description of water pollutant and potential impacts

Thermal Pollution: Elevated temperatures in cooling water discharges may result in either acute or chronic toxicity to aquatic life in the receiving stream, dependent upon temperatures and exposure. Higher temperatures of water generally decrease the level of dissolved oxygen available to organisms and aquatic life.

### (2.5.1.3) Value chain stage

Select all that apply

✓ Direct operations

# (2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

☑ Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

### (2.5.1.5) Please explain

Thermal impacts from our three coal and single nuclear generating facilities operating in 2023 are studied extensively. These include evaluations of entrainment and impingement aquatic organisms in cooling water systems and resulting cooling water effluent. With relatively recent revisions to thermal and water intake provisions in the federal Clean Water Act ("Sections 316 a and b"), updated and expanded studies have been included in the latest round of wastewater NPDES wastewater permits and are currently underway. The purpose of these studies is to determine whether Ameren facilities are having an adverse impact on the aquatic organisms in the adjacent rivers. Several studies have been completed and submitted to the permitting authority while several are ongoing. Interim results from one of these studies for the Labadie Energy Center concludes that the balanced indigenous community of aquatic organisms near the thermal discharge are adequately protected and are not adversely impacted. Success is measured by striving to achieve a 100% compliance rate with applicable laws and regulations.

#### Row 4

### (2.5.1.1) Water pollutant category

Select from:

✓ Other physical pollutants

# (2.5.1.2) Description of water pollutant and potential impacts

Radiation: Radiation has an ionizing effect on living matter, and different particles can penetrate various layers of material which may pose radiation risks to humans and environments in the event of a contamination event. As nuclear power plants use Uranium-235 (a radioactive material), the primary concern is radiation exposure. The risk of radiation exposure at nuclear power plants in the United States is small because of the diverse and redundant barriers and safety systems in

place at nuclear power plants, the training and skills of the reactor operators, testing and maintenance activities, and the regulatory requirements and oversight of the U.S. Nuclear Regulatory Commission. In addition, cooling water cools the condenser in the turbine hall, but is never in contact with the nuclear part of the plant.

# (2.5.1.3) Value chain stage

Select all that apply

✓ Direct operations

# (2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

- ✓ Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience
- ☑ Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

# (2.5.1.5) Please explain

Our nuclear Callaway Energy Center is subject to stringent controls per the terms of its federal Nuclear Regulatory Commission (NRC) license, as well as other state and federal regulations and permit programs. Routine monitoring is performed and reported annually to the state of Missouri and the NRC. All effluents are sampled, analyzed and treated prior to discharge. We comply with radiation dose limits for the public and employees, monitor discharge and the surrounding environment, and provide annual reports to the NRC. In addition, our internal procedures include written compliance plans, consistent monitoring, biological studies, self-assessments and internal audits, staff training, and implementation of best management practices to prevent harmful levels of radiation enter waterways or the surrounding environment. Ameren Missouri also has sufficient installed spent fuel storage capacity, including wet pool and dry cask storage, capacity sufficient for the licensed life of the facility. Callaway participates in the Nuclear Energy Institute's Ground Water Protection Initiative, which identifies actions to improve utilities' management and response to instances where the inadvertent release of radioactive substances may result in low but detectible levels of plant-related materials in subsurface soils and water. Success is measured by striving to achieve a 100% compliance rate with applicable laws and regulations.

[Add row]

### C3. Disclosure of risks and opportunities

(3.1) Have you identified any environmental risks which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future?

### Climate change

# (3.1.1) Environmental risks identified

Select from:

✓ Yes, only within our direct operations

#### Water

### (3.1.1) Environmental risks identified

Select from:

☑ Yes, both in direct operations and upstream/downstream value chain

#### **Plastics**

# (3.1.1) Environmental risks identified

Select from:

✓ No

(3.1.2) Primary reason why your organization does not consider itself to have environmental risks in your direct operations and/or upstream/downstream value chain

Select from:

✓ Other, please specify :Not assessed and we do not plan to within the next two years

### (3.1.3) Please explain

Our primary products and business is generating and providing electricity and delivering natural gas to our customers. These processes do not produce plastics, but some plastics are used in packaging in our direct operations and supply chain. We have a waste management policy that includes intentions to reduce or eliminate waste (including medium and high density plastic), and the directive to work with suppliers to optimize materials and packaging to reduce waste when purchasing materials and equipment. We have implemented some measures to reduce plastic in some instances (i.e. using reusable bins instead of single-use packaging), and Ameren is developing a waste minimization program to reduce the quantity of waste generated by company operations. An inter-departmental team is working to better capture waste data and develop relevant reduction solution targets.

[Fixed row]

(3.1.1) Provide details of the environmental risks identified which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future.

### Climate change

### (3.1.1.1) Risk identifier

Select from:

✓ Risk1

# (3.1.1.3) Risk types and primary environmental risk driver

#### **Technology**

☑ Transition to lower emissions technology and products

### (3.1.1.4) Value chain stage where the risk occurs

Select from:

Direct operations

## (3.1.1.6) Country/area where the risk occurs

Select all that apply

✓ United States of America

### (3.1.1.9) Organization-specific description of risk

Ameren Missouri's (AMO) Integrated Resource Plan (IRP) is designed to ensure that customers' long-term electric energy needs are met in a reliable, cost-effective and environmentally responsible manner. Ameren Missouri adopted a new preferred resource plan with its 2023 Integrated Resource Plan filing. In that filing, the Company re-affirmed that its new Preferred Resource Plan includes the addition of 2,000 MW of new wind generation and 2,700 MW of new solar generation and implementation of energy efficiency and demand response programs, as well as continued pursuit of demand side management (DSM) programs throughout the entire planning horizon at the Realistic Achievable Potential level. Ameren is targeting reductions in Scope 1 and 2 greenhouse gas emissions of 60 percent by 2030 and 85 percent by 2040 (based on 2005 levels), with a goal of achieving net-zero emissions by 2045. More information is available at Ameren.com/IRP.

# (3.1.1.11) Primary financial effect of the risk

Select from:

✓ Increased capital expenditures

# (3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

✓ Medium-term

### (3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

✓ About as likely as not

# (3.1.1.14) Magnitude

Select from:

Unknown

### (3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

✓ No

## (3.1.1.28) Explanation of cost calculation

### (3.1.1.29) Description of response

Ameren's strategy for addressing climate risk is largely embedded in Ameren Missouri's 2023 Integrated Resource Plan (IRP), which was filed with the MoPSC in September 2023 and reflects Ameren Missouri's preferred resource plan between 2024 and 2043. This plan reaffirms Ameren's net-zero carbon emissions reduction goal by 2045. It outlines Ameren Missouri's intent to retire more than 2,500 MW of fossil-fired generation by 2030 and add 2,800 MW of additional new, clean, renewable (wind and solar) generation by 2030 and a total of 4,700 MW by 2036. Additionally, we plan to add 400 MW of battery storage by 2030 and a total of 800 MW by 2035. Ameren Missouri's ability to construct and/or acquire wind, solar, and other renewable energy generation facilities and battery storage, as well as natural gas-fired energy centers, retire fossil fuel-fired energy centers, and implement new or existing customer energy-efficiency programs, including any such construction, acquisition, retirement, or implementation in connection with its Smart Energy Plan, integrated resource plan, or emissions reduction goals, and to recover its cost of investment, a related return, and, in the case of customer energy-efficiency programs, any lost margins in a timely manner, each of which is affected by the ability to obtain all necessary regulatory and project approvals, including certificates of convenience and necessity from the MoPSC or any other required approvals for the addition of renewable resources

#### Water

### (3.1.1.1) Risk identifier

Select from:

✓ Risk1

# (3.1.1.3) Risk types and primary environmental risk driver

#### **Chronic physical**

✓ Water stress

# (3.1.1.4) Value chain stage where the risk occurs

Select from:

✓ Upstream value chain

# (3.1.1.6) Country/area where the risk occurs

✓ United States of America

# (3.1.1.7) River basin where the risk occurs

Select all that apply

✓ Mississippi River

### (3.1.1.9) Organization-specific description of risk

We studied the current and future resilience of water resources to understand potential impact on our service area and supply chain, and reported them in our 2018 Water Resiliency Assessment report. This voluntary report shows that, for the time period around 2030, water stress is projected to be near normal for most of the Midwest (our regions of direct operations) but could increase in the Powder River Basin (PRB) in Wyoming, a key portion of our supply chain. A significant amount of our coal supply is from the PRB. Also, barges are sometimes used in our upstream supply chain to transport coal. We monitor our supply chain and are not aware of any water-related risks that cannot be managed. Ameren's strategy for addressing climate risk is largely embedded in AMO's 2023 Integrated Resource Plan (IRP), which outlines plans to retire approximately 2,500 MW of fossil-fired generation by 2030. The coal-fired Meramec Energy Center was retired at the end of 2022. The IRP also includes the addition of 2,800 MW of new, clean, renewable generation by 2030 and a total of 4,700 MW by 2040. The IRP also includes the addition of 800 MW of battery storage by 2035. To maintain reliability and resiliency for customers, IRP includes the addition of an 800 MW gas simple cycle energy center by 2027 and a 1,200 MW combined-cycle energy center by 2033. These plans would reduce the amount coal coming from the PRB. Risk of potentially increasing risk of water scarcity in the PRB will be monitored.

# (3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

✓ Medium-term

# (3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

Unlikely

# (3.1.1.14) Magnitude

Select from:

✓ Low

# (3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

✓ No

### (3.1.1.26) Primary response to risk

#### Infrastructure, technology and spending

✓ Other infrastructure, technology and spending, please specify: Increase investment in new technology

### (3.1.1.27) Cost of response to risk

0

### (3.1.1.28) Explanation of cost calculation

Our risk of supply chain disruption due to water scarcity is expected to decrease over time in connection with the transition of our generation resources. Our transition plan, as reflected in Ameren Missouri's IRP, includes significant investment in renewable generation, storage, and a combined cycle gas Energy Center.

### (3.1.1.29) Description of response

Ameren Missouri's Integrated Resource Plan (IRP) outlines plans to significantly increase our renewable energy portfolio and accelerate the retirement of coal-fired generation, which will decrease our dependence on coal in our supply chain (and mitigate risk to potential disruptions). These investments in renewable energy generation technologies coupled with the retirement of coal-fired energy centers will reduce reliance on coal coming from the PRB in the future.

#### Water

### (3.1.1.1) Risk identifier

Select from:

✓ Risk2

### (3.1.1.3) Risk types and primary environmental risk driver

#### **Policy**

✓ Other policy risk, please specify: Regulatory Uncertainty

# (3.1.1.4) Value chain stage where the risk occurs

Select from:

Direct operations

# (3.1.1.6) Country/area where the risk occurs

Select all that apply

United States of America

### (3.1.1.7) River basin where the risk occurs

Select all that apply

✓ Mississippi River

# (3.1.1.9) Organization-specific description of risk

Section 316(b) of the US Clean Water Act (CWA) establishes criteria to protect fish and other aquatic organisms from detrimental impacts associated with large water intake structures. At power plants (including Ameren's energy centers), aquatic organisms can be impinged or entrained within cooling water intake structures, piping and condenser systems. The US EPA issued revised Section 316(b) regulations in 2014, requiring extensive studies for review by the MO Department of Natural Resources and other agencies. These include assessments and cost-benefit analysis of various control technologies, up to and including cooling tower retrofits. Outcomes of CWA Section 316(b) studies might result in regulatory agencies requiring cooling system modifications or replacement technologies at our Rush Island and Sioux energy centers. Ameren will be working closely with the resource agencies over the next 2-3 years to implement required technologies. It is possible that one of the recommendations to come out of these analyses will require installation of modified traveling screens at one or more of our coal-fired energy centers included in the studies. Thus, as part of our risk assessment processes, the estimated costs for the installation of the modified screens are provided in Table 5.3 of Ameren's 2020 IRP (for Rush Island and Sioux Energy Centers) and are included in the potential financial impact figure below. See the 2022 update to Ameren's 2020 IRP for details. www.ameren.com/IRP.

## (3.1.1.11) Primary financial effect of the risk

Select from:

✓ Increased cost of capital

# (3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

✓ Medium-term

### (3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

Likely

### (3.1.1.14) Magnitude

Select from:

✓ Medium-high

# (3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

Yes

### (3.1.1.25) Explanation of financial effect figure

Costs for traveling screen retrofits at the the energy centers were estimated in Table 5.2 of Chapter 5, Environmental Compliance, (Environmental Mitigation Costs) as part of the development of Ameren Missouri's Integrated Resource Plan (IRP)(as referenced above). These costs were estimated as a part of our triennial filing of our IRP. The Integrated Resource Plan is available at: https://www.ameren.com/IRP

### (3.1.1.26) Primary response to risk

#### Infrastructure, technology and spending

# (3.1.1.27) Cost of response to risk

24000000

### (3.1.1.28) Explanation of cost calculation

The approximate cost of fitting one energy centers with a traveling screen is estimated to be 24million dollars, as reported in table 5.2 of Ameren Missouri's IRP.

# (3.1.1.29) Description of response

Upon completion of the current Section 316(b) studies, we begin dialogue with the regulatory agencies, and if warranted, begin design, budgeting and procurement of the required technologies.

#### Water

# (3.1.1.1) Risk identifier

Select from:

✓ Risk3

# (3.1.1.3) Risk types and primary environmental risk driver

#### **Policy**

☑ Regulation of discharge quality/volumes

# (3.1.1.4) Value chain stage where the risk occurs

Select from:

✓ Direct operations

### (3.1.1.6) Country/area where the risk occurs

Select all that apply

✓ United States of America

### (3.1.1.7) River basin where the risk occurs

Select all that apply

Mississippi River

# (3.1.1.9) Organization-specific description of risk

Section 316(a) of the US Clean Water Act requires limitations on thermal discharges from industrial sources, including power plants. Cooling water discharges at Ameren's energy centers are regulated by the US Environmental Protection Agency and the Missouri Department of Natural Resources, through the NPDES (National Pollutant Discharge Elimination System) permit program. As required by the current Labadie Energy Center permit, extensive thermal studies, monitoring, and modeling are being conducted at that energy center. Based on the results to date, we believe we are in full compliance with Section 316(a). In the event of changing thermal conditions, changes in operating procedures might be necessary to address thermal issues, avoiding the high-cost alternative of installing cooling towers. We do not believe there are thermal issues at our other coal-fired energy centers that would require cooling towers. Nonetheless, if one of our energy centers would need to reduce or cease operations or install capital intensive modifications, we could experience stranded costs that may not be recovered through rates, and therefore could lead to an impairment or abandonment of assets.

# (3.1.1.11) Primary financial effect of the risk

Select from:

✓ Increased indirect [operating] costs

### (3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

✓ Medium-term

# (3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

Unknown

# (3.1.1.14) Magnitude

Select from:

✓ Medium-high

# (3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

**V** No

### (3.1.1.26) Primary response to risk

#### Infrastructure, technology and spending

✓ Improve pollution abatement and control measures

### (3.1.1.27) Cost of response to risk

50000

# (3.1.1.28) Explanation of cost calculation

NPDES (permitting regulation) required cooling studies be completed to assess thermal discharge levels at one of our coal-fired energy centers. A Thermal Discharge Parameter (TDP) was put in place to make sure we are in compliance with thermal discharge regulations. These studies were estimated to have cost approximately 50,000.

## (3.1.1.29) Description of response

In the event that ongoing studies indicate that the Labadie Energy Center may not fully meet compliance requirements in the future, we expect operating procedures would be implemented to address thermal issues and thereby avoid requirements to install cooling towers at the Labadie Energy Center.

#### Water

# (3.1.1.1) Risk identifier

Select from:

✓ Risk4

# (3.1.1.3) Risk types and primary environmental risk driver

#### **Chronic physical**

✓ Other chronic physical risk, please specify: Dependency on water intensive energy sources

## (3.1.1.4) Value chain stage where the risk occurs

Select from:

Direct operations

### (3.1.1.6) Country/area where the risk occurs

Select all that apply

✓ United States of America

### (3.1.1.7) River basin where the risk occurs

Select all that apply

✓ Mississippi River

# (3.1.1.9) Organization-specific description of risk

Primary factors that may influence the availability of these water resources include US Army Corp of Engineers management of flows, climate and consumption. How changes in temperature and precipitation resulting from climate change may influence water resources and availability. If energy centers were required to be closed prior to the end of their useful lives due to a lack of available water we could experience stranded costs that may not be recovered through rates and could lead to an impairment or abandonment of assets. Much of our energy generation relies heavily on water intensive energy sources and our long term strategy includes a responsible transition away from these generation technologies. Ameren's strategy for addressing climate risk is largely embedded in AMO's 2023 Integrated Resource Plan (IRP) which outlines plans to retire approximately 2500 MW of fossil-fired generation by 2030. The coal-fired Meramec Energy Center was retired at the end of 2022. The IRP also includes the addition of 2800 MW of new, clean, renewable generation by 2030 and a total of 4700 MW by 2040. The IRP also includes the addition of an 800 MW gas simple cycle energy center by 2027 and a 1200 MW combined-cycle energy center by 2033. This is expected to reduce reliance on water-intensive generation.

## (3.1.1.11) Primary financial effect of the risk

Select from:

✓ Closure of operations

# (3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

✓ Medium-term

# (3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

✓ Very unlikely

### (3.1.1.14) Magnitude

Select from:

✓ Medium-high

### (3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

✓ No

# (3.1.1.26) Primary response to risk

#### Compliance, monitoring and targets

☑ Improve monitoring of direct operations

# (3.1.1.27) Cost of response to risk

50000

# (3.1.1.28) Explanation of cost calculation

Approximate cost is expected to be in the range of 50,000 per year, including both the embedded cost of river level monitoring and periodic studies.

### (3.1.1.29) Description of response

Ameren monitors river basin conditions, and performs periodic water resiliency and risk assessments, including the consideration of climate change. River levels are monitored daily at our energy centers that withdrawal and discharge from those sources.

#### Water

### (3.1.1.1) Risk identifier

Select from:

Risk5

### (3.1.1.3) Risk types and primary environmental risk driver

#### **Acute physical**

✓ Flooding (coastal, fluvial, pluvial, groundwater)

### (3.1.1.4) Value chain stage where the risk occurs

Select from:

✓ Direct operations

### (3.1.1.6) Country/area where the risk occurs

Select all that apply

✓ United States of America

### (3.1.1.7) River basin where the risk occurs

Select all that apply

Mississippi River

# (3.1.1.9) Organization-specific description of risk

Impacts from flooding are highly dependent on the facility and location, as well as severity of the flooding event. Mitigation costs could range from several hundred thousand dollars to several million dollars. The range of response could require slight temporary adjustment in operations or could lead to total disruption of operations and/or the temporary shutting down of operations. Ameren has robust crisis management strategies at both the operations and corporate levels. We use advance weather systems to monitor and prepare for the severity of impending weather events and mobilize crews and resources to respond effectively. We have published a climate risk report titled: Powering a Reliable, Sustainable Tomorrow that outlined our potential climate and water-related risks and expectations. Following past flooding events, Ameren implemented more vigilant surveillance and monitoring of local river stages following extreme rainfall or drought conditions. We have also constructed flood walls, upgraded berms, implemented storm water capture and control efforts, and relocated equipment within substation sites susceptible to flooding.

## (3.1.1.11) Primary financial effect of the risk

Select from:

✓ Increased indirect [operating] costs

# (3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

✓ Short-term

# (3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

✓ Very likely

# (3.1.1.14) Magnitude

Select from:

✓ Medium-high

### (3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

✓ No

# (3.1.1.26) Primary response to risk

#### **Policies and plans**

✓ Develop flood emergency plans

# (3.1.1.27) Cost of response to risk

50000

## (3.1.1.28) Explanation of cost calculation

Costs from weather events and flooding are highly dependent on the facility and location, as well as severity of the flooding event, and could range from several hundred thousand dollars in mitigation costs to several million dollars in impacts. Our coal-fired energy centers are all located near rivers and at risk for flooding. We developed flood emergency plans as one method of mitigation. The cost to develop the flood emergency plans is estimated to have cost 50,000.

# (3.1.1.29) Description of response

Impacts from severe weather events and flooding are highly dependent on the facility and location, as well as severity of the flooding event. Flooding can result in disruption to operations or reduced accessibility to an operating center. Before any potential flooding event, our crisis management teams are constantly monitoring weather patterns, developing crisis response protocols, and predicting impacts so we can mobilize our resources to best respond during an event. Following recent extreme weather events, we have implemented "system hardening" by constructing flood walls, upgrading berms, implementing storm water capture and control efforts, and relocating equipment within substation sites susceptible to flooding. In addition we conducted studies to develop flood emergency plans.

[Add row]

(3.2) Within each river basin, how many facilities are exposed to substantive effects of water-related risks, and what percentage of your total number of facilities does this represent?

Row 1

### (3.2.1) Country/Area & River basin

#### **United States of America**

Mississippi River

### (3.2.2) Value chain stages where facilities at risk have been identified in this river basin

Select all that apply

✓ Direct operations

### (3.2.3) Number of facilities within direct operations exposed to water-related risk in this river basin

(3.2.4) % of your organization's total facilities within direct operations exposed to water-related risk in this river basin				
Select from:  ✓ 26-50%				
(3.2.8) % organization's annual electricity generation that could be affected by these facilities				
Select from:  ✓ 76-99%				
(3.2.10) % organization's total global revenue that could be affected				
Select from:  ✓ Unknown [Add row]				
(3.3) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?				

Water-related regulatory violations	Comment
Select from: ✓ No	We had no fines, enforcement orders, and/or other penalties for water-related regulatory violations in 2023.

[Fixed row]

(3.5) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

Select from:

✓ No, and we do not anticipate being regulated in the next three years

(3.6) Have you identified any environmental opportunities which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future?

	Environmental opportunities identified
Climate change	Select from:  ☑ Yes, we have identified opportunities, and some/all are being realized
Water	Select from:  ✓ Yes, we have identified opportunities, and some/all are being realized

[Fixed row]

(3.6.1) Provide details of the environmental opportunities identified which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future.

### Climate change

# (3.6.1.1) Opportunity identifier

Select from:

✓ Opp1

### (3.6.1.3) Opportunity type and primary environmental opportunity driver

#### **Energy source**

✓ Other energy source opportunity, please specify: Use of lower emission sources of energy

# (3.6.1.4) Value chain stage where the opportunity occurs

Select from:

✓ Direct operations

### (3.6.1.5) Country/area where the opportunity occurs

Select all that apply

✓ United States of America

### (3.6.1.8) Organization specific description

The Ameren Missouri's (AMO) 2023 Integrated Resource Plan (IRP) is designed to ensure that customers' long-term electric energy needs are met in a reliable, cost-effective and environmentally responsible manner. The current IRP, issued in June 2023, reflects plans to significantly increase AMO's renewable energy portfolio, the retirement of the Meramec Energy Center in 2022 and all coal-fired generation by 2042; and the addition of 5400 MWs of renewable generation by 2040. Ameren is targeting reductions in Scope 1 and 2 greenhouse gas emissions of 60% by 2030 and 85% by 2040, compared to 2005 levels, with a goal of achieving net-zero carbon emissions by 2045. More information is available at Ameren.com/IRP.

### (3.6.1.9) Primary financial effect of the opportunity

Select from:

✓ Returns on investment in low-emission technology

### (3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

✓ Short-term

# (3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

✓ About as likely as not (33–66%)

### (3.6.1.12) Magnitude

Select from:

✓ Medium-low

#### Water

### (3.6.1.1) Opportunity identifier

Select from:

✓ Opp1

# (3.6.1.3) Opportunity type and primary environmental opportunity driver

#### Resilience

✓ Increased resilience to impacts of climate change

# (3.6.1.4) Value chain stage where the opportunity occurs

Select from:

Direct operations

### (3.6.1.5) Country/area where the opportunity occurs

Select all that apply

✓ United States of America

### (3.6.1.6) River basin where the opportunity occurs

Select all that apply

✓ Mississippi River

# (3.6.1.8) Organization specific description

Ameren has been successful in advocating for legislation that provides for more rapid and widespread infrastructure investment, resulting in the Modernization Action Plan in Ameren Illinois and the Smart Energy Plan in Ameren Missouri. These programs have led to accelerated transmission and distribution investments directed at enhancing reliability, hardening our system and expanding grid intelligence. We have a vigilant surveillance and monitoring program for local river stages following extreme rainfall or drought conditions. Following recent flooding events, we constructed flood walls, upgraded berms, implemented storm water capture and control efforts, and relocated equipment within substation sites susceptible to flooding, all of which are located in the Mississippi River Basin. To increase resiliency of the

electric grid, we bury lines most susceptible to weather-related damage, including those in heavily forested areas and crossing over interstate and multi-lane state highways. For overhead line assets, we increasingly use composite material poles and cross-arms, line post insulators, 360-degree pole guying, and mechanical line dampers. To mitigate the risk of high wind, extreme weather, or other climatic conditions, a site suitability assessment was conducted for the Atchison and High Prairie wind energy centers, which confirmed the turbines are suitable for use during such extreme conditions. Read more in our 2023 Climate Report.

## (3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

✓ Medium-term

# (3.6.1.12) Magnitude

Select from:

Medium

### (3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

Yes

# (3.6.1.23) Explanation of financial effect figures

Over the next five years (2022-2026) Ameren plans to invest over 3.8 billion in transmission infrastructure improvements, as reflected in our 2023-2027 capital plan.

#### Water

# (3.6.1.1) Opportunity identifier

Select from:

✓ Opp2

# (3.6.1.3) Opportunity type and primary environmental opportunity driver

#### **Resource efficiency**

☑ Other resource efficiency opportunity, please specify: Increased water efficiency in operations

# (3.6.1.4) Value chain stage where the opportunity occurs

Select from:

✓ Direct operations

# (3.6.1.5) Country/area where the opportunity occurs

Select all that apply

✓ United States of America

### (3.6.1.6) River basin where the opportunity occurs

Select all that apply

✓ Mississippi River

### (3.6.1.8) Organization specific description

Ameren permanently discontinued wet transport of coal ash at 8 of its 10 coal combustion units and as of 2020 has transitioned all units scheduled to operate past 2022 to dry ash handling (this includes our Sioux, Rush Island, and Labadie Energy Centers). The two units that have not been transitioned are located at the Meramec Energy Center, which was retired at the end of 2022. The dry handing of CCR will use significantly lower volumes of water, enhancing the efficiency of water use and further reducing the risk of surface and groundwater contamination, as well as potential increasingly stringent regulatory risk in future. Success in CCR management is measured by our compliance rate with strict regulations. We strive for 100% compliance with relevant regulations. In addition, the wastewater treatment systems at our three coal-fired energy centers have been upgraded, and will use water more efficiently. These measures are part of our strategy in order to remain compliant and mitigate regulatory risks in addition to our commitment to environmental stewardship, through which we strive to use resources efficiently. The water savings through our transition to dry ash handling and upgrades to new wastewater treatment plants have also been incorporated into our water reduction target, which is to reduce water use for thermal generation by 95% by 2045, based on a 2005 baseline, driven by our coal-fired energy center retirement schedule.

# (3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

☑ Short-term

### (3.6.1.12) Magnitude

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OC	ししし	HO	111.

Medium

# (3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

Yes

### (3.6.1.17) Anticipated financial effect figure in the short-term - minimum (currency)

90000000

# (3.6.1.18) Anticipated financial effect figure in the short-term – maximum (currency)

120000000

### (3.6.1.23) Explanation of financial effect figures

On November 3, 2015, the EPA issued a revised rulemaking for steam electric power plant discharges (the Steam Electric Effluent Guidelines Rule). This rule prohibits discharges of ash transport water. As such, Ameren Missouri constructed new or augmented fly ash handling systems and new bottom ash handling systems. Ameren Missouri has also just finished the construction of new wastewater treatment systems to manage discharges from various power plant systems such as demineralizer regenerations, storm water, and other process wastewater. Ameren Missouri estimate that they will need to make capital expenditures of 90 million to 120 million from 2023 through 2027 in order to comply with existing environmental regulations. Additional environmental controls beyond 2027 could be required. This estimate of capital expenditures includes ash pond closure and corrective action measures required by the CCR Rule and potential modifications to cooling water intake structures at existing power plants under Clean Water Act rules. More information is available at Ameren.com/CCRFacts.

[Add row]

#### C4. Governance

### (4.1) Does your organization have a board of directors or an equivalent governing body?

# (4.1.1) Board of directors or equivalent governing body

Select from:

Yes

# (4.1.2) Frequency with which the board or equivalent meets

Select from:

✓ More frequently than quarterly

# (4.1.3) Types of directors your board or equivalent is comprised of

Select all that apply

☑ Executive directors or equivalent

✓ Independent non-executive directors or equivalent

# (4.1.4) Board diversity and inclusion policy

Select from:

✓ Yes, and it is publicly available

### (4.1.5) Briefly describe what the policy covers

The Board has a demonstrated commitment to maintaining diverse representation. When conducting searches for new directors, the Committee will use its best efforts to include among the pool of candidates women and racially or ethnically diverse candidates, and any third-party search firm engaged by the Committee will be asked to use its best efforts to include such candidates in the pool of candidates. In connection with its assessment and recommendation of candidates for director, the Nominating and Corporate Governance Committee will consider diversity (including, but not limited to, gender, race, ethnicity, age, experience and skills), director tenure, board refreshment and such other factors as it deems appropriate given the then-current and anticipated future needs of the Board and the Company and to maintain a balance of perspectives, qualifications, qualities and skills on the Board. The Nominating and Corporate Governance Committee considers and assesses

the implementation and effectiveness of its diversity policy in connection with Board nominations annually. Although the Nominating and Corporate Governance Committee may seek candidates that have different qualities and experiences at different times in order to maximize the aggregate experience, qualities and strengths of the Board members, nominees for each election or appointment of directors will be evaluated using a substantially similar process.

[Fixed row]

### (4.1.1) Is there board-level oversight of environmental issues within your organization?

	Board-level oversight of this environmental issue
Climate change	Select from:  ✓ Yes
Water	Select from:  ✓ Yes
Biodiversity	Select from:  ☑ No, and we do not plan to within the next two years

[Fixed row]

(4.1.2) Identify the positions (do not include any names) of the individuals or committees on the board with accountability for environmental issues and provide details of the board's oversight of environmental issues.

### Climate change

### (4.1.2.1) Positions of individuals or committees with accountability for this environmental issue

Select all that apply

☑ Board-level committee

# (4.1.2.2) Positions' accountability for this environmental issue is outlined in policies applicable to the board

Select from:

Yes

### (4.1.2.3) Policies which outline the positions' accountability for this environmental issue

Select all that apply

☑ Other policy applicable to the board, please specify: Board committee charter

# (4.1.2.4) Frequency with which this environmental issue is a scheduled agenda item

Select from:

☑ Scheduled agenda item in some board meetings – at least annually

### (4.1.2.5) Governance mechanisms into which this environmental issue is integrated

Select all that apply

☑ Reviewing and guiding annual budgets

✓ Overseeing the setting of corporate targets

☑ Monitoring progress towards corporate targets

✓ Overseeing and guiding public policy engagement

☑ Reviewing and guiding innovation/R&D priorities

✓ Overseeing and guiding acquisitions, mergers, and divestitures

✓ Monitoring compliance with corporate policies and/or commitments

☑ Overseeing and guiding the development of a climate transition plan

☑ Reviewing and guiding the assessment process for dependencies, impacts, risks, and opportunities

✓ Approving and/or overseeing employee incentives

✓ Overseeing and guiding major capital expenditures

✓ Monitoring the implementation of the business strategy

✓ Monitoring the implementation of a climate transition plan

✓ Overseeing and guiding the development of a business strategy

### (4.1.2.7) Please explain

The Nuclear, Operations and Environmental Sustainability Committee (NOESC) oversees and reviews the Company's operations, including safety, performance, environmental and compliance issues, and risks, policies and performance related to environmental sustainability matters, including those related to climate change and water resource management. Senior management updates the NOESC on all aspects of the Company's operations throughout the year, including long-term generation planning, compliance with environmental regulations and environmental sustainability matters. The Audit and Risk Committee oversees the Company's enterprise risk management program, which includes strategic, operational and cybersecurity risks, as well as the processes, guidelines, and policies for identifying, assessing, monitoring, and mitigating such risks, which include climate-related risks. The Nominating and Corporate Governance Committee oversees the Company's

corporate governance, which includes the Company's proxy statements, shareholder proposals, the Company's responses to shareholder proposals and any reports the Company issues in response to shareholder proposals. The Human Resources Committee oversees executive compensation practices and policies, including the integration of environmental, social and governance measures. The Finance Committee oversees and reviews major capital projects, including projects related to environmental (climate) compliance and the execution of our climate transition plans. Case Study: Net-Zero Target (Situation)We recognize climate change is a critical issue for our customers and stakeholders.(Task)Management evaluates emissions reductions targets and related pathways to achieve such reductions. (Action)In June 2022, Ameren established a goal of achieving net-zero carbon emissions by 2045. This goal includes both Scope 1 and 2 emissions including other greenhouse gas emissions of CH4, N2O and SF6, and encompasses direct emissions from operations, as well as electricity usage at Ameren buildings. Ameren is also targeting a 60% emissions reduction by 2030 and an 85% reduction by 2040 based on 2005 levels. Our net-zero carbon emissions goal is consistent with the objectives of the Paris Agreement and limiting global temperature rise to 1.5 degree Celsius. The carbon emissions goals were discussed with the Board of Directors. (Result)Details of the company goal are available publicly at ameren.com/IRP.

#### Water

# (4.1.2.1) Positions of individuals or committees with accountability for this environmental issue

Select all that apply

- ✓ Chief Executive Officer (CEO)
- ▼ Board-level committee

# (4.1.2.2) Positions' accountability for this environmental issue is outlined in policies applicable to the board

Select from:

Yes

### (4.1.2.3) Policies which outline the positions' accountability for this environmental issue

Select all that apply

☑ Other policy applicable to the board, please specify :Committee charter

# (4.1.2.4) Frequency with which this environmental issue is a scheduled agenda item

Select from:

✓ Sporadic – agenda item as important matters arise

### (4.1.2.5) Governance mechanisms into which this environmental issue is integrated

Select all that apply

- ✓ Reviewing and guiding the assessment process for dependencies, impacts, risks, and opportunities
- ✓ Overseeing and guiding the development of a business strategy
- ☑ Monitoring the implementation of the business strategy
- ✓ Overseeing and guiding major capital expenditures
- ☑ Reviewing and guiding annual budgets

### (4.1.2.7) Please explain

We are focused on ensuring that our corporate governance and enterprise risk management practices protect and enhance long-term shareholder value and reflect our environmental stewardship, including water stewardship. In addition to receiving regular reports from each board committee that oversees the various elements impacted by environmental and water-related matters, the full Board of Directors holds an annual strategy session to consider key risks and opportunities for the company, including those posed by climate change and water-related issues. The Board periodically hosts presentations by outside experts who provide perspectives and updates on climate change and related risks and opportunities. The Board and relevant committees also review the Company's significant climate-related disclosures, such as the periodic climate risk reports and annual Sustainability Report. • The Audit and Risk Committee of the Board oversees the Company's overall enterprise risk management program, which includes strategic and operational risks, as well as the processes, guidelines and policies for identifying, assessing, monitoring, and mitigating such risks which includes water-related issues. • The Nuclear, Operations and Environmental Sustainability Committee oversees and reviews our operations, including safety, performance, sustainability and compliance issues, and risks, policies and performance related to environmental sustainability matters, including those related to climate change and water resource management. • The Finance Committee oversees and approves major capital expenditures relating to environmental compliance measures, such as programs to comply with coal combustion residual management plans and the acquisition of renewable generation facilities. Example: During 2023, the Board of Directors and the Nuclear, Operations and Environmental Committee of the Board provided oversight of the development of the 2023 IRP, including the planned acceleration of coal-fired energy centers and significant increase in renewable generation resources reflected in the IRP. The generation resource plan reflected in the 2023 IRP will contribute to a decreased reliance on water resources by Ameren's generation portfolio over time. [Fixed row]

### (4.2) Does your organization's board have competency on environmental issues?

### Climate change

### (4.2.1) Board-level competency on this environmental issue

Select from:

Yes

## (4.2.2) Mechanisms to maintain an environmentally competent board

Select all that apply

- ☑ Consulting regularly with an internal, permanent, subject-expert working group
- ✓ Integrating knowledge of environmental issues into board nominating process
- ☑ Having at least one board member with expertise on this environmental issue

# (4.2.3) Environmental expertise of the board member

#### **Experience**

☑ Executive-level experience in a role focused on environmental issues

#### Water

# (4.2.1) Board-level competency on this environmental issue

Select from:

Yes

### (4.2.2) Mechanisms to maintain an environmentally competent board

Select all that apply

- ✓ Consulting regularly with an internal, permanent, subject-expert working group
- ✓ Integrating knowledge of environmental issues into board nominating process
- ☑ Having at least one board member with expertise on this environmental issue

# (4.2.3) Environmental expertise of the board member

#### **Experience**

☑ Executive-level experience in a role focused on environmental issues

[Fixed row]

### (4.3) Is there management-level responsibility for environmental issues within your organization?

	Management-level responsibility for this environmental issue
Climate change	Select from:  ☑ Yes
Water	Select from:  ✓ Yes
Biodiversity	Select from:  ☑ Yes

[Fixed row]

(4.3.1) Provide the highest senior management-level positions or committees with responsibility for environmental issues (do not include the names of individuals).

### Climate change

# (4.3.1.1) Position of individual or committee with responsibility

#### **Executive level**

✓ Chief Executive Officer (CEO)

# (4.3.1.2) Environmental responsibilities of this position

#### Dependencies, impacts, risks and opportunities

- ✓ Assessing environmental dependencies, impacts, risks, and opportunities
- ✓ Assessing future trends in environmental dependencies, impacts, risks, and opportunities

☑ Managing environmental dependencies, impacts, risks, and opportunities

#### **Engagement**

- ☑ Managing public policy engagement related to environmental issues
- ☑ Managing value chain engagement related to environmental issues

#### Policies, commitments, and targets

- ✓ Monitoring compliance with corporate environmental policies and/or commitments
- ☑ Measuring progress towards environmental corporate targets
- ☑ Setting corporate environmental policies and/or commitments
- ☑ Setting corporate environmental targets

#### Strategy and financial planning

✓ Developing a climate transition plan environmental issues

✓ Managing major capital and/or operational expenditures relating to

- ✓ Implementing a climate transition plan
- ✓ Conducting environmental scenario analysis
- ☑ Managing annual budgets related to environmental issues
- ☑ Managing acquisitions, mergers, and divestitures related to environmental issues

#### Other

✓ Providing employee incentives related to environmental performance

# (4.3.1.4) Reporting line

Select from:

☑ Reports to the board directly

### (4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ As important matters arise

#### (4.3.1.6) Please explain

The CEO is the highest position responsible for climate-related issues at Ameren. Several other officers are responsible for climate-related issues, including (i) Sr. VP—Corporate Development, Environmental Strategy & Innovation; (ii) Sr. VP & Chief Accounting Officer; (iii) Executive VP-General Counsel & Secretary; (iv) Sr. VP and Chief Sustainability, Diversity and Philanthropy Officer (CSDPO); and (v) operating subsidiary Presidents, who report to the CEO. Our strategy and actions are subject to stringent governance requirements. Varied management teams in our organization plan and execute our risk strategy, as well as coordinate with internal/external subject matter experts to inform the Board and company leadership of specific issues. These teams include: environmental, innovation, legislative and reg. affairs, corp. planning, engineering and generation, transmission, distribution and gas operations. Most of these teams report to the officers with responsibilities for climate-related issues. Our Board of Directors also has extensive oversight over our strategy, execution and all key risks, including key climate risks. In 2023, Ameren published a climate report titled "Powering a Reliable, Sustainable Tomorrow." This report provides information about the Company's management of climate-related risks and opportunities, including Ameren Missouri's expansive plan to clean energy in the future. It was prepared by a crossfunctional group of subject matter experts from across the Company, including representatives from our communications, corp. planning, sustainability, environmental, finance, legal, electric and gas operations, and strategy and innovation departments and outside advisors. Members of Ameren's Exec. Leadership Team, including the CEO oversaw and provided guidance on the report's preparation. The report was reviewed by the Board of Directors, as well as Nuclear, Operations, and Environmental Sustainability Committee of our Board of Directors.

#### Water

### (4.3.1.1) Position of individual or committee with responsibility

#### **Executive level**

☑ Chief Executive Officer (CEO)

### (4.3.1.2) Environmental responsibilities of this position

#### Dependencies, impacts, risks and opportunities

☑ Managing environmental dependencies, impacts, risks, and opportunities

#### Policies, commitments, and targets

☑ Measuring progress towards environmental corporate targets

#### Strategy and financial planning

☑ Managing annual budgets related to environmental issues

### (4.3.1.4) Reporting line

Select from:

☑ Reports to the board directly

### (4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ As important matters arise

### (4.3.1.6) Please explain

The CEO regularly reviews and evaluates water-related issues, including our water-related targets, water-related compliance matters, and associated financial budgeting for mitigation projects, as part of overall business strategy and long-term financial planning. A dedicated Water Quality Group continually monitors regulatory change and risks/opportunities, and reports to multiple teams including the CEO. This, along with our reports that assess climate change scenarios and long-term water availability/resiliency, help inform our overall business strategy, including our Integrated Resource Plan (IRP). The CEO and other members of executive leadership review and provide input on the IRP, including information on the transition to dry-ash handling and wastewater treatment system upgrades at our coal-fired energy centers[, which was completed in 2022.

#### **Biodiversity**

### (4.3.1.1) Position of individual or committee with responsibility

#### Other

☑ Other, please specify: Executive Management-level Responsibility

#### (4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

As important matters arise

### (4.3.1.6) Please explain

Ameren Biodiversity Policy: Biodiversity is the variety and number of living plants, animals, and aquatic species present in the natural environment, upon which we rely for health, commerce, and quality of life. As part of our corporate social responsibility, we recognize the importance of conserving natural habitat and native

species to aid in protecting biodiversity in the regions we serve. Our policy is to reduce, minimize, or avoid impacts on biodiversity as we develop infrastructure or conduct operations. We will consider biodiversity and mitigation measures or enhancements to the ecosystems of the lands and waterways we manage. We will do the following to meet the commitments under this policy: • Assess and prevent or reduce detrimental effects on biodiversity from company actions and ongoing operations, wherever possible. • Promote, support and participate in wildlife protection initiatives and programs that are responsive to and consistent with our business activities. • Continue to implement habitat mitigation measures or enhancements associated with projects as we improve and modernize our electric and natural gas businesses. • Continue to establish habitat reserves on Ameren-owned properties where feasible. • Utilize native plantings in landscaping or vegetation restoration endeavors where practical. • Create awareness and understanding of biodiversity by engaging with coworkers and stakeholders including the communities and customers we serve, government agencies, universities and other organizations when planning, building and operating our energy infrastructure. • Utilize pollinator-supportive and native plants as part of construction, maintenance, and restoration activities where practical.

# (4.5) Do you provide monetary incentives for the management of environmental issues, including the attainment of targets?

### Climate change

### (4.5.1) Provision of monetary incentives related to this environmental issue

Select from:

Yes

## (4.5.2) % of total C-suite and board-level monetary incentives linked to the management of this environmental issue

10

## (4.5.3) Please explain

The Ameren Long-Term Incentive Program (LTIP) is intended to reward the corporate executive team for their contributions to Ameren's long-term success by providing the opportunity to earn shares of Ameren Common Stock. Awards issued under the LTIP have a three-year performance period. 10% of the LTIP is tied to Performance Share Units (PSUs) based on clean energy transition goals/results (renewable generation and energy storage additions, as well as coal-fired energy center retirements).

#### Water

### (4.5.1) Provision of monetary incentives related to this environmental issue

Select from:

✓ No, and we do not plan to introduce them in the next two years [Fixed row]

(4.5.1) Provide further details on the monetary incentives provided for the management of environmental issues (do not include the names of individuals).

### Climate change

### (4.5.1.1) Position entitled to monetary incentive

#### **Senior-mid management**

☑ Other senior-mid manager, please specify: Members of Ameren Leadership Team

## (4.5.1.2) Incentives

Select all that apply

Shares

## (4.5.1.3) Performance metrics

#### **Targets**

- ✓ Progress towards environmental targets
- ✓ Achievement of environmental targets

#### Strategy and financial planning

☑ Achievement of climate transition plan

#### **Emission reduction**

✓ Implementation of an emissions reduction initiative

### (4.5.1.4) Incentive plan the incentives are linked to

Select from:

✓ Long-Term Incentive Plan, or equivalent, only (e.g. contractual multi-year bonus)

### (4.5.1.5) Further details of incentives

The Ameren Long-Term Incentive Program (LTIP) is intended to reward the executive and senior management teams for their contributions to Ameren's long-term success by providing the opportunity to earn shares of Ameren Common Stock. Awards issued under the LTIP have a three-year performance period. 10% of the LTIP is tied to Performance Share Units (PSUs) based on clean energy transition goals/results (renewable generation and energy storage additions, as well as coal-fired energy center retirements).

# (4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

In 2020, Ameren added a 'clean energy transition' metric to its long-term incentive program. The metric is based on renewable generation and energy storage additions (in terms of megawatts, MW) over a three-year performance period. Effective in 2021, the clean energy transition metric was enhanced to also include the MW associated with the retirement of its coal fired energy centers over the three-year performance period. The clean energy transition metric is tied to 10% of the total annual equity grant under the long-term incentive program. This metric applies to the entire Ameren Leadership Team (ALT), including the corporate executive team and Chief Executive Officer. This metric is aligned with Ameren's commitment to strong environmental stewardship and executing a balanced and flexible generation strategy—targeting net-zero Scope 1 and 2 emissions by 2045.

[Add row]

### (4.6) Does your organization have an environmental policy that addresses environmental issues?

Does your organization have any environmental policies?
Select from:  ✓ Yes

[Fixed row]

### (4.6.1) Provide details of your environmental policies.

#### Row 1

### (4.6.1.1) Environmental issues covered

Select all that apply

- ✓ Climate change
- Water
- ✓ Biodiversity

### (4.6.1.2) Level of coverage

Select from:

✓ Organization-wide

### (4.6.1.3) Value chain stages covered

Select all that apply

✓ Direct operations

#### (4.6.1.4) Explain the coverage

Ameren's environmental policy is company-wide applying to all employees and contractors and highlights four key pillars: Compliance, Environmental Stewardship, Operational Excellence and Environmental Justice & Stakeholder Engagement. We are committed to environmental excellence by integrating environmental management and sustainability principles into our operations, business planning, and decision-making. We assure environmental stewardship by working to reduce emissions and waste and to preserve natural resources. We support innovative technologies to increase the use of renewable and other forms of clean energy and create programs that allow customers to manage their energy use efficiently. Ameren's water policy is also company-wide and explains our commitment to conserving and protecting natural resources, including water use and quality. We acknowledge business dependencies on large quantities of freshwater from local rivers for generation and cooling purposes, as well as business impacts on water. We publicly post our CDP response to increase transparency regarding the use of water resources across the entire company. Our 2018 Water Resiliency Assessment investigated water risk based on climate scenario analysis. Our Climate Report details system hardening measures designed to mitigate said risks. All referenced reports and policies are posted on our website for stakeholder awareness.

## (4.6.1.5) Environmental policy content

#### **Environmental commitments**

- ✓ Commitment to avoidance of negative impacts on threatened and protected species
- ☑ Commitment to comply with regulations and mandatory standards
- ✓ Commitment to take environmental action beyond regulatory compliance

#### **Water-specific commitments**

- ☑ Commitment to reduce water consumption volumes
- ✓ Commitment to reduce water withdrawal volumes
- ☑ Commitment to reduce or phase out hazardous substances
- ☑ Commitment to control/reduce/eliminate water pollution
- ☑ Commitment to safely managed WASH in local communities

- ☑ Commitment to the conservation of freshwater ecosystems
- ☑ Commitment to water stewardship and/or collective action

### (4.6.1.6) Indicate whether your environmental policy is in line with global environmental treaties or policy goals

Select all that apply

✓ Yes, in line with the Paris Agreement

## (4.6.1.7) Public availability

Select from:

✓ Publicly available [Add row]

### (4.10) Are you a signatory or member of any environmental collaborative frameworks or initiatives?

### (4.10.1) Are you a signatory or member of any environmental collaborative frameworks or initiatives?

Select from:

Yes

### (4.10.2) Collaborative framework or initiative

☑ Other, please specify :EEI/AGA ESG/Sustainability Template Reporting Framework

### (4.10.3) Describe your organization's role within each framework or initiative

EEI/AGA ESG/Sustainability Template Reporting Framework: Ameren is participating in the EEI AGA ESG/Sustainability Report, a voluntary industry initiative coordinated by the Edison Electric Institute (EEI) and the American Gas Association (AGA) to provide electric industry investors with more uniform and consistent environmental, social, governance and sustainability-related metrics. Ameren piloted and participates in this voluntary industry initiative to better serve customers and investors with more uniform and consistent reporting. TCFD Reporting Framework: Powering a Reliable, Sustainable Tomorrow: Ameren's 2023 climate risk report is based on recommendations from the Task Force on Climate-related Financial Disclosures (TCFD). This report provides information about the company's management of climate-related risks and opportunities, including its expansive plan to add clean energy in the coming decades. It also details how that plan is consistent with meeting the 1.5 Celsius goal, the target established by the Paris Agreement. TPI: Ameren is a listed company in the Transition Pathway Initiative (TPI) online tool. Ameren received the highest rating for Management Quality--Strategic Assessment (Level 4). The management quality is an assessment of the management of greenhouse gas emissions and of risks and opportunities related to the low-carbon transition. For Carbon Performance, Ameren's long-term alignment is 2040-2050 is listed as below 2 degrees based on the TPI online tool. Ameren provided feedback to TPI regarding their carbon performance assessment-our net-zero plan is consistent with meeting the 1.5 Celsius goal, the target established by the Paris Agreement.

(4.11) In the reporting year, did your organization engage in activities that could directly or indirectly influence policy, law, or regulation that may (positively or negatively) impact the environment?

(4.11.1) External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the environment

Select all that apply

✓ Yes, we engaged directly with policy makers

(4.11.2) Indicate whether your organization has a public commitment or position statement to conduct your engagement activities in line with global environmental treaties or policy goals

Select from:

☑ No, and we do not plan to have one in the next two years

### (4.11.5) Indicate whether your organization is registered on a transparency register

Select from:

✓ No

# (4.11.8) Describe the process your organization has in place to ensure that your external engagement activities are consistent with your environmental commitments and/or transition plan

Ameren's board of directors oversees environmental policy matters and strategies, including those related to planning for the potential implications of climate-related issues. Ameren's board also oversees the Company's public affairs activities, including regular review of political contributions and related expenditures. Ameren's government affairs teams are responsible for processes and commitments that ensure coordination with and consistent adherence to Ameren's strategic objectives, including with respect to climate-related matters, and to implement corrective actions when inconsistencies are found. Representatives of Ameren's government affairs teams participate in Ameren's Sustainability Executive Steering Committee, which is led by the Chief Sustainability, Diversity & Philanthropy Officer, and which oversees the Company's environmental, social and governance initiatives. In addition, an internal climate policy team guides climate-related corporate strategy and policy including external advocacy. The team comprises senior leaders and subject matter experts and meets periodically to coordinate and discuss climate policy matters, supports strategic alignment across the company. Ameren Missouri Environmental Services and Ameren Corporate Environmental staff jointly develop plans and engage with internal and external stakeholders, including state and federal regulatory agencies, advisory groups such as the Missouri River Recovery Implementation Committee, the Missouri Water Protection Forum, and the Illinois Environmental Regulatory Group, and the public. Ameren's government affairs groups ensure consistency with water policy and regulatory requirements. These Ameren departments are responsible for processes and commitments that ensure coordination with and consistent adherence to Ameren's water policy and to implement corrective actions when inconsistencies are found.

[Fixed row]

(4.12) Have you published information about your organization's response to environmental issues for this reporting year in places other than your CDP response?

Select from:

Yes

(4.12.1) Provide details on the information published about your organization's response to environmental issues for this reporting year in places other than your CDP response. Please attach the publication.

Row 1

## (4.12.1.1) Publication

Select from:

✓ In mainstream reports

## (4.12.1.3) Environmental issues covered in publication

Select all that apply

- ✓ Climate change
- Water

## (4.12.1.4) Status of the publication

Select from:

Complete

## (4.12.1.5) Content elements

Select all that apply

- **☑** Governance
- ☑ Risks & Opportunities
- Strategy
- ✓ Emission targets

## (4.12.1.8) Comment

The Annual Report provides financial information and highlights the Company's CO2 goals.

#### Row 2

## (4.12.1.1) **Publication**

Select from:

✓ In voluntary communications

## (4.12.1.3) Environmental issues covered in publication

Select all that apply

- ✓ Climate change
- Water
- ☑ Biodiversity

## (4.12.1.4) Status of the publication

Select from:

Complete

## (4.12.1.5) Content elements

Select all that apply

- ✓ Governance
- ☑ Risks & Opportunities
- Strategy

## (4.12.1.6) Page/section reference

2024 Ameren Sustainability Report (entire report).

## (4.12.1.8) Comment

2024 Sustainability Report: Ameren's latest sustainability report covers Ameren's progress in 2023, including details with respect to Ameren's net-zero carbon emissions targets and substantial investments in clean energy. Also, the report includes Ameren's business activities mapped to the United Nations Sustainable Development Goals.

#### Row 3

## (4.12.1.1) **Publication**

Select from:

✓ In other regulatory filings

### (4.12.1.3) Environmental issues covered in publication

Select all that apply

✓ Climate change

## (4.12.1.4) Status of the publication

Select from:

✓ Underway - previous year attached

### (4.12.1.5) Content elements

Select all that apply

- ✓ Governance
- ☑ Risks & Opportunities
- Strategy
- Emission targets

## (4.12.1.6) Page/section reference

2023 Ameren Missouri Integrated Resource Plan More information is available at AmerenMissouri.com/IRP. Plan summary attached.

### (4.12.1.7) Attach the relevant publication

2023\_IRP\_Stakeholder\_Summary.pdf

## (4.12.1.8) Comment

Ameren Missouri Integrated Resource Plan. A 20-year plan that supports cleaner energy in Missouri, including major expansions of solar and wind power. The IRP, which is filed every three years, describes our preferred approach to meeting electric customers' projected long-term energy needs in a cost-effective fashion that maintains system reliability as we move to cleaner and more diverse sources of energy generation.

#### Row 4

## (4.12.1.1) **Publication**

Select from:

✓ In voluntary communications

## (4.12.1.3) Environmental issues covered in publication

Select all that apply

- ✓ Climate change
- Water
- ☑ Biodiversity

## (4.12.1.4) Status of the publication

Select from:

✓ Underway - previous year attached

## (4.12.1.5) Content elements

Select all that apply

- ✓ Governance
- ✓ Risks & Opportunities
- Strategy
- Emissions figures

## (4.12.1.6) Page/section reference

Ameren Corporation Climate Report – Powering a Reliable, Sustainable Tomorrow. Entire Report.

## (4.12.1.7) Attach the relevant publication

## (4.12.1.8) Comment

Powering a Reliable, Sustainable Tomorrow: Ameren's 2023 climate risk report is based on recommendations from the Task Force on Climate-related Financial Disclosures (TCFD). This report provides information about the company's management of climate-related risks and opportunities, including its expansive plan to add clean energy in the coming decades. It also details how that plan is consistent with meeting the 1.5 Celsius goal, the target established by the Paris Agreement.

#### Row 5

### (4.12.1.1) **Publication**

Select from:

✓ In voluntary communications

### (4.12.1.3) Environmental issues covered in publication

Select all that apply

- ✓ Climate change
- Water
- ☑ Biodiversity

## (4.12.1.4) Status of the publication

Select from:

Complete

### (4.12.1.5) Content elements

Select all that apply

- ☑ Governance
- ✓ Risks & Opportunities
- Strategy

Emission targets

## (4.12.1.6) Page/section reference

Ameren Sustainability Investor Presentation: Leading the Way to a Sustainable Energy Future (August 2024). Entire Presentation.

### (4.12.1.8) Comment

The Ameren Sustainability Investor presentation provides a comprehensive view of Ameren's commitment to operating in a sustainable manner by carefully balancing our key responsibilities to our customers and the communities we serve, our co-workers, our shareholders and the environment. Our ability to achieve our mission and vision is directly linked to four key sustainability pillars: environmental stewardship, social impact, governance and sustainable growth.

#### Row 6

### (4.12.1.1) **Publication**

Select from:

✓ In voluntary communications

## (4.12.1.3) Environmental issues covered in publication

Select all that apply

✓ Climate change

### (4.12.1.4) Status of the publication

Select from:

Complete

### (4.12.1.5) Content elements

Select all that apply

- Governance
- ☑ Risks & Opportunities
- Strategy

## (4.12.1.6) Page/section reference

EEI AGA ESG Sustainability Template. See entire report.

## (4.12.1.8) Comment

Ameren is participating in the EEI AGA ESG/Sustainability Report, a voluntary industry initiative coordinated by the Edison Electric Institute (EEI) and the American Gas Association (AGA) to provide electric industry investors with more uniform and consistent environmental, social, governance and sustainability-related (ESG/sustainability) metrics.

[Add row]

### **C5. Business strategy**

(5.1) Does your organization use scenario analysis to identify environmental outcomes?

#### Climate change

## (5.1.1) Use of scenario analysis

Select from:

Yes

## (5.1.2) Frequency of analysis

Select from:

✓ Not defined

#### Water

## (5.1.1) Use of scenario analysis

Select from:

Yes

## (5.1.2) Frequency of analysis

Select from:

✓ Not defined

[Fixed row]

(5.1.1) Provide details of the scenarios used in your organization's scenario analysis.

### Climate change

## (5.1.1.1) Scenario used

#### Physical climate scenarios

☑ Bespoke physical climate scenario

## (5.1.1.3) Approach to scenario

Select from:

✓ Qualitative and quantitative

## (5.1.1.4) Scenario coverage

Select from:

✓ Organization-wide

## (5.1.1.5) Risk types considered in scenario

Select all that apply

- Acute physical
- ☑ Chronic physical
- Market
- Reputation
- Technology

## (5.1.1.6) Temperature alignment of scenario

Select from:

**✓** 1.5°C or lower

## (5.1.1.7) Reference year

2023

### (5.1.1.8) Timeframes covered

Select all that apply

✓ 2025✓ 2070

✓ 2030✓ 2080

✓ 2040✓ 2090

✓ 2050✓ 2100

**☑** 2060

### (5.1.1.9) Driving forces in scenario

#### Local ecosystem asset interactions, dependencies and impacts

✓ Climate change (one of five drivers of nature change)

#### Relevant technology and science

☑ Other relevant technology and science driving forces, please specify

## (5.1.1.10) Assumptions, uncertainties and constraints in scenario

Ameren's strategy for climate risk is embedded in Ameren Missouri's 2023 Integrated Resource Plan (IRP) Update. To assess the resilience of the IRP against potential future climate policies and associated emissions requirements, we leveraged the EPRI study "Grounding Decisions: A Scientific Foundation for Companies Considering Global Climate Scenarios and Greenhouse Gas Goals." An updated report was released "Review of 1.5C and Other Newer Global Emissions Scenarios: Insights for Company and Financial Climate Low-Carbon Transition Risk Assessment and Greenhouse Gas Goal Setting." This report offered a scientifically based framework for considering uncertainty in climate-scenario analysis. Much of EPRI's study builds on the scenario results released by the IPCC in its Sixth Assessment Report and on scenario data used by the IPCC in its "Special Report on 1.5C." (IPCC Special Report). From the combined data sets of these IPCC reports, 97 scenarios were placed into 1 of 3 categories according to their probabilities of limiting increases in global average temperature to no more than 1.5C. These represent projected global annual CO2 emissions levels over a given timeframe, along with a range of probabilities of staying below 1.5C. We calculated Ameren's pro-rata share of emissions for the global electric sector scenarios from the EPRI analysis using Ameren's share of 2005 emissions. Comparing the IRP against those scenarios with a high likelihood of achievement of a 1.5C goal, we found that the projected CO2 emissions under our current plan fall well within the range of the emissions defined by these scenarios. Our current net-zero emissions by 2045 plan, with interim emissions reductions of 60% by 2030 and 85% by 2040, based on 2005 levels, is consistent with limiting temperature rise to 1.5 C by 2050. We concluded that for the time period around 2030 water stress is projected to be near normal for most regions within the study area, but is likely to increase in the already arid Powder River Basin. Average annual precipitation has been variable to increasing but is projected to increase in the future across all three watersheds. Flooding has been increasing and is projected to continue to increase in the study area; however, flooding is more variable both historically and projected in Powder River Basin. Drought has been variable historically but is projected to increase across all three watersheds.

#### Water

## (5.1.1.1) Scenario used

#### **Water scenarios**

☑ Customized publicly available water scenario, please specify: Water Resiliency Assessment

## (5.1.1.3) Approach to scenario

Select from:

✓ Qualitative and quantitative

## (5.1.1.4) Scenario coverage

Select from:

✓ Organization-wide

## (5.1.1.5) Risk types considered in scenario

Select all that apply

- ☑ Chronic physical
- ✓ Policy
- Market
- ▼ Technology

## (5.1.1.8) Timeframes covered

Select all that apply

✓ 2025✓ 2070

✓ 2030✓ 2080

✓ 2040✓ 2090

✓ 2050✓ 2100

### (5.1.1.9) Driving forces in scenario

#### Local ecosystem asset interactions, dependencies and impacts

✓ Climate change (one of five drivers of nature change)

#### Regulators, legal and policy regimes

☑ Global targets

#### Relevant technology and science

☑ Other relevant technology and science driving forces, please specify

#### **Direct interaction with climate**

☑ Other direct interaction with climate driving forces, please specify

#### (5.1.1.10) Assumptions, uncertainties and constraints in scenario

Parameters, assumptions, analytical choices Water-related (Water Resiliency Assessment) - When considering factors that may influence water resources, the primary factors include temperature and precipitation, which both influence snowmelt, as well as water consumption from upstream users. This report focuses solely on natural factors and how changes in temperature and precipitation as a result of climate change may influence water resources and water availability. The report does not consider how future consumption from other water users in the region may affect Ameren's access to water resources, as such information is not known or otherwise publicly available. Potential climate change impacts across the study area may vary due to the wide range of topographies and geographies. For this section, four climate factors are considered: temperature, precipitation, extreme events, and drought/water availability. Each of these factors can impact regional water resources, and therefore affect consistent and reliable water availability. Climate- Related (Climate Risk Report: Committed to Clean) - To help us assess the resilience of Ameren Missouri's IRP against potential future climate policies and associated emissions requirements, we leveraged the Electric Power Research Institute (EPRI) study "Grounding Decisions: A Scientific Foundation for Companies Considering Global Climate Scenarios and Greenhouse Gas Goals," which summarized over 1,000 climate scenarios from the IPCC and others. The study was updated in April 2020. From the combined data sets of IPCC reports, 78 scenarios were placed into one of three categories according to their probabilities of limiting increases in global average temperature to no more than 1.5C. Each category includes a range of emissions pathways, which represent projected global annual CO2 emissions levels over a given period of time, along with a range of probabilities of staying below 1.5C. To provide proper context for a review of Ameren Missouri's most recent IRP, we calculated Ameren's pro-rata share of emissions for the global electric sector scenarios from the EPRI analysis using Ameren's share of 2005 emissions. This allowed us to compare the emission reductions associated with our plan to the emissions pathways represented in the scenario analysis data used by EPRI. [Add row]

#### (5.1.2) Provide details of the outcomes of your organization's scenario analysis.

#### Climate change

### (5.1.2.1) Business processes influenced by your analysis of the reported scenarios

Select all that apply

☑ Target setting and transition planning

### (5.1.2.2) Coverage of analysis

Select from:

✓ Organization-wide

### (5.1.2.3) Summarize the outcomes of the scenario analysis and any implications for other environmental issues

Focal questions We recognize that climate change is a critical issue for our customers, our communities, our nation and our planet. We are committed to doing our part to protect and preserve the environment as described in this report. It provides a comprehensive look at the steps Ameren is taking to manage our climaterelated risks – including policy and legal, physical, reputational, technology, market, and financial risks – while continuing to meet our goal to provide safe, reliable and affordable energy to serve our customers. To address and respond to climate risk, we evaluate all aspects of our electric, natural gas and transmission businesses. The primary sources of Ameren's greenhouse gas (GHG) emissions are Ameren Missouri's fossil-fueled energy centers. To a lesser extent, our GHG emissions can also be attributed to our natural gas and electric delivery operations. As a result, we are taking actions across all parts of the business as we address the potential impacts of climate change and strive to reduce our total GHG emissions. Key focal questions included in our scenario analysis planning: What is our customers' peak demand and energy consumption expected over the next 20 years and what is the best way to meet that demand and energy consumption? Is our plan consistent with Paris objectives or not? Results of the climate-related scenario analysis with respect to the focal questions As we have continued to evaluate climate risks, we have increasingly focused on contributing to the achievement of a goal of limiting global average temperature rise to no more than 1.5C, the target established by the Paris Agreement. To help us assess the resilience of Ameren Missouri's 2020 IRP against potential future climate policies & associated emissions requirements, we leveraged the EPRI study "Grounding Decisions: A Scientific Foundation for Companies Considering Global Climate Scenarios and Greenhouse Gas Goals," which summarized over 1,000 climate scenarios from the IPCC & others. The study was updated April 2020 with the release of a new report "Review of 1.5C & Other Newer Global Emissions Scenarios: Insights for Company & Financial Climate Low-Carbon Transition Risk Assessment & Greenhouse Gas Goal Setting." The EPRI study offered a scientifically-based framework for considering uncertainty in climate-scenario analysis & provided insights that could be applied at the company level. The EPRI study also included other scenario data from sources reviewed by the IPCC, & some scenario data from sources not reviewed by the IPCC, such as the NRDC & Bloomberg New Energy Finance. Our strategy for addressing climate risk, which is embedded in Ameren Missouri's IRP (updated June 2022) is expected to deliver significant reductions in carbon emissions by the end of the decade, with the goal of ultimately reaching net-zero carbon emissions by 2045, while effectively balancing customer affordability & reliability, & managing related risks. We believe that the plan set forth in our IRP coupled with other plans will enable us to effectively achieve our goals. Our updated plan & scenario analysis informed the acceleration of coal retirements—targeting retirement of 3,000 MW by 2030 & the retirement of all coal energy centers by 2042 (retirement of a total of 5.400 MW). The Meramec Energy Center (coal-fired) was retired in Dec. 2022.

Also, the plan adds 4,700 MW of renewables by 2040 (investment opp. 7.5 B); adds 1,200 MW of combined cycle generation by 2031 (investment opp. of 1.7 B)-planned transition to H2 or H2 blend with carbon capture retrofit by 2040; & adds 800 MW of battery storage by 2040 (investment opp. of 650 M). Our plan is the best way to meet our customer's peak demand & energy consumption over the next 20 years. To test the resilience of our IRP, we compared our expected emission reductions under that plan to the emission pathways analyzed by EPRI. These emissions pathways, which represent estimated global annual CO2 emissions levels over a given timeframe, included 100s of emissions pathways published by the IPCC, the UN body that assesses the science related to climate change. Based on this analysis, we believe that our projected emissions are consistent with limiting global temperature rise to 1.5C. We believe our plan transitions our generation fleet to a cleaner & more diverse portfolio in a responsible fashion.

#### Water

### (5.1.2.1) Business processes influenced by your analysis of the reported scenarios

Select all that apply

☑ Target setting and transition planning

### (5.1.2.2) Coverage of analysis

Select from:

✓ Organization-wide

### (5.1.2.3) Summarize the outcomes of the scenario analysis and any implications for other environmental issues

Description of possible water-related outcomes A study area was defined for this report to include the Upper Mississippi and the Lower Missouri Water Resources Region, which represents Ameren's service area, as well as specific portions of the Powder River Basin in Wyoming, which represents a key portion of Ameren's supply chain. Water stress is projected to be near normal for most areas within Ameren's service area in the time period around 2030. With precipitation projected to see a slight increase, the Upper Mississippi and the lower portion of Missouri Regions are anticipated to see an increasing trend for maximum monthly flow and flooding events. Precipitation is also expected to have seasonal variability, with specific increases seen in the spring. However, the projected increase in the exporation and potentially lower streamflow in the summer is anticipated to outweigh a projected increase in average annual precipitation, and contribute to an increase in drought events by midcentury, particularly in summer months. The Powder River Basin, already considered an arid region, may experience increased water stress. The potentially higher temperatures, higher evaporation and lower summer stream flows are likely to contribute to a potential future increase in drought severity and frequency. The projections for the future flooding trend are mixed as the historical instantaneous peak flows in this area has been steadily decreasing, while projected maximum monthly flow is shown to increase in the future. Influence on business strategy Our climate and water-related studies indicated the potential for increased variability of precipitation and flood events in our service territory, and potential increased drought in the Powder River Basin, a key portion of our supply chain. Our actions include: • Response to physical risks: For future flooding, we have implemented more vigilant monitoring of local river stages following extreme rainfall or drought conditions. We have constructed flood walls, upgraded berms, implemen

destructive effects of wind and moisture. Timeframe: Significant portions of these upgrades are set to be completed in 2024. • Response to water conservation: While our Water Resilience Assessment indicated low water scarcity risk in our service territory we are implementing water-saving measures: transitioning to dry ash handling, investment in renewable technologies, energy efficiency measures, and smart grids to facilitate continues incorporation of non-water-intensive generation. Timeframe: These majority of water efficiency upgrades completed in 2021, and remaining is scheduled to complete in 2024.

[Fixed row]

#### (5.2) Does your organization's strategy include a climate transition plan?

## (5.2.1) Transition plan

Select from:

✓ Yes, we have a climate transition plan which aligns with a 1.5°C world

### (5.2.3) Publicly available climate transition plan

Select from:

Yes

# (5.2.4) Plan explicitly commits to cease all spending on, and revenue generation from, activities that contribute to fossil fuel expansion

Select from:

☑ No, and we do not plan to add an explicit commitment within the next two years

### (5.2.7) Mechanism by which feedback is collected from shareholders on your climate transition plan

Select from:

☑ We have a different feedback mechanism in place

### (5.2.8) Description of feedback mechanism

The Company maintains an active shareholder engagement program to ensure regular communication with shareholders regarding areas of interest or concern. Each year, we conduct outreach to shareholders owning a significant percentage of our outstanding shares of Common Stock, in addition to presentations at industry and

financial conferences and meetings with analysts and investment firms. The Company's engagement efforts include investor meetings specifically focused on its sustainability initiatives, including environmental stewardship, social impact, and governance practices, including executive compensation, risk management and oversight. In 2022 and early 2023, we reached out to over 80 shareholders and offered to engage on ESG-related topics, including climate-related topics and our transition plan as well as any other topics of interest. We received positive responses. We engaged with a broad range of shareholders, actively managed funds and socially-responsible investment funds. Key topics for shareholder engagement included climate-related matters, cybersecurity, human capital management and corporate culture, and Board leadership structure, As well as how these topics tie to our long-term strategy. Participants in these engagements included our CEO; CFO; EVP General Counsel and Secretary; SVP Chief Sustainability, Diversity & Philanthropy Officer; Senior Director, Environmental Strategy and Analysis, Director, Investor Relations, Director, Corporate Sustainability and Director, Corporate Analysis. In addition, our investor relations group leads our management team in hundreds of investor meetings throughout the year.

### (5.2.9) Frequency of feedback collection

Select from:

✓ More frequently than annually

### (5.2.12) Attach any relevant documents which detail your climate transition plan (optional)

2024 Sustainability Report.pdf,2023\_IRP\_Stakeholder\_Summary.pdf

### (5.2.13) Other environmental issues that your climate transition plan considers

Select all that apply

✓ Biodiversity

[Fixed row]

### (5.3) Have environmental risks and opportunities affected your strategy and/or financial planning?

### (5.3.1) Environmental risks and/or opportunities have affected your strategy and/or financial planning

Select from:

✓ Yes, both strategy and financial planning

### (5.3.2) Business areas where environmental risks and/or opportunities have affected your strategy

Select all that apply

- Products and services
- ✓ Upstream/downstream value chain
- ✓ Investment in R&D
- Operations

[Fixed row]

#### (5.3.1) Describe where and how environmental risks and opportunities have affected your strategy.

#### **Products and services**

### (5.3.1.1) Effect type

Select all that apply

- Risks
- Opportunities

### (5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

✓ Climate change

### (5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

Ameren has a process for identifying significant risks and opportunities that allow its business to make prudent decisions while meeting our customers' energy needs in a safe, reliable, efficient and environmentally responsible manner, including climate-related risks. Ameren develops action plans that mitigate risk, manage long-term customer costs and improve shareholder value. Ameren's strategy for addressing climate risk is largely embedded in Ameren Missouri's 2023 Integrated Resource Plan (IRP), which was filed with the MoPSC in September 2023 and reflects Ameren Missouri's preferred resource plan between 2024 and 2043. This plan reaffirms Ameren's net-zero carbon emissions reduction goal by 2045. It outlines Ameren Missouri's intent to retire more than 2,500 MW of fossil-fired generation by 2030, and add 2,800 MW of additional new, clean, renewable (wind and solar) generation by 2030 and a total of 4,700 MW by 2036. In addition, we plan to add 400 MW of battery storage by 2030 and a total of 800 MW by 2035. More information is available at AmerenMissouri.com/IRP.

#### Upstream/downstream value chain

### (5.3.1.1) Effect type

Select all that apply

- ✓ Risks
- Opportunities

### (5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

✓ Climate change

## (5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

Ameren's risk management department has policies to address fuel price volatility and supply chain risks, including related to operations and weather. Robust policies and processes exist to allow Ameren management to review and approve each offset or allowance financial hedge that may be executed. Caps or limits on specific transactions may be implemented to diversify the portfolio of hedges to minimize the negative financial impact associated with any single hedge investment or offset project.

#### **Investment in R&D**

### (5.3.1.1) Effect type

Select all that apply

- ✓ Risks
- Opportunities

## (5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

✓ Climate change

## (5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

Ameren is a member of the Low Carbon Resources Initiative, an effort to accelerate the deployment of low- and zero-carbon energy technologies required for technologies to achieve deep decarbonization in a responsible fashion. In addition, Ameren joined EPRI's Climate READi effort. The goal of the Climate Power Resilience and Adaptation Initiative (READi) is to develop a common framework for addressing the entirety of the power system (planning through operations); to provide an informed approach to climate risk assessment and strategic resilience planning that can be replicated; and to drive stakeholder alignment on adaptation

strategies for efficient and effective investment. Ameren is collaborating with LCRI to pilot a hydrogen-based long duration energy storage project at the TAC microgrid in Champaign, Illinois, in 2024. By leveraging the existing microgrid platform at the TAC, we plan to add a hydrogen subsystem as a dispatchable load/source to evaluate the performance of hydrogen-based long duration energy storage technology (for more than 8 hours as recognized by the industry). The benefits of this project include gaining practical experience and understanding of the safety, efficiency and flexibility of a hydrogen subsystem and first-hand experience understanding hydrogen's contribution to system reliability, resiliency and sustainability. Ameren is leveraging our collaboration with Climate READi to conduct a site specific analysis of temperature trends and extremes in Missouri. EPRI will conduct a comprehensive site-specific climate and weather data analysis and application guidance for dry-bulb temperature and summer and winter minimum and maximum extreme weather trends to incorporate in future generation design criteria. Specifically, this project will develop a comprehensive climate dataset, including analyses of the historical baseline and projected changes [based on the best available Coupled Model Intercomparison Project (CMIP6) climate science and modeling] in both average and extreme outcomes at planning and engineering design time scales (e.g., 2050s, 2080s).

#### **Operations**

### (5.3.1.1) Effect type

Select all that apply

Risks

Opportunities

### (5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

✓ Climate change

### (5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

Ameren is focused on responsibly delivering a cleaner energy future while providing safe, reliable and affordable energy to customers. To address and respond to climate risk, we evaluate all aspects of our electric, natural gas and transmission businesses. The primary sources of Ameren's greenhouse gas (GHG) emissions are Ameren Missouri's fossil-fueled energy centers. Even though less than 1% of our Scope 1 and Scope 2 GHG emissions are attributable to natural gas emissions from our operations, we are taking actions across all parts of our business as we strive to reduce our total GHG emissions. Ameren Missouri is transforming its generation fleet with the acceleration of clean energy additions as set forth in its 20-year energy plan to provide reliable, affordable and resilient energy for customers. Ameren's strategy for addressing climate risk is largely embedded in Ameren Missouri's 2023 Integrated Resource Plan (IRP), which was filed with the MoPSC in September 2023 and reflects Ameren Missouri's preferred resource plan between 2024 and 2043. This plan reaffirms Ameren's net-zero carbon emissions reduction goal by 2045. It outlines Ameren Missouri's intent to retire more than 2,500 MW of fossil-fired generation by 2030, and add 2,800 MW of additional new, clean, renewable (wind and solar) generation by 2030 and a total of 4,700 MW by 2036. In addition, we plan to add 400 MW of battery storage by 2030 and a total of 800 MW by 2035. Ameren Missouri plans to add new dispatchable resources over the next 20 years, beginning with a simple-cycle natural gas-fired energy center by the end of 2027.

After the Sioux Energy Center retirement, the company plans to add a 1,200 MW combined cycle energy center to be in service by 2033. More information is available at Ameren.com/IRP.

[Add row]

#### (5.3.2) Describe where and how environmental risks and opportunities have affected your financial planning.

#### Row 1

### (5.3.2.1) Financial planning elements that have been affected

Select all that apply

Capital allocation

### (5.3.2.4) Describe how environmental risks and/or opportunities have affected these financial planning elements

The primary sources of Ameren's GHG emissions are AMO's fossil-fueled energy centers. Capital expenditures/allocation to support the implementation of Ameren's investment strategy are factored into Ameren's financial planning and risk management processes and are regularly considered. Our strategy addresses:1. Electric Generation. We are transitioning our generation fleet to cleaner resources, as set forth in Ameren Missouri's 2023 Integrated Resource Plan (IRP). 2. Electric Transmission. We are expanding and enhancing our electric transmission grid to integrate additional clean, renewable energy resources while reducing energy losses and improving system reliability.3. Electric Grid. We are modernizing the electric grid to accommodate more energy from renewable sources, strengthen our system to be more resilient to climate change and weather-related events, and improve efficiency and reliability, 4. Energy Efficiency. We are implementing expanded programs that incentivize customers to reduce their energy consumption because the cleanest energy is the energy that is not needed. 5. Low- to No-Carbon Energy Resources. Ameren will continue to build on an already solid base of clean energy sources. We are investing in the long-term stability of the Callaway Energy Center and expect to seek an extension of its operating license beyond 2044. We will also continue to invest in our hydro-powered energy centers at Keokuk and Osage. Ameren will collaborate with EPRI and the Gas Technology Institute on a Low-Carbon Resources Initiative to accelerate development and demonstration of low- and zero-carbon energy technologies required for decarbonization 6. Natural Gas Distribution System. We are reducing methane leakage in our natural gas distribution system. We have replaced 100% of cast and wrought iron pipeline on the natural gas delivery system. These efforts and operational practices have reduced our fugitive methane emissions rate to approx. 0.1%, avg. over the last five years.7. Other Non-Energy Center Emissions. We are promoting customer programs related to renewable energy and electrification of transportation. We expect to make significant capital expenditures to maintain and improve our electric and natural gas utility infrastructure and to comply with existing environmental regulations. In February 2024, we issued five-year capital expenditure estimates of 21.9B(AMO – up to 13B; AIC – up to 4.8B; ATXI – up to 4.1B) of capital expenditures from 2024-2028. [Add row]

# (5.4) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?

Identification of spending/revenue that is aligned with your organization's climate transition	Methodology or framework used to assess alignment with your organization's climate transition
Select from:  ✓ Yes	Select all that apply  ✓ Other methodology or framework

[Fixed row]

# (5.4.1) Quantify the amount and percentage share of your spending/revenue that is aligned with your organization's climate transition.

	*	Percentage share of selected financial metric planned to align in 2025 (%)	Percentage share of selected financial metric planned to align in 2030 (%)
Row 1	0	9	33

[Add row]

# (5.5) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

## (5.5.1) Investment in low-carbon R&D

Select from:

✓ Yes

### (5.5.2) Comment

Ameren has invested in research relating to alternative forms of generation. In 2022, Ameren spent over 3.394 Million for CO2 emissions reduction and alternative energy generation R&D programs. Ameren partnered with the University of Missouri System, Capital Innovators and industry associations to invest, mentor and support energy technology startups. Through this innovative public-private partnership, Ameren invested 1.9 million from 2017- 2019 in energy startups and technologies with the goal of meeting future needs for clean energy in our service territory. To date, over 150 jobs have been created along with an additional 20 million in follow-on funding for these companies. Ameren is continuing these efforts through EPRI's Incubatenergy Labs Network. This collaborative endeavor, consisting of over a dozen peer utilities, focuses on demonstration pilots of new technologies set to transform the energy landscape, including those that have a focus on carbon and the environment.

[Fixed row]

(5.5.7) Provide details of your organization's investments in low-carbon R&D for your sector activities over the last three years.

Row 1

### (5.5.7.1) Technology area

Select from:

✓ Other, please specify :CO2 emissions reduction and alternative energy generation R&D programs.

### (5.5.7.2) Stage of development in the reporting year

Select from:

✓ Applied research and development

### (5.5.7.3) Average % of total R&D investment over the last 3 years

28

## (5.5.7.4) R&D investment figure in the reporting year (unit currency as selected in 1.2) (optional)

3394000

### (5.5.7.5) Average % of total R&D investment planned over the next 5 years

# (5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

Ameren has invested in research relating to alternative forms of generation. In 2022, Ameren spent over 3.394 Million for CO2 emissions reduction and alternative energy generation R&D programs. Research includes the EPRI Electrification Portfolio Assessment, Social Cost of Carbon Project, Integration of Distributed Energy Program, Energy Sustainability Interest Group, Sustainability Benchmarking Project, Feasibility Study for Microgrids, Energy Storage Program, and Grid Modernization Program. In addition to EPRI activities, Ameren participated in the Missouri S&T Microgrid Consortium, The University of Illinois Distributed Generation Analysis, and the Gas Technology Institute Emerging Technology Program. Ameren partnered with the University of Missouri System, Capital Innovators and industry associations to invest, mentor and support energy technology startups. Through this innovative public-private partnership, Ameren invested 1.9 million from 2017-2019 in energy startups and technologies with the goal of meeting future needs for clean energy in our service territory. To date, over 150 jobs have been created along with an additional 20 million in follow-on funding for these companies. Ameren is continuing these efforts through EPRI's Incubatenergy Labs Network. This collaborative endeavor, consisting of over a dozen peer utilities, focuses on demonstration pilots of new technologies set to transform the energy landscape, including those that have a focus on carbon and the environment. We are unable to calculate the savings from these investments. Ameren is also a member of the Low Carbon Resources Initiative, an effort to accelerate the deployment of low- and zero-carbon energy technologies required for technologies to achieve deep decarbonization in a responsible fashion. In addition, Ameren joined EPRI's Climate READi effort. The goal of the Climate Power Resilience and Adaptation Initiative (READi) is to develop a common framework for addressing the entirety of the power system (planning through operations)

(5.7) Break down, by source, your organization's CAPEX in the reporting year and CAPEX planned over the next 5 years.

### Lignite

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

(5.7.5) Explain your CAPEX calculations, including any assumptions

#### Oil

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

(5.7.5) Explain your CAPEX calculations, including any assumptions

N/A

#### Gas

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

(

(5.7.5) Explain your CAPEX calculations, including any assumptions

N/A

#### Sustainable biomass

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

(5.7.5) Explain your CAPEX calculations, including any assumptions

N/A

#### Other biomass

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

(5.7.5) Explain your CAPEX calculations, including any assumptions

N/A

**Waste (non-biomass)** 

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

(5.7.5) Explain your CAPEX calculations, including any assumptions

N/A

#### **Nuclear**

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

(5.7.5) Explain your CAPEX calculations, including any assumptions

N/A

#### **Geothermal**

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

### (5.7.5) Explain your CAPEX calculations, including any assumptions

N/A

### **Hydropower**

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

### (5.7.5) Explain your CAPEX calculations, including any assumptions

N/A

[Fixed row]

(5.7.1) Break down your total planned CAPEX in your current CAPEX plan for products and services (e.g. smart grids, digitalization, etc.).

Row 1

### (5.7.1.1) Products and services

Select from:

Smart grid

# (5.7.1.2) Description of product/service

Ameren Missouri Smart Grid Program: Ameren Missouri, through the Smart Energy Plan (SEP), is investing in smart technology, stronger poles and upgraded power lines to help reduce outages and respond faster when they do occur. We will continue to provide our customers and communities with benefits and value. Our 9.9 billion plan for 2023 to 2027 will further our efforts to create a stronger, smarter, cleaner, more resilient and secure electric grid. As one component of SEP, Ameren Missouri expects to invest approximately 438 million in smart grid operations. This involves deploying smart and automated switching devices and building a private fiber wireless communication network to enable the system to more rapidly detect and isolate outages, reroute power and restore service. These devices with associated grid upgrades have improved reliability up to 40%. Smart Grid also includes investments in the LED streetlight program. Ameren Missouri, in collaboration with communities, upgrades streetlights to energy-efficient LED bulbs. Ameren Missouri Smart Meter Program: Ameren Missouri, through the Smart Energy Plan (SEP), is investing in smart technology, stronger poles and upgraded power lines to help reduce outages and respond faster when they do occur. We will continue to provide our customers and communities with benefits and value. Our 9.9 billion plan for 2023 to 2027 will further our efforts to create a stronger, smarter, cleaner, more resilient and secure electric grid. One component of the SEP is installing over 1 million\*\* smart meters by 2024. This meter program will provide two-way communication that can more quickly pinpoint and restore outages. In addition, this program enables us to offer a suite of expanded rate options that give customers the power to choose a rate that fits their lifestyle. \*\* Does not include gas modules. All installations by 2024

# (5.7.1.3) CAPEX planned for product/service

438000000

# (5.7.1.4) Percentage of total CAPEX planned for products and services

4.4

# (5.7.1.5) End year of CAPEX plan

2027

#### Row 2

# (5.7.1.1) Products and services

Select from:

✓ Other, please specify: Ameren Missouri Smart Meter

# (5.7.1.2) Description of product/service

Ameren Missouri Smart Grid Program: Ameren Missouri, through the Smart Energy Plan (SEP), is investing in smart technology, stronger poles and upgraded power lines to help reduce outages and respond faster when they do occur. We will continue to provide our customers and communities with benefits and value. Our 9.9 billion plan for 2023 to 2027 will further our efforts to create a stronger, smarter, cleaner, more resilient and secure electric grid. As one component of SEP, Ameren Missouri expects to invest approximately 438 million in smart grid operations. This involves deploying smart and automated switching devices and building a private fiber wireless communication network to enable the system to more rapidly detect and isolate outages, reroute power and restore service. These devices with associated grid upgrades have improved reliability up to 40%. Smart Grid also includes investments in the LED streetlight program. Ameren Missouri, in collaboration with communities, upgrades streetlights to energy-efficient LED bulbs. Ameren Missouri Smart Meter Program: Ameren Missouri, through the Smart Energy Plan (SEP), is investing in smart technology, stronger poles and upgraded power lines to help reduce outages and respond faster when they do occur. We will continue to provide our customers and communities with benefits and value. Our 9.9 billion plan for 2023 to 2027 will further our efforts to create a stronger, smarter, cleaner, more resilient and secure electric grid. One component of the SEP is installing over 1 million\*\* smart meters by 2024. This meter program will provide two-way communication that can more quickly pinpoint and restore outages. In addition, this program enables us to offer a suite of expanded rate options that give customers the power to choose a rate that fits their lifestyle. \*\* Does not include gas modules. All installations by 2024

### (5.7.1.3) CAPEX planned for product/service

104000000

# (5.7.1.4) Percentage of total CAPEX planned for products and services

1.1

# (5.7.1.5) End year of CAPEX plan

2027 [Add row]

(5.9) What is the trend in your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anticipated trend for the next reporting year?

# (5.9.1) Water-related CAPEX (+/- % change)

# (5.9.2) Anticipated forward trend for CAPEX (+/- % change)

27

# (5.9.3) Water-related OPEX (+/- % change)

-46

# (5.9.4) Anticipated forward trend for OPEX (+/- % change)

35

### (5.9.5) Please explain

CAPEX expenditures include wastewater treatment system upgrades, ash pond closures, dry ash handling transitions, groundwater improvement and monitoring systems and 316(b) compliance measures. These expenditures decreased (-29%) from 2021 to 2022 as some ash pond closure projects finished construction and entered operation (O&M costs). CAPEX spending is expected to increase through 2024 (average of 27%) due to ongoing additional ash pond closures and 316(b) compliance projects. OPEX spending includes operation of wastewater treatment, groundwater monitoring and improvement systems, 316(b) compliance projects and ash pond closure maintenance. These have decreased 46% compared to the previous year as ash pond and wastewater operation expenses decreased (decreasing O&M costs). OPEX is expected to increase 35% on average through 2024 due to increasing ash pond O&M as projects finish and additional O&M cost maintenance of closed ash ponds and implementation of 316(b) compliance measures [Fixed row]

### (5.10) Does your organization use an internal price on environmental externalities?

Use of internal pricing of environmental externalities	Environmental externality priced
Select from:  ✓ Yes	Select all that apply  ☑ Carbon

### (5.10.1) Provide details of your organization's internal price on carbon.

#### Row 1

# (5.10.1.1) Type of pricing scheme

Select from:

✓ Implicit price

# (5.10.1.2) Objectives for implementing internal price

Select all that apply

- ✓ Drive low-carbon investment
- ✓ Identify and seize low-carbon opportunities
- ✓ Navigate regulations
- ✓ Stress test investments
- ☑ Other, please specify: Stakeholder expectations; Ameren Missouri Integrated Resource Plan

# (5.10.1.3) Factors considered when determining the price

Select all that apply

☑ Social cost of climate-related impact

# (5.10.1.5) Scopes covered

Select all that apply

✓ Scope 1

# (5.10.1.6) Pricing approach used – spatial variance

Select from:

✓ Other, please specify: Pricing approach used – spatial variance Other, please specify The use of CO2 prices is applied to the ongoing costs for the Ameren Missouri. Specifically those generation facilities that burn coal and natural gas.

### (5.10.1.8) Pricing approach used – temporal variance

Select from:

Evolutionary

# (5.10.1.10) Minimum actual price used (currency per metric ton CO2e)

2.66

# (5.10.1.11) Maximum actual price used (currency per metric ton CO2e)

25.11

### (5.10.1.12) Business decision-making processes the internal price is applied to

Select all that apply

- ✓ Capital expenditure
- Operations

# (5.10.1.13) Internal price is mandatory within business decision-making processes

Select from:

✓ Yes, for some decision-making processes, please specify :Ameren Missouri Integrated Resource Plan [Add row]

# (5.11) Do you engage with your value chain on environmental issues?

	Engaging with this stakeholder on environmental issues	Environmental issues covered
Suppliers	Select from: ✓ Yes	Select all that apply  ✓ Climate change ✓ Water
Customers	Select from:  ✓ Yes	Select all that apply  ☑ Climate change ☑ Water

[Fixed row]

# (5.11.1) Does your organization assess and classify suppliers according to their dependencies and/or impacts on the environment?

	Assessment of supplier dependencies and/or impacts on the environment
Water	Select from:
	☑ No, we do not assess the dependencies and/or impacts of our suppliers, and have no plans to do so within two years

[Fixed row]

# (5.11.2) Does your organization prioritize which suppliers to engage with on environmental issues?

# **Climate change**

# (5.11.2.1) Supplier engagement prioritization on this environmental issue

Select from:

✓ Yes, we prioritize which suppliers to engage with on this environmental issue

# (5.11.2.2) Criteria informing which suppliers are prioritized for engagement on this environmental issue

Select all that apply

✓ Strategic status of suppliers

#### Water

# (5.11.2.1) Supplier engagement prioritization on this environmental issue

Select from:

☑ No, we do not prioritize which suppliers to engage with on this environmental issue [Fixed row]

### (5.11.5) Do your suppliers have to meet environmental requirements as part of your organization's purchasing process?

### Climate change

# (5.11.5.1) Suppliers have to meet specific environmental requirements related to this environmental issue as part of the purchasing process

Select from:

☑ No, but we plan to introduce environmental requirements related to this environmental issue within the next two years

# (5.11.5.2) Policy in place for addressing supplier non-compliance

Select from:

☑ No, we do not have a policy in place for addressing non-compliance

#### Water

# (5.11.5.1) Suppliers have to meet specific environmental requirements related to this environmental issue as part of the purchasing process

Select from:

☑ No, and we do not plan to introduce environmental requirements related to this environmental issue within the next two years

### (5.11.5.2) Policy in place for addressing supplier non-compliance

Select from:

☑ No, we do not have a policy in place for addressing non-compliance

### (5.11.5.3) Comment

Some selected suppliers are asked to provide their sustainability strategies, which includes proposed action on water-related initiatives, but we do not currently have water related requirements as part of our purchasing process.

[Fixed row]

### (5.11.7) Provide further details of your organization's supplier engagement on environmental issues.

### Climate change

# (5.11.7.2) Action driven by supplier engagement

Select from:

✓ Other, please specify: Information collection (understanding supplier behavior)

### (5.11.7.3) Type and details of engagement

#### Information collection

☑ Collect GHG emissions data at least annually from suppliers

#### Innovation and collaboration

✓ Other innovation and collaboration activity, please specify: Engagement & incentivization (changing supplier behavior) Run an engagement campaign to educate suppliers about climate change

[Add row]

### (5.11.9) Provide details of any environmental engagement activity with other stakeholders in the value chain.

# Climate change

# (5.11.9.1) Type of stakeholder

Select from:

Customers

### (5.11.9.2) Type and details of engagement

#### **Education/Information sharing**

☑ Run an engagement campaign to educate stakeholders about the environmental impacts about your products, goods and/or services

# (5.11.9.3) % of stakeholder type engaged

Select from:

**✓** 26-50%

# (5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

✓ None

# (5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

Ameren utilized a variety of communications channels and the media to announce its goal of reducing carbon emissions to net-zero by 2045. The goal was to reach Ameren Missouri customers along with other stakeholders including regulators, shareholders, and employees. We recognize that our customers may belong to numerous stakeholder groups. Engaging the media was an efficient way to amplify our message. The engagement included numerous media interviews with local and nationally-based news organizations, a nationally-distributed press release and a revised website. Additionally, Ameren Missouri ran full-color advertisements in most of the largest print publications in the service territory, driving additional views and engagement to the IRP website. In Q1 and Q2 2021, Ameren Missouri's paid media efforts focused on the company's commitment to clean and carbon reduction goals. This holistic, multi-channel campaign included TV, radio, digital, social media and targeted print tactics. Messages reached co-workers through the company's intranet news page as well as letters from senior leaders. In addition, to better share information about Ameren's community impacts and to learn directly from community leaders about needs in their neighborhoods, Ameren held a "Community Voices Workshop" in October 2022 for both Ameren Missouri and Ameren Illinois. The Community Voices Workshops provided information including energy efficiency and energy assistance programs. The company solicited feedback from community-based groups in each state on the variety of programs offered, how they're working for customers and how they could potentially be changed in the future to be even more effective. Their success, among several others, spurred the establishment of a more concentrated effort, the Community Voices Advisory Board. This diverse group of leaders from nonprofits, community accommunity accommunity accommunity perspectives on relevant issues to assist us in understanding the priorities and interests of their constituents. All mem

# (5.11.9.6) Effect of engagement and measures of success

Impact of engagement, including measures of success Results prove the information campaign was effective. Of the traffic driven to the IRP web page, more than 75% can be attributed to campaign tactics. The video discussing Ameren's commitment to clean received an additional 42,000 views on YouTube. Digital ads drove well over 250,000 impressions. For Ameren-owned channels, including website and social media, we achieved more than 76,000 impressions with a potential reach of nearly 3,000,000. A majority of our social media engagement is with customers who live in the St. Louis metro area in Missouri and Illinois. The impressions through media channels were likely much higher as stories highlighting the carbon reduction goal appeared in print, online and were broadcast on television and radio across the state of Missouri. The combined television market audience is more than 1.8 million households. Newspaper subscriptions in those areas surpass 100,000 homes and the media outlet's combined Facebook followers are well beyond 2 million individuals. The story went beyond local outlets in the Ameren service territory. National media outlets reported on the goals as well. These numbers are approximate as media do not share specific data on their audiences.

#### Water

### (5.11.9.1) Type of stakeholder

Select from:

Customers

# (5.11.9.2) Type and details of engagement

#### Innovation and collaboration

☑ Collaborate with stakeholders on innovations to reduce environmental impacts in products and services

# (5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

We engage with customers and partners as a way to identify and meet their needs while also supporting the environment. This also helps us stay aware of rising issues among our stakeholders, offers avenues of collaboration, and open lines of communication and space to discuss water-related issues as they arise among our communities and stakeholders. Sessions where we can meet with stakeholders and customers and have meaningful conversations help us to build stronger relationships with our community stakeholders. These engagements help us better understand their concerns and needs, and discuss impactful ways that we can be supporting them in their sustainability goals.

# (5.11.9.6) Effect of engagement and measures of success

We work with municipalities as they (1) regulate the spaces in which we work, and (2) can help us to decrease our water-related impact. Example: we partner with the St. Louis Metropolitan Sewer District to reconstruct the parking lot at our Development & Resource Center to better manage water runoff, enhancing the health of local streams. We work with customers annually in our "Community Voices", where community stakeholders are invited to share their feedback on our initiatives, including water-related topics. In 2021 we updated our water resources website to further inform our stakeholders about where water usage in generation occurs (graphs of water proportions used at each energy center), descriptions of business impacts and dependencies on water, our latest CDP scores, and our water reduction targets (95% reduction by 2045) to show how we plan to reduce water usage in alignment with scheduled coal-fired energy center retirements (all by 2042). We highlighted water metrics in our 2022 Sustainability Report; a primary document of communication with our stakeholders, on water-related topics. We plan to continue sharing and being transparent about our water story on our website and reporting outlets, as well as continuing our "Community Voices" programs in 2024 and further. Success is measured by having 50% or more of invited stakeholders attend events and meetings.

[Add row]

# **C6. Environmental Performance - Consolidation Approach**

# (6.1) Provide details on your chosen consolidation approach for the calculation of environmental performance data.

	Consolidation approach used	Provide the rationale for the choice of consolidation approach
Climate change	Select from: ☑ Operational control	Ameren's Scope 1, 2, and 3 Greenhouse Gas Emissions calculations are based on the WBCSD/WRI GHG Protocol.
Water	Select from: ☑ Operational control	Ameren's water calculations are consolidated by operational structure for all Ameren generation and non-generation subsidiaries.

[Fixed row]

O/. Environmental pentonnance ominate onang	vironmental performance - Clir	mate Chanc
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(7.1) Is this your first year of reporting emissions data to CDP?

Select from:

✓ No

(7.1.1) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Has there been a structural change?	Details of structural change(s), including completion dates
Select all that apply  ✓ Yes, other structural change, please specify	Shutdown of Meramec coal plant.

[Fixed row]

(7.1.2) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

# (7.1.2.1) Change(s) in methodology, boundary, and/or reporting year definition?

Select all that apply

✓ Yes, a change in boundary

# (7.1.2.2) Details of methodology, boundary, and/or reporting year definition change(s)

Scope 1 expanded to include fugitive methane emissions from stored coal. Scope 2 expanded to include additional Ameren Missouri energy facilities; specifically Taum Sauk and the Callaway nuclear facility. The methodology was revised to apply an allocation factor per the Climate Registry (Section 14.4, Equation 14.e) to calculate Scope 2 emissions for Taum Sauk, Callaway, Ameren Missouri and Ameren Headquarters. Scope 3 expanded to include a more fulsome accounting of categories associated with Ameren's energy provision to customers. Specifically: • Scope 3 Category 3, activity D - Generation of electricity that Ameren purchases and sells to customers; the emissions calculations now include upstream activities, as well as the fuel combustion phase, for the generation of that electricity. [Fixed row]

# (7.1.3) Have your organization's base year emissions and past years' emissions been recalculated as a result of any changes or errors reported in 7.1.1 and/or 7.1.2?

Base year recalculation	Past years' recalculation
Select from:  ✓ No, because the impact does not meet our significance threshold	Select from: ✓ No

[Fixed row]

# (7.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

Select all that apply

- ☑ The Greenhouse Gas Protocol: Scope 2 Guidance
- ☑ US EPA Mandatory Greenhouse Gas Reporting Rule
- ☑ US EPA Emissions & Generation Resource Integrated Database (eGRID)
- ☑ The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Standard
- ☑ The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
- ☑ Other, please specify: USEPA Clean Air Act Acid Rain Program, The Climate Registry

# (7.3) Describe your organization's approach to reporting Scope 2 emissions.

Scope 2, location-based	Scope 2, market-based	Comment
Select from:  ✓ We are reporting a Scope 2, location-based figure	Select from:  ✓ We are reporting a Scope 2, market-based figure	Our Scope 2 emissions are the same for location-based and market-based.

[Fixed row]

(7.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?

Select from:

Yes

(7.4.1) Provide details of the sources of Scope 1, Scope 2, or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure.

#### Row 1

# (7.4.1.1) Source of excluded emissions

The electricity use from the grid at Ameren's electricity generation facilities (with the exception of Taum Sauk and Callaway) is excluded because of the potential for double counting with our Scope 1 emissions.

# (7.4.1.2) Scope(s) or Scope 3 category(ies)

Select all that apply

✓ Scope 2 (location-based)

# (7.4.1.4) Relevance of location-based Scope 2 emissions from this source

Select from:

☑ Emissions are not relevant

# (7.4.1.10) Explain why this source is excluded

The electricity use from the grid at Ameren's electricity generation facilities (with the exception of Taum Sauk and Callaway) is excluded because of the potential for double counting with our Scope 1 emissions

### (7.4.1.11) Explain how you estimated the percentage of emissions this excluded source represents

The electricity use from the grid at Ameren's electricity generation facilities is excluded because the potential for double counting with our Scope 1 emissions. These emissions are included in our Scope 1. Therefore, the estimated percentage of total Scope 12 emissions this excluded source represents is 0%. [Add row]

### (7.5) Provide your base year and base year emissions.

### Scope 1

# (7.5.1) Base year end

12/31/2005

# (7.5.2) Base year emissions (metric tons CO2e)

38419673.0

### (7.5.3) Methodological details

2005 Scope 1 emissions include: Ameren Generation only. The 2005 data provided excludes information related to the energy centers Ameren divested in late 2013 and early 2014 but includes information related to our Meredosia and Hutsonville Energy Centers, which were closed prior to 2015.

### Scope 2 (location-based)

### (7.5.1) Base year end

# (7.5.2) Base year emissions (metric tons CO2e)

74981.0

# (7.5.3) Methodological details

Scope 2 emissions presented include electricity usage only at Ameren Illinois buildings and Ameren headquarters. Scope 2 emissions are the same for location-based and market-based.

### Scope 2 (market-based)

# (7.5.1) Base year end

12/31/2021

# (7.5.2) Base year emissions (metric tons CO2e)

74981.0

# (7.5.3) Methodological details

Scope 2 emissions presented include electricity usage only at Ameren Illinois buildings and Ameren headquarters. Scope 2 emissions are the same for location-based and market-based.

# Scope 3 category 1: Purchased goods and services

### (7.5.1) Base year end

12/31/2021

### (7.5.2) Base year emissions (metric tons CO2e)

1575053.0

# (7.5.3) Methodological details

Includes emissions associated with Ameren supply chain purchased goods and services for 2021 are included in this summary. Extraction of natural gas sold to customers for 2021 also included.

### Scope 3 category 2: Capital goods

### (7.5.1) Base year end

12/31/2021

### (7.5.2) Base year emissions (metric tons CO2e)

905098.0

# (7.5.3) Methodological details

Includes emissions associated with Ameren supply chain capital goods for 2021 are included in this summary.

### Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

### (7.5.1) Base year end

12/31/2021

# (7.5.2) Base year emissions (metric tons CO2e)

8478655

# (7.5.3) Methodological details

Includes emissions from extraction and production of fuels consumed by Ameren in 2021 for generation of electricity, extraction and production of fuels used internally by Ameren, extraction and production of fuels for electricity used internally by Ameren, T&D losses associated with Ameren's internal electricity consumption, and generation of electricity that Ameren purchases and sells to customers

### Scope 3 category 4: Upstream transportation and distribution

# (7.5.1) Base year end

12/31/2021

# (7.5.2) Base year emissions (metric tons CO2e)

788307.0

# (7.5.3) Methodological details

Includes emissions from transportation of fuels used by Ameren for electricity generation and transportation of goods identified in categories 1 and 2.

## **Scope 3 category 5: Waste generated in operations**

### (7.5.1) Base year end

12/31/2021

# (7.5.2) Base year emissions (metric tons CO2e)

66048.0

# (7.5.3) Methodological details

Includes emissions from disposal and treatment of waste generated by Ameren's operations.

### Scope 3 category 6: Business travel

# (7.5.1) Base year end

12/31/2021

# (7.5.2) Base year emissions (metric tons CO2e)

4127.0

# (7.5.3) Methodological details

Includes emissions associated with personal vehicles, rental vehicles, and air, rail, or bus travel.

### Scope 3 category 7: Employee commuting

# (7.5.1) Base year end

12/31/2021

# (7.5.2) Base year emissions (metric tons CO2e)

7191.0

# (7.5.3) Methodological details

Includes emissions from employees commuting in personal vehicles or other means

### Scope 3 category 8: Upstream leased assets

# (7.5.1) Base year end

12/31/2021

# (7.5.2) Base year emissions (metric tons CO2e)

0.0

### Scope 3 category 9: Downstream transportation and distribution

# (7.5.1) Base year end

12/31/2021

# (7.5.2) Base year emissions (metric tons CO2e)

### Scope 3 category 10: Processing of sold products

# (7.5.1) Base year end

12/31/2021

# (7.5.2) Base year emissions (metric tons CO2e)

0.0

# Scope 3 category 11: Use of sold products

# (7.5.1) Base year end

12/31/2021

# (7.5.2) Base year emissions (metric tons CO2e)

7003489.0

# (7.5.3) Methodological details

Includes emissions associated with customer use of natural gas sold by Ameren.

### Scope 3 category 12: End of life treatment of sold products

# (7.5.1) Base year end

12/31/2021

# (7.5.2) Base year emissions (metric tons CO2e)

0.0

### Scope 3 category 13: Downstream leased assets

# (7.5.1) Base year end

12/31/2021

# (7.5.2) Base year emissions (metric tons CO2e)

0.0

### **Scope 3 category 14: Franchises**

# (7.5.1) Base year end

12/31/2021

# (7.5.2) Base year emissions (metric tons CO2e)

0.0

# **Scope 3 category 15: Investments**

# (7.5.1) Base year end

12/31/2021

# (7.5.2) Base year emissions (metric tons CO2e)

0.0

# **Scope 3: Other (upstream)**

# (7.5.1) Base year end

12/31/2021

### (7.5.2) Base year emissions (metric tons CO2e)

0.0

### Scope 3: Other (downstream)

### (7.5.1) Base year end

12/31/2021

# (7.5.2) Base year emissions (metric tons CO2e)

0.0
[Fixed row]

### (7.6) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

### Reporting year

# (7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

19883180

### (7.6.3) Methodological details

2023 Scope 1 emissions sources include: Ameren Missouri Generation, Ameren Missouri & Ameren Illinois Vehicle Fleet; Ameren Missouri equipment fuel oil; propane usage in remote facilities, Ameren Illinois & Missouri Natural Gas consumption for buildings; SF6 releases (fugitive emissions) associated with Ameren Illinois and Ameren Missouri electric distribution; and CH4 releases (fugitive emissions) associated with Ameren Illinois and Ameren Missouri natural gas supply.2023 Scope 1 emissions sources include: Ameren Missouri Generation, Ameren Missouri & Ameren Illinois Vehicle Fleet; Ameren Missouri equipment fuel oil; propane usage in remote facilities, Ameren Illinois & Missouri Natural Gas consumption for buildings; SF6 releases (fugitive emissions) associated with Ameren Illinois and Ameren Missouri natural gas supply and fugitive CH4 emissions from stored coal [Fixed row]

### (7.7) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

### Reporting year

# (7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

84831

# (7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e) (if applicable)

84831

# (7.7.4) Methodological details

Our Scope 2 emissions are the same for location-based and market-based, as we use the regional grid average emission factors for both. Scope 2 includes electricity usage at Ameren Illinois Buildings and Ameren Missouri Buildings including Taum Sauk and Callaway (nuclear electricity generation facility). The electricity use from the grid at Ameren's electricity generation facilities (with the exception of Taum Sauk and Callaway) is excluded because of the potential for double counting with our Scope 1 emissions. The methodology was revised to apply an allocation factor per the Climate Registry (Section 14.4, Equation 14.e) to calculate Scope 2 emissions for Taum Sauk, Callaway, Ameren Missouri and Ameren Headquarters.

[Fixed row]

### (7.8) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

### **Purchased goods and services**

### (7.8.1) Evaluation status

Select from:

✓ Relevant, calculated

### (7.8.2) Emissions in reporting year (metric tons CO2e)

1800530

# (7.8.3) Emissions calculation methodology

Select all that apply

- ✓ Spend-based method
- ✓ Fuel-based method

### (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### (7.8.5) Please explain

Extraction and production of natural gas sold to customers: Fuel-based method. Inputs: Quantities (Mscf) of natural gas purchased for sale to customers. Emission Factors: natural gas-specific upstream factor from "GHG Conversion Factors for Company Reporting" published by the UK Government Other goods and services (non-fuel) purchased in 2023: Spend-based method. Inputs: Ameren 2023 expenditure summaries, categorized for application of Scope 3 GHG emission factors. Emission Factors: Commodity type-specific emission factors from USEPA's Supply Chain GHG Emission Factors for US Commodities and Industries v1.1.

### **Capital goods**

### (7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

# (7.8.2) Emissions in reporting year (metric tons CO2e)

481327

### (7.8.3) Emissions calculation methodology

Select all that apply

✓ Spend-based method

# (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

# (7.8.5) Please explain

Ameren 2023 expenditure summaries, categorized for application of Scope 3 GHG emission factors. Emission Factors: Commodity type-specific emission factors from USEPA's Supply Chain GHG Emission Factors for US Commodities and Industries v1.1.

### Fuel-and-energy-related activities (not included in Scope 1 or 2)

### (7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

# (7.8.2) Emissions in reporting year (metric tons CO2e)

9827717

### (7.8.3) Emissions calculation methodology

Select all that apply

✓ Fuel-based method

# (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

# (7.8.5) Please explain

2023 totals of each energy types (fuels and electricity) used by Ameren. Emission Factors: Fossil fuel upstream emission factors from "GHG Conversion Factors for Company Reporting" published by the UK Government. T&D losses: Midwest region-specific grid loss factor from USEPA eGRID 2020 applied to kWh of electricity used by Ameren, to determine kWh of T&D loss. Applied the electricity upstream emission factor from the source above, along with the SERC Midwest eGRID subregion combustion emission factor. Includes generation of electricity that Ameren purchases and sells to customers

### **Upstream transportation and distribution**

### (7.8.1) Evaluation status

Select from:

✓ Relevant, calculated

# (7.8.2) Emissions in reporting year (metric tons CO2e)

517345

# (7.8.3) Emissions calculation methodology

Select all that apply

- Spend-based method
- Distance-based method

# (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

# (7.8.5) Please explain

Transportation of coal used for electricity generation: Distance-based method Inputs: Tonnage and miles of coal transported Emission Factor: USEPA GHG Emission Factors Hub, Table 8 "Scope 3 Category 4: Upstream Transportation and Distribution, and Category 9: Downstream Transportation and Distribution" Transportation of other purchased goods and services: Spend-based method Inputs: Transportation expenditure total obtained from Ameren 2023 expenditure summary spreadsheets. Emission Factor: USEPA's Supply Chain GHG Emission Factors for US Commodities and Industries v1.1. Used the "Truck transportation" emission factor as a high estimate, as the associated GHG emissions are higher than for other transportation modes per spent. GWPs as used in USEPA: 40 CFR 98, Table A-1; derived from Intergovernmental Panel on Climate Change AR4 (2007)

### Waste generated in operations

### (7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

### (7.8.2) Emissions in reporting year (metric tons CO2e)

29810

# (7.8.3) Emissions calculation methodology

Select all that apply

Average data method

# (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

# (7.8.5) Please explain

Amounts of landfilled and recycled waste, obtained from Ameren sources including a waste shipment database. Emission Factors: USEPA GHG Emission Factors Hub, Table 9 "Scope 3 Category 5: Waste Generated in Operations and Category 12: End-of-Life Treatment of Sold Products" GWPs as used in USEPA: 40 CFR 98, Table A-1; derived from Intergovernmental Panel on Climate Change AR4 (2007. Construction waste from Ameren Transmission (ATXI) and ash to landfill for Ameren Missouri was not included in this assessment due to lack of data.)

#### **Business travel**

### (7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

### (7.8.2) Emissions in reporting year (metric tons CO2e)

5948

### (7.8.3) Emissions calculation methodology

Select all that apply

- ✓ Spend-based method
- ✓ Distance-based method

# (7.8.5) Please explain

Vehicle travel: Distance-based method Inputs: Total vehicle mileage for 2023. Personal vehicles for business use; mileage obtained from Ameren employee expense reports. Rental Vehicles; mileage obtained from vehicle rental company Enterprise. Emission Factor: USEPA GHG Emission Factors Hub, Table 10 "Scope 3 Category 6: Business Travel and Category 7: Employee Commuting" Air and ground travel: Spend-based method Inputs: 2023 expenditures obtained from Ameren employee expense reports, as mileage is not tracked. Emission Factors: travel mode-specific emission factors from USEPA's Supply Chain GHG Emission Factors for US Commodities and Industries v1.1

### **Employee commuting**

### (7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

# (7.8.2) Emissions in reporting year (metric tons CO2e)

6812

# (7.8.3) Emissions calculation methodology

Select all that apply

- ✓ Spend-based method
- ✓ Distance-based method

### (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

# (7.8.5) Please explain

For the calculation of business travel, Ameren utilizes a combination of a distance-based and a spend-based approach. Distance-based emission factors (kg CO2e/vehicle-mile) are taken from the U.S. EPA Emission Factors Hub. Currently, the April 2022 version of the Emission Factors Hub is in use. Spend-based emission factors are taken from the USEEIO, the U.S. EPA's Environmentally-Extended Input-Output (EEIO) models. Ameren is using v1.1 of this emission factors dataset. Ameren expense reports were used to calculate business travel for personal vehicles for business use, air travel, parking, taxi, tips and tolls. An emissions report summary from the vehicle car rental company was used to calculate emissions from rental vehicles.

### **Upstream leased assets**

# (7.8.1) Evaluation status

Select from:

✓ Not relevant, explanation provided

### (7.8.5) Please explain

Ameren reports under Operational Control; therefore energy consumption from leased vehicles or facilities should be included under Scopes 1 and 2. leased vehicles or facilities should be included under Scopes 1 and 2.

### **Downstream transportation and distribution**

# (7.8.1) Evaluation status

Select from:

✓ Not relevant, explanation provided

### (7.8.5) Please explain

Ameren's product is delivered by wire or pipeline. The associated GHG emissions from these methods are captured in Ameren's Scope 1 inventory.

# **Processing of sold products**

# (7.8.1) Evaluation status

Select from:

✓ Not relevant, explanation provided

### (7.8.5) Please explain

Ameren makes and delivers electricity, and delivers natural gas to the ultimate consumers of these products. Thus, their products are not processed, they are simply consumed

# **Use of sold products**

# (7.8.1) Evaluation status

Select from:

✓ Relevant, calculated

### (7.8.2) Emissions in reporting year (metric tons CO2e)

3930473

# (7.8.3) Emissions calculation methodology

Select all that apply

✓ Fuel-based method

# (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

O

### (7.8.5) Please explain

For the calculation of customer use of natural gas, Ameren utilizes emission factors from the EPA Emission Factors Hub. Currently, the April 2022 version of the Emission Factors Hub is in use. Natural gas totals from the 2023 10K are used to calculate emissions from this category.

### End of life treatment of sold products

### (7.8.1) Evaluation status

Select from:

✓ Not relevant, explanation provided

# (7.8.5) Please explain

Ameren's products, electricity and natural gas, are consumed and have no end of life issues.

#### **Downstream leased assets**

# (7.8.1) Evaluation status

Select from:

✓ Not relevant, explanation provided

### (7.8.5) Please explain

Ameren does not lease out any assets to other entities.

#### **Franchises**

# (7.8.1) Evaluation status

Select from:

✓ Not relevant, explanation provided

# (7.8.5) Please explain

Ameren is required to deliver energy in its franchised service territory. This delivery is only to ultimate customers, and therefore inclusion in the Franchises category would be double-counting.

#### **Investments**

# (7.8.1) Evaluation status

Select from:

✓ Not relevant, explanation provided

# (7.8.5) Please explain

Ameren makes investments in assets it will own. Thus, emissions will be captured in Scope 1 or Scope 2 after they enter service.

### Other (upstream)

# (7.8.1) Evaluation status

Select from:

✓ Not relevant, explanation provided

# (7.8.5) Please explain

Not applicable. Ameren reports under Operational Control; therefore energy consumption from leased vehicles or facilities should be included under Scopes 1 and 2

# Other (downstream)

# (7.8.1) Evaluation status

Select from:

✓ Not relevant, explanation provided

# (7.8.5) Please explain

Any assets leased to other entities, including customers, and not included in Use of sold products. [Fixed row]

# (7.9) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Select from:  ☑ Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Select from:  ☑ Third-party verification or assurance process in place
Scope 3	Select from:

Verification/assurance status
✓ Third-party verification or assurance process in place

[Fixed row]

# (7.9.1) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

#### Row 1

# (7.9.1.1) Verification or assurance cycle in place

Select from:

✓ Annual process

# (7.9.1.2) Status in the current reporting year

Select from:

Complete

# (7.9.1.3) Type of verification or assurance

Select from:

✓ Limited assurance

# (7.9.1.4) Attach the statement

Ameren\_Limited Assurance Report\_CDP\_Oct 24 2024.pdf

# (7.9.1.5) Page/section reference

# (7.9.1.6) Relevant standard

Select from:

✓ ISAE3000

# (7.9.1.7) Proportion of reported emissions verified (%)

100 [Add row]

(7.9.2) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Row 1

# (7.9.2.1) Scope 2 approach

Select from:

✓ Scope 2 location-based

# (7.9.2.2) Verification or assurance cycle in place

Select from:

Annual process

# (7.9.2.3) Status in the current reporting year

Select from:

Complete

# (7.9.2.4) Type of verification or assurance

✓ Limited assurance

# (7.9.2.5) Attach the statement

Ameren\_Limited Assurance Report\_CDP\_Oct 24 2024.pdf

# (7.9.2.6) Page/ section reference

See attachment for 2023 Scope 1 emissions (Pages 1-2)

### (7.9.2.7) Relevant standard

Select from:

✓ ISAE3000

[Add row]

# (7.9.3) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

#### Row 1

# (7.9.3.1) Scope 3 category

Select all that apply

✓ Scope 3: Capital goods

✓ Scope 3: Business travel

✓ Scope 3: Employee commuting

✓ Scope 3: Use of sold products

✓ Scope 3: Purchased goods and services

✓ Scope 3: Waste generated in operations

☑ Scope 3: Upstream transportation and distribution

✓ Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)

# (7.9.3.2) Verification or assurance cycle in place

Sel	lect	from:	

✓ Annual process

## (7.9.3.3) Status in the current reporting year

Select from:

Complete

### (7.9.3.4) Type of verification or assurance

Select from:

✓ Limited assurance

## (7.9.3.5) Attach the statement

Ameren\_Limited Assurance Report\_CDP\_Oct 24 2024.pdf

## (7.9.3.6) Page/section reference

See attachment for 2023 Scope 1 emissions (Pages 1-2)

## (7.9.3.7) Relevant standard

Select from:

**☑** ISAE3000

[Add row]

# (7.10) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Select from:

✓ Decreased

(7.10.1) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

Change in renewable energy consumption

# (7.10.1.1) Change in emissions (metric tons CO2e)

0

## (7.10.1.2) Direction of change in emissions

Select from:

✓ No change

Other emissions reduction activities

### (7.10.1.1) Change in emissions (metric tons CO2e)

0

# (7.10.1.2) Direction of change in emissions

Select from:

✓ No change

#### **Divestment**

## (7.10.1.1) Change in emissions (metric tons CO2e)

0

## (7.10.1.2) Direction of change in emissions

Select from:

✓ No change

#### **Acquisitions**

## (7.10.1.1) Change in emissions (metric tons CO2e)

O

## (7.10.1.2) Direction of change in emissions

Select from:

✓ No change

#### Mergers

# (7.10.1.1) Change in emissions (metric tons CO2e)

0

# (7.10.1.2) Direction of change in emissions

Select from:

✓ No change

## **Change in output**

# (7.10.1.1) Change in emissions (metric tons CO2e)

5047235

## (7.10.1.2) Direction of change in emissions

Select from:

Decreased

## (7.10.1.3) Emissions value (percentage)

20.2

#### (7.10.1.4) Please explain calculation

Scope 1 Emissions from generation activities were lower in 2023 compared to 2022 largely due to the shutdown of Meramec Energy Center. Electricity production in 2022 was higher than 2023. A total decrease of 5,047,235 tons CO2e compared to 2022; therefore, we calculated a decrease of 20.2% as follows: (5,047,235/24,930.415)\_\*100 20.2%

#### Change in methodology

## (7.10.1.1) Change in emissions (metric tons CO2e)

n

### (7.10.1.2) Direction of change in emissions

Select from:

✓ No change

#### **Change in boundary**

## (7.10.1.1) Change in emissions (metric tons CO2e)

0

## (7.10.1.2) Direction of change in emissions

Select from:

✓ No change

#### **Change in physical operating conditions**

## (7.10.1.1) Change in emissions (metric tons CO2e)

### (7.10.1.2) Direction of change in emissions

Select from:

✓ No change

#### Unidentified

# (7.10.1.2) Direction of change in emissions

Select from:

✓ No change [Fixed row]

(7.10.2) Are your emissions performance calculations in 7.10 and 7.10.1 based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Select from:

✓ Location-based

(7.12) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

Select from:

✓ Yes

(7.12.1) Provide the emissions from biogenic carbon relevant to your organization in metric tons CO2.

### (7.12.1.1) CO2 emissions from biogenic carbon (metric tons CO2)

41589

## (7.12.1.2) Comment

The biogenic emissions sources include biomethane usage at the Maryland Heights Renewable Energy Center, as well as the biogenic portion of B20 biodiesel used in some of the Ameren Illinois (AIC) vehicles.
[Fixed row]

(7.15) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Select from:

Yes

(7.15.1) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used global warming potential (GWP).

Row 1

#### (7.15.1.1) **Greenhouse** gas

Select from:

✓ CO2

#### (7.15.1.2) Scope 1 emissions (metric tons of CO2e)

19585951

### (7.15.1.3) **GWP** Reference

Select from:

✓ IPCC Fifth Assessment Report (AR5 – 100 year)

Row 2

## (7.15.1.1) **Greenhouse gas**

Sel	lect	fror	n·
OCI	-cc	$II \cup I$	,,,

✓ CH4

# (7.15.1.2) Scope 1 emissions (metric tons of CO2e)

186752

# (7.15.1.3) **GWP** Reference

Select from:

✓ IPCC Fifth Assessment Report (AR5 – 100 year)

#### Row 3

# (7.15.1.1) Greenhouse gas

Select from:

✓ N20

# (7.15.1.2) Scope 1 emissions (metric tons of CO2e)

96920

# (7.15.1.3) **GWP** Reference

Select from:

✓ IPCC Fifth Assessment Report (AR5 – 100 year)

#### Row 4

# (7.15.1.1) **Greenhouse gas**

Select from:

✓ SF6

# (7.15.1.2) Scope 1 emissions (metric tons of CO2e)

13557

#### (7.15.1.3) **GWP** Reference

Select from:

☑ IPCC Fifth Assessment Report (AR5 – 100 year) [Add row]

(7.15.3) Break down your total gross global Scope 1 emissions from electric utilities value chain activities by greenhouse gas type.

**Fugitives** 

(7.15.3.1) Gross Scope 1 CO2 emissions (metric tons CO2)

1811

(7.15.3.2) Gross Scope 1 methane emissions (metric tons CH4)

4671

(7.15.3.3) Gross Scope 1 SF6 emissions (metric tons SF6)

0.58

(7.15.3.4) Total gross Scope 1 emissions (metric tons CO2e)

146155

**Combustion (Electric utilities)** 

(7.15.3.1) Gross Scope 1 CO2 emissions (metric tons CO2)

(7.15.3.2) Gross Scope 1 methane emissions (metric tons CH4) 1994 (7.15.3.3) Gross Scope 1 SF6 emissions (metric tons SF6) 365 (7.15.3.4) Total gross Scope 1 emissions (metric tons CO2e) 19670763 **Combustion (Gas utilities)** (7.15.3.1) Gross Scope 1 CO2 emissions (metric tons CO2) 13452 (7.15.3.2) Gross Scope 1 methane emissions (metric tons CH4) 0.25 (7.15.3.3) Gross Scope 1 SF6 emissions (metric tons SF6) 0.03 (7.15.3.4) Total gross Scope 1 emissions (metric tons CO2e) 13466 **Combustion (Other)** (7.15.3.1) Gross Scope 1 CO2 emissions (metric tons CO2)

# (7.15.3.2) Gross Scope 1 methane emissions (metric tons CH4) 4.2 (7.15.3.3) Gross Scope 1 SF6 emissions (metric tons SF6) 0.45 (7.15.3.4) Total gross Scope 1 emissions (metric tons CO2e) 52795 **Emissions not elsewhere classified** (7.15.3.1) Gross Scope 1 CO2 emissions (metric tons CO2) 0 (7.15.3.2) Gross Scope 1 methane emissions (metric tons CH4) (7.15.3.3) Gross Scope 1 SF6 emissions (metric tons SF6) 0 (7.15.3.4) Total gross Scope 1 emissions (metric tons CO2e) [Fixed row]

(7.16) Break down your total gross global Scope 1 and 2 emissions by country/area.

	Scope 1 emissions (metric tons CO2e)
United States of America	19883180

[Fixed row]

#### (7.17) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

Select all that apply

☑ By business division

# (7.17.1) Break down your total gross global Scope 1 emissions by business division.

	Business division	Scope 1 emissions (metric ton CO2e)
Row 2	Distribution	212416
Row 3	Generation	19670763

[Add row]

# (7.23) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

Select from:

✓ Yes

(7.23.1) Break down your gross Scope 1 and Scope 2 emissions by subsidiary.

#### Row 1

## (7.23.1.1) Subsidiary name

Ameren Illinois (AIC)

## (7.23.1.2) Primary activity

Select from:

☑ Energy services & equipment

## (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

CUSIP number

## (7.23.1.6) CUSIP number

02361DAZ3

### (7.23.1.12) Scope 1 emissions (metric tons CO2e)

150944

#### (7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

18807

## (7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

18807

## (7.23.1.15) Comment

Scope 1: natural gas consumption, vehicle fuel consumption, fugitive emissions of SF6 and CH4Scope 2: Electricity usage from Ashmore and all other AMO facilities

#### Row 2

## (7.23.1.1) Subsidiary name

Ameren Missouri (AMO)

#### (7.23.1.2) Primary activity

Select from:

☑ Energy services & equipment

## (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

✓ CUSIP number

## (7.23.1.6) CUSIP number

906548CW0

### (7.23.1.12) Scope 1 emissions (metric tons CO2e)

19732236

#### (7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

66024

## (7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

66024

## (7.23.1.15) Comment

Scope 1: electricity generation, natural gas consumption, propane consumption, fuel oil consumption, vehicle fuel consumption, fugitive emissions of SF6 and CH4Scope 2: electricity consumption at Ameren headquarters, Taum Sauk, Callaway, and all other AMO facilities

#### (7.29) What percentage of your total operational spend in the reporting year was on energy?

Select from:

✓ More than 35% but less than or equal to 40%

#### (7.33) Does your electric utility organization have a transmission and distribution business?

Select from:

Yes

#### (7.53) Did you have an emissions target that was active in the reporting year?

Select all that apply

✓ Absolute target

#### (7.53.1) Provide details of your absolute emissions targets and progress made against those targets.

	covered by tardet (metric tone (1174)	target in all selected Scopes (metric	Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
Row 1	0.000	0.000	0.000

[Add row]

## (7.54) Did you have any other climate-related targets that were active in the reporting year?

Select all that apply

- ☑ Targets to increase or maintain low-carbon energy consumption or production
- ✓ Other climate-related targets

(7.55) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Select from:

Yes

#### (7.58) Describe your organization's efforts to reduce methane emissions from your activities.

retired in late 2022) and Ameren Missouri Combustion Turbine Fleet. The leak detection sensors are utilized to monitor, alarm operators, and in some cases isolate methane leaks if/when they exist. Primarily these devices are utilized within turbine enclosure packages as well as specific applications where detection is employed in other areas such as our natural gas compression and cleaning systems in operation at the Maryland Height Renewable Energy Center (landfill gas to energy facility). The 2023 Ameren Missouri Integrated Resource Plan (IRP) is designed to ensure that customers' long-term electric energy needs are met in a reliable, costeffective and environmentally responsible manner. Ameren's preferred plan focuses on transitioning the generation fleet to a cleaner and more fuel diverse energy portfolio in a responsible manner. This transition will result in increased amounts of renewable generation and reduced amounts of fossil generation, which includes natural gas fuelled units. This should reduce methane emissions from our electric generation activities. One example is the retirement of the Meramec Energy Center in 2022 which used natural gas for Units 1&;2. In addition, Ameren is targeting reductions in carbon emissions of 60 percent by 2030 and 85 percent by 2040 (based on 2005 levels), with a goal of achieving net-zero by 2045. Case Study (Situation) Ameren has specific programs designed to reduce and eliminate methane emissions by building a smarter, more reliable delivery infrastructure. (Task) To reduce the highest sources of methane leaks on our natural gas delivery system, we've replaced 100% of cast and wrought iron pipeline. (Action) In addition, all unprotected pipelines will be eliminated. Now, our Ameren Illinois and Ameren Missouri natural gas distribution systems are almost entirely ofplastic and protective coated steel pipelines with no cast iron pipe in our systems (Result) For example, since 2015, our Illinois and Missouri businesses have proactively replaced over 265 miles of older, leak-prone, mechanically-coupled steel and older vintage polyethylene distribution gas mains. Since 2013, Ameren has reduced underground methane leaks by over 77%. In addition, Ameren uses renewable natural gas (a pipeline-quality gas derived from landfills and grain processing waste digesters to reduce the environmental impact of methane emissions). These ongoing efforts will continue to reduce future methane emissions. Delivery and transmission. Other GHGs, such as sulfur hexafluoride (SF6) and methane, are released on a much smaller scale through the process of delivering electricity and natural gas to customers' homes and businesses. SF6 is used as an insulator for transmission equipment, such as circuit breakers, and methane is the principal component in natural gas. Our investments in smarter, cleaner, and more efficient and reliable delivery and transmission technology will continue to reduce these kinds of emissions.

#### **C9. Environmental performance - Water security**

(9.1) Are there any exclusions from your disclosure of water-related data?

Select from:

Yes

(9.1.1) Provide details on these exclusions.

#### Row 1

#### (9.1.1.1) Exclusion

Select from:

Facilities

## (9.1.1.2) Description of exclusion

Ameren and its subsidiaries own over 800 energy generation and non-energy generation facilities, including administrative buildings, substations, warehouses etc. This report excludes all non-generation facilities, which account for less than 1% of total water use. All non-generation sites and facilities were estimated to consist of less than 0.0002% of total withdrawals, making them an immaterial proportion of overall water accounting. Due to the immaterial nature of non-generation water usage, this disclosure will exclude all facilities except for the following 14 Ameren Missouri energy centers: 3 coal, 1 nuclear, 2 hydroelectric dams, 1 pumped storage, and 7 combustion turbines (CTGs). Over 99% of water withdrawn for generation operations is discharged back to surface water sources. Groundwater volume usage at our energy centers is around 0.01% of total withdrawal. Ameren strives to minimize water use in accordance with its Water Policy and has invested millions of dollars in efficient water and treatment technologies. Our 2018 Water Resilience Assessment report describes the future resiliency of water resources in our service territory and select regions of our supply chain, and our Report on our Responsible Management of Coal Combustion Residuals (CCR) provides information regarding our efforts to reduce water usage and improve the quality of effluent consistent with corporate sustainability initiatives. Information on our CCR plans available at Ameren.com/CCRFacts.

## (9.1.1.3) Reason for exclusion

Select from:

✓ Small volume [rainwater]

### (9.1.1.7) Percentage of water volume the exclusion represents

Select from:

✓ Less than 1%

#### Row 2

## (9.1.1.1) Exclusion

Select from:

Business activities

## (9.1.1.2) Description of exclusion

Natural Gas distribution Ameren's operations associated with procuring and distributing natural gas to our customers use little to no direct water resources. These operations include the use of potable water as a resource for personnel use at related sites, as well as limited amounts of water for hydrostatic testing, and for excavation operations to construct gas lines. We are implementing practices to reduce the necessary volumes of water required to perform these operations. The volumes of water used in these operations are less than 0.1% of our electrical generation centers. Therefore, Ameren's natural gas distribution activities are excluded from the scope of this disclosure.

### (9.1.1.3) Reason for exclusion

Select from:

✓ Small volume [rainwater]

## (9.1.1.7) Percentage of water volume the exclusion represents

Select from:

✓ Less than 1%

#### Row 3

## (9.1.1.1) Exclusion

Select from:

Facilities

## (9.1.1.2) Description of exclusion

Solar, wind, methane gas, and oil generation facilities Ameren operates 31 energy generation centers, fueled by coal, natural gas, nuclear, hydro, wind, solar, landfill methane gas, and oil. Solar and wind use no water for generation and methane gas and oil use negligible amounts (

## (9.1.1.3) Reason for exclusion

Select from:

✓ Small volume [rainwater]

## (9.1.1.7) Percentage of water volume the exclusion represents

Select from:

✓ Less than 1% [Add row]

## (9.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?

#### Water withdrawals - total volumes

### (9.2.1) % of sites/facilities/operations

Select from:

**☑** 76-99

#### (9.2.2) Frequency of measurement

Select from:

Daily

## (9.2.3) Method of measurement

Coal-fired and Hydroelectric: (6 facilities) Daily calculations based on design pump flow rate multiplied by daily run times estimate withdrawal volume. The total volumes are rolled up into monthly permitting reports and annual reports. Nuclear and Combustion Turbine Generator (CTG): (8 facilities) volumes are measured with flow meters at our CTG locations (via 3rd party readings), and daily metered volumes are measured at specific withdrawal and discharge outfalls at our nuclear energy center.

## (9.2.4) Please explain

All 14 energy centers (facilities) covered by the scope of this disclosure calculate water withdrawals daily and include this data in monthly permitting reports for regulatory reasons (which is why 100% was selected). The withdrawal and discharge flows are calculated daily as required to evaluate compliance with National Pollutant Discharge Elimination System (NPDES) permit limitations and are reported in monthly Discharge Monitoring Reports (DMRs) to regulation authorities. These volumes are expected to remain relevant in future given generation and regulatory requirements.

#### Water withdrawals - volumes by source

## (9.2.1) % of sites/facilities/operations

Select from:

**76-99** 

## (9.2.2) Frequency of measurement

Select from:

Daily

#### (9.2.3) Method of measurement

Coal-fired and Hydroelectric: (6 facilities) surface and groundwater volumes are calculated based on design pump flow rate multiplied by run times for each energy center7 facilities) source water (

## (9.2.4) Please explain

All 14 energy centers (facilities) covered by the scope of this disclosure calculate water withdrawals daily and include this data in monthly permitting reports for regulatory reasons (which is why 100% was selected). The withdrawal and discharge flows are calculated daily as required to evaluate compliance with National Pollutant Discharge Elimination System (NPDES) permit limitations and are reported in monthly Discharge Monitoring Reports (DMRs) to regulation authorities. The principal sources of surface freshwater are within the upper Mississippi and Missouri River basins. These volumes are expected to remain relevant in future given generation and regulatory requirements.

## Water withdrawals quality

### (9.2.1) % of sites/facilities/operations

Select from:

**☑** 76-99

## (9.2.2) Frequency of measurement

Select from:

Daily

## (9.2.3) Method of measurement

Coal-fired, Hydroelectric, Nuclear: (7 facilities) intake water is monitored daily for temperature and total suspended solids, and other water quality measurements using various types of sampling equipment and manual sample collection and analysis. CTGs: (7 facilities) 3rd party withdrawal (

#### (9.2.4) Please explain

All 14 energy centers (facilities) covered by this disclosure calculate water withdrawals daily and include this data in monthly permitting reports for regulatory reasons. Our CTGs source municipal potable water (representing

#### Water discharges - total volumes

## (9.2.1) % of sites/facilities/operations

Select from:

**☑** 76-99

## (9.2.2) Frequency of measurement

Select from:

Daily

#### (9.2.3) Method of measurement

Coal-fired, Nuclear and Hydroelectric: (7 facilities) Discharge flows are calculated based on withdrawal volumes and the estimated consumption. CTGs: (7 facilities) our CTG discharge is estimated to be negligible (

## (9.2.4) Please explain

All 14 Ameren energy centers covered by the scope of this disclosure calculate water discharge in one-minute intervals, daily, or sometimes weekly depending on the site, and include this data in monthly reports for Discharge Monitoring Reports (DMRs). These volumes are expected to remain relevant in future given generation and regulatory requirements.

#### Water discharges – volumes by destination

#### (9.2.1) % of sites/facilities/operations

Select from:

√ 76-99

## (9.2.2) Frequency of measurement

Select from:

Daily

## (9.2.3) Method of measurement

Coal-fired, Nuclear, and Hydro Generation: (6 facilities) All discharge to surface water and are calculated based on withdrawal volumes and the estimated consumption. Some water runs through wastewater treatment before discharge to surface. CTGs: (7) most water is discharged to 3rd party municipalities and is estimated to be similar to metered withdrawal (metered by 3rd party provider for billing). Remaining water is discharged to surface and volumes are measured according known to tank volume.

#### (9.2.4) Please explain

All 12 Ameren energy centers covered by the scope of this disclosure calculate water discharge in one-minute intervals, daily, or sometimes weekly depending on the site, and include this data in monthly reports for Discharge Monitoring Reports (DMRs). Our coal, nuclear, and hydro energy centers discharge to surface water (Mississippi and Missouri River Basins) and calculations are calculated based on withdra wal volumes and the estimated consumption. Discharge flows are calculated daily as required to evaluate compliance with National Pollutant Discharge Elimination System (NPDES) permit limitations and are reported in monthly DMRs to regulation authorities. Some CTGs discharge to third parties, including storm water, and volumes are measured for DMRs and calculated via billing amounts. There is negligible (

#### Water discharges - volumes by treatment method

#### (9.2.1) % of sites/facilities/operations

Select from:

**☑** 76-99

#### (9.2.2) Frequency of measurement

Select from:

Daily

#### (9.2.3) Method of measurement

Nuclear and Coal-fired: (4 facilities) all have wastewater treatment of varying levels, with volume measured by flow meters. Hydroelectric: (3 facilities) Discharge is untreated and estimated by calculating design pump flow rate multiplied by run times. CTGs: (7 facilities) most water is discharged to 3rd party municipalities which treat it and is metered by 3rd party provider for billing. Remaining water is discharged to surface and volumes are measured according known to tank volume.

#### (9.2.4) Please explain

Discharge volumes are calculated daily using design pump flow rate and run times and included in monthly permitting reports. For this calculation, Ameren Missouri's hydroelectric and pumped storage facility have been excluded as recommended by the CDP guidance. • (Included) Our nuclear energy center and three coal-fired energy centers discharge to the Mississippi River and the Missouri River All have wastewater treatment systems of varying levels and volumes are recorded separately. • (Excluded) untreated water from three hydroelectric energy centers (run of river, dam, and pumped storage. Flow rates estimate water discharge. • The combustion turbine sites discharge to third party sources after which water is treated. Some water is untreated and discharged to surface. Negligible volumes (

#### Water discharge quality – by standard effluent parameters

#### (9.2.1) % of sites/facilities/operations

Select from:

**☑** 76-99

## (9.2.2) Frequency of measurement

Select from:

Daily

### (9.2.3) Method of measurement

Coal-fired, and Nuclear Energy Centers: (4 facilities) Discharge quality is monitored using various types of sensors and sampling equipment, as well as manual sampling and analysis CTGs: (7 facilities) all but one site is monitored using various sensors and sampling equipment. Hydro: (3 facilities) – Excluded on CDP guidance.

#### (9.2.4) Please explain

For this calculation, Ameren's hydroelectric and pumped storage facilities have been excluded as recommended by the CDP guidance. Therefore 11 facilities are in scope (three coal, one nuclear, and seven CTG facilities). At 10 of those 11 facilities (representing 91% of Ameren facilities), 99.9% of our water discharge is monitored for effluent parameters. This excludes one CTG site, where a holding tank is used on site to collect and discharge negligible volumes of employee WASH water. Discharges via specified outfalls are monitored daily or before occasional annual discharge for different types of water quality as required by NPDES (wastewater) permits at all energy centers subject to wastewater quality monitoring conditions in their permits. i.e. our nuclear energy center monitors three separate outfalls, as they have different effluent parameters. These volumes are expected to remain relevant in future given generation and regulatory requirements.

Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)

## (9.2.1) % of sites/facilities/operations

Select from:

**✓** 76-99

#### (9.2.2) Frequency of measurement

Select from:

Daily

## (9.2.3) Method of measurement

Coal-fired, Nuclear, and CTG: (11 facilities) all are monitored for temperature and coal and nuclear sites are monitored for nitrates and phosphates (as well as other pollutants) using sensory and sampling methodologies. Hydro: Excluded on CDP guidance.

## (9.2.4) Please explain

For this calculation, Ameren's hydroelectric and pumped storage facilities have been excluded as recommended by the CDP guidance. CTGs have also been excluded due to negligible discharge amounts (

#### Water discharge quality - temperature

## (9.2.1) % of sites/facilities/operations

Select from:

√ 76-99

## (9.2.2) Frequency of measurement

Select from:

Daily

#### (9.2.3) Method of measurement

Coal-fired, Nuclear, and CTG: (11 facilities) all are monitored for temperature using sensory and sampling methodologies. Hydro: Excluded on CDP guidance

### (9.2.4) Please explain

For this calculation, Ameren's hydroelectric and pumped storage facilities have been excluded as recommended by the CDP guidance. Therefore 11 facilities are in scope (our three coal, one nuclear, and seven CTG facilities). At 10 of those 11 facilities (representing 91% of Ameren facilities), 99.9% of our water discharge is monitored for effluent parameters. These sites monitor thermal cooling water discharge outfalls for thermal parameters as required by NPDES (wastewater) permits. This excludes one CTG site, where a holding tank on site collects and discharge negligible volumes of employee WASH water. Our 7 CTGs discharge negligible amounts to surface water (

#### Water consumption - total volume

#### (9.2.1) % of sites/facilities/operations

Select from:

**✓** 100%

## (9.2.2) Frequency of measurement

Select from:

Yearly

#### (9.2.3) Method of measurement

Coal-fired: (3 facilities) estimated based on a consumption factors (i.e. boiler and generation specs) to calculate gallons per MWh evaporated Nuclear: (1 facility) Withdrawal and Discharge volumes are metered, so consumption is withdrawal minus discharge. Hydroelectric: (3 facilities) nonthermal and flow through, estimated to have no consumption. CTGs: (7 facilities) difficult to calculate, total water usage is

#### (9.2.4) Please explain

A small percentage of water is consumed (about 0.1%) at our energy centers for cooling and about 99% of total water withdrawn is discharged back to the environment. Consumption volumes at our coal-fired energy centers are estimated based on energy center operations i.e. generation, and consumption factors published by regulatory agencies (consumption factors are multiplied by net generation). At our nuclear plant and combustion turbine energy centers, consumption is calculated by subtracting discharge from withdrawal. Our hydroelectric energy centers are considered to have no consumption. Total consumption volume is calculated on an annual basis in order to include in reports such as the Water Security CDP. These volumes are expected to remain relevant in future given generation and regulatory requirements.

#### Water recycled/reused

#### (9.2.1) % of sites/facilities/operations

Select from:

**☑** 100%

## (9.2.2) Frequency of measurement

Select from:

Yearly

#### (9.2.3) Method of measurement

Hydroelectric Pumped Storage: (1 facility) – volume is calculated using known upper reservoir volume (closed loop). Coal-fired (1 facility) – scrubber volume estimated using pump flow volume multiplied by runtime. Nuclear: (1 facility) – Recycled cooling tower water (7,514 ML) estimated using pump flow volume times runtime and known system volume. All other facilities (11 facilities) – No recycled water. Volumes are estimated to be 0 Liters.

## (9.2.4) Please explain

Recycled water is used at three facilities included in this scope and volumes are estimated. At all facilities with recycled water, volumes are monitored and calculated annually according to pump flow volumes multiplied by run times, as well as flow balances developed and provided to regulators as part of NPDES (wastewater) permit applications. For this calculation, Ameren's two hydroelectric facilities have been excluded as recommended by the CDP guidance making the total number of facilities included in the calculation twelve (three recycle out of twelve included; all measure water volumes). Recycled water is used at one coal-fired facility for the flue gas desulfurization (FGD scrubber), and at one nuclear facility for thermal cooling. Water is also recycled at the Taum Sauk pumped storage facility, which is considered to be closed-loop system. These volumes are expected to remain relevant in future given generation and regulatory requirements.

#### The provision of fully-functioning, safely managed WASH services to all workers

#### (9.2.1) % of sites/facilities/operations

Select from:

**100%** 

## (9.2.2) Frequency of measurement

Select from:

Daily

#### (9.2.3) Method of measurement

All sites provide WASH water for employees. Some sites monitor more frequently than others. Nuclear: WASH is monitored daily using various sensors and sampling equipment.

#### (9.2.4) Please explain

Clean and safe potable water is available at all Ameren facilities for personnel use. The potable water is either provided by commercial or public water systems or produced at one of our facilities. Potable water produced at our facilities is monitored at least daily at some sites to ensure its quality.

[Fixed row]

# (9.2.1) For your hydropower operations, what proportion of the following water aspects are regularly measured and monitored?

#### Fulfilment of downstream environmental flows

## (9.2.1.1) % of sites/facilities/operations measured and monitored

Select from:

**1**00%

## (9.2.1.2) Please explain

Ameren owns and operates two river-based hydroelectric facilities, where downstream environmental flows are maintained continuously. • The Keokuk Energy Center is a run-of-the-river facility on the Mississippi River where water flows through at the same rate as the river's natural flow rate. • The Bagnell Dam (Osage Energy Center) withholds water in the Lake of the Ozarks reservoir. The Osage Energy Center has downstream flow obligations. Water releases from the lake are monitored and managed to ensure downstream flows meet regulatory criteria, as contained in our Federal Energy Regulatory Commission license.

#### **Sediment loading**

#### (9.2.1.1) % of sites/facilities/operations measured and monitored

Select from:

**☑** 100%

#### (9.2.1.2) Please explain

Ameren owns and operates two river-based hydroelectric facilities, where downstream environmental flows are maintained continuously. • The Keokuk Energy Center is a run-of-the-river facility on the Mississippi River where water flows through at the same rate as the river's natural flow rate. • The Bagnell Dam (Osage Energy Center) withholds water in the Lake of the Ozarks reservoir. The Osage Energy Center has downstream flow obligations. Water releases from the lake are monitored and managed to ensure downstream flows meet regulatory criteria, as contained in our Federal Energy Regulatory Commission license.

#### Other, please specify

## (9.2.1.1) % of sites/facilities/operations measured and monitored

Select from:

✓ Not relevant

## (9.2.1.2) Please explain

We do not measure and monitor other water aspects at this time. [Fixed row]

(9.2.2) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, how do they compare to the previous reporting year, and how are they forecasted to change?

**Total withdrawals** 

## (9.2.2.1) Volume (megaliters/year)

48870894

## (9.2.2.2) Comparison with previous reporting year

Select from:

✓ Lower

## (9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

✓ Increase/decrease in business activity

## (9.2.2.4) Five-year forecast

Select from:

☑ About the same

## (9.2.2.5) Primary reason for forecast

Select from:

☑ Divestment from water intensive technology/process

#### (9.2.2.6) Please explain

"About the same" is defined as a less than 10% increase or decrease compared to the previous year. Total withdrawals were 9% lower in 2022 compared to 2021, or "about the same". Reasoning: Keokuk Energy Center (run of river facility on the Mississippi) represented 78% and Bagnell Dam (on the Osage River) represented 15% of total withdrawal in 2022. Changes in withdrawal from these two hydroelectric facilities impact year over year (YOY) changes the most. Withdrawal is calculated based on the pump flow volumes multiplied by run times of water through the generation turbines and spillway (spilled water is estimated based on spill volume and time spill doors are open). No water is considered to be withheld or consumed. Keokuk had the same (

#### **Total discharges**

## (9.2.2.1) Volume (megaliters/year)

48843525

### (9.2.2.2) Comparison with previous reporting year

Select from:

Lower

## (9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

✓ Increase/decrease in business activity

## (9.2.2.4) Five-year forecast

Select from:

✓ About the same

#### (9.2.2.5) Primary reason for forecast

Select from:

☑ Divestment from water intensive technology/process

## (9.2.2.6) Please explain

"About the same" is defined as a less than 10% increase or decrease compared to the previous year. Total discharges were 9% lower in 2022 compared to 2021, or "about the same". Reasoning: Keokuk Energy Center (run of river facility; Mississippi) represented 78% and Bagnell Dam (Osage River) represented 15% of total discharges in 2022. Changes in discharge from these two hydroelectric facilities impact year over year (YOY) changes the most. Discharge is considered equal to withdrawal for our hydro operations and is calculated based on the pump flow volumes multiplied by run times of water through the generation turbines and spillway (spilled water is estimated based on spill volume and time spill doors are open). No water is considered to be withheld or consumed. Keokuk had the same (

#### **Total consumption**

## (9.2.2.1) Volume (megaliters/year)

27133

## (9.2.2.2) Comparison with previous reporting year

Select from:

✓ About the same

## (9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

✓ Increase/decrease in business activity

#### (9.2.2.4) Five-year forecast

Select from:

☑ About the same

## (9.2.2.5) Primary reason for forecast

Select from:

☑ Divestment from water intensive technology/process

#### (9.2.2.6) Please explain

Total consumption makes up less than 1% of total water withdrawal. The largest consumer of water is our nuclear Callaway Energy Center for use in the cooling towers, and made up 74% of total consumption in 2022. The amount of water consumption is much higher than the previous year ("much higher" is defined as greater

than 20%). This is primarily due to decreased generation in 2021 due to a refueling as well as a maintenance outage, comparatively making 2022 volumes higher (125%) since the energy center was online for more days in 2022 than in 2021. When the plant is offline, there is less water evaporated (consumed) in the cooling towers. Consumption at our four coal-fired energy centers decreased slightly (compared to the previous year) due to operational needs, generation scheduling. These facilities represent 25% of total consumption. There is no consumption at our hydroelectric generation energy centers. Water consumption is estimated annually for all of our generation sites included in the scope and is calculated based on known generation consumption factors per MWh generated (at our coal-fired energy centers, and calculated by withdrawal minus discharge at our nuclear energy center). 5 Year forecast: We expect water consumption to stay about the same over the next 5 years. "About the same" is /- 10% compared to the previous year. We retired one at the end of 2022, and plan to retire an additional coal-fired energy center by the end of 2026. However, these energy center only make up about 5% of total consumption, which is not enough to cross the 10% threshold that defines "about the same". We are investing in 2,800 MW of new renewable generation by 2030 (that doesn't use water) by the end of 2040, and we plan to retire all coalfired generation by 2042. We have a target to reduce water withdrawal for thermal generation by 95% by 2045. More information available in our 2022 Ameren IRP update at Ameren.com/IRP [Fixed row]

(9.2.4) Indicate whether water is withdrawn from areas with water stress, provide the volume, how it compares with the previous reporting year, and how it is forecasted to change.

### (9.2.4.1) Withdrawals are from areas with water stress

Select from:

✓ No

## (9.2.4.8) Identification tool

Select all that apply

✓ WRI Aqueduct

#### (9.2.4.9) Please explain

Ameren undertook a comprehensive study of water risks using a number of tools and concluded that water withdrawals are not from regions with high water stressed areas. Our Water Resilience Assessment report in 2018 assessed the then-current and future availability of water resources across Ameren service territory and portions of our supply chain under a variety of potential climate change scenarios. The report evaluated four different publicly available climate change tools and datasets including: the World Resources Institute's Aqueduct and Water Risk Atlas, the U.S. Army Corps of Engineers' Climate Hydrology Assessment Tool, the National Oceanic and Atmospheric Administration's Climate Explorer Tool, and the U.S. Drought Monitor. We applied the WRI Water Risk Atlas to Ameren's service territory (located within the Mississippi and Missouri River Basins) and the Powder River Basin in Wyoming, where we source the majority of our coal for power

generation. Water stress was evaluated within these regions according to various future scenarios. The tool was also used to project changes from a baseline to 2030 for three future scenarios: Optimistic, Business as Usual, and Pessimistic. Ameren's Water Resiliency Assessment concluded that for the time period around 2030, water stress is projected to be near normal for most regions within the study area but is likely to increase in the already arid Powder River Basin (which is relevant as a portion of Ameren's supply chain). The report concluded that there is no present or expected future water stress (for the time period around 2030) within our boundaries of direct operations. Ameren's Water Resiliency Assessment report is posted on our website at Ameren.com/Sustainability.

[Fixed row]

#### (9.2.7) Provide total water withdrawal data by source.

Fresh surface water, including rainwater, water from wetlands, rivers, and lakes

#### (9.2.7.1) Relevance

Select from:

Relevant

## (9.2.7.2) Volume (megaliters/year)

48865567

## (9.2.7.3) Comparison with previous reporting year

Select from:

Lower

## (9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

✓ Increase/decrease in business activity

#### (9.2.7.5) Please explain

"Relevant" was chosen because we rely on freshwater resources for generation operations. "Lower" is defined to be 10-20% lower compared to the previous year. Total discharges were 15% lower in 2023 compared to 2022. Surface withdrawal was 9% lower than the previous year due to decreased withdrawal at our Osage Energy Center, as there were lower water levels available for generation. Water withdrawal was about the same (

#### **Brackish surface water/Seawater**

## (9.2.7.1) Relevance

Select from:

✓ Not relevant

## (9.2.7.5) Please explain

"Not Relevant" was chosen because our operations are not located near, nor withdraw from brackish or seawater sources. This is not expected to change as we have no plans to begin withdrawing from new water sources.

#### Groundwater - renewable

## (9.2.7.1) Relevance

Select from:

Relevant

## (9.2.7.2) Volume (megaliters/year)

5194

## (9.2.7.3) Comparison with previous reporting year

Select from:

✓ About the same

## (9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

✓ Increase/decrease in business activity

## (9.2.7.5) Please explain

"Relevant" was chosen because shallow alluvial groundwater supplied by on-site wells is used at three generation facilities (two coal-fired energy centers and one nuclear energy center) for drinking water and other plant operations. "About the same" is defined as less than /- 10% difference YOY. Groundwater withdrawal was "about the same" (8% lower) than previous year largely due to unchanged operations at our Labadie coal-fired energy center (this facility represents about 93% of total groundwater withdrawal) and fluctuations (or lack thereof) at Labadie carry heavy weight in driving overall percent volume change YOY. Future Outlook: The amount that is withdrawn is expected to stay relatively the same in near-future as our energy centers are expected to run at similar capacities to previous years. In the long term, groundwater withdrawal will incrementally decrease as all coal-fired energy centers are expected to be retired by 2042.

#### Groundwater - non-renewable

## (9.2.7.1) Relevance

Select from:

✓ Not relevant

# (9.2.7.5) Please explain

"Not Relevant" was chosen because our operations do not withdraw from non-renewable groundwater sources. This is not expected to change as we have no plans to begin withdrawing from new water sources.

#### **Produced/Entrained water**

## (9.2.7.1) Relevance

Select from:

✓ Not relevant

# (9.2.7.5) Please explain

"Not Relevant" was chosen because our operations do not withdraw from produced or entrained water. This is not expected to change as we have no plans to begin withdrawing from new water sources.

#### Third party sources

# (9.2.7.1) Relevance

Select from:

✓ Relevant

## (9.2.7.2) Volume (megaliters/year)

133

## (9.2.7.3) Comparison with previous reporting year

Select from:

Much lower

## (9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

✓ Increase/decrease in business activity

### (9.2.7.5) Please explain

"Relevant" was chosen because third-party supply of potable and non-potable is from municipal, public and/or private water providers and is used as potable (WASH) water and for use in our CTG operations. Third-party water volumes are purchased and therefore metered and reported monthly. Volumes were much lower than the previous year with "much lower" being defined as more than 20% lower than the previous year. This is primarily due to the decommissioning of the Meramec Energy Center in 2022. In addition, the volumes of third-party withdrawal are relatively small; therefore small fluctuations from year to year will have a higher percent change impact. Future Outlook: Overall, these water volumes are negligible (less than 0.001%) compared to the volumes used for total operations and the remaining facilities are expected to run similar to previous years so no significant changes in volume withdrawal from third-party sources is expected in the future.

[Fixed row]

#### (9.2.8) Provide total water discharge data by destination.

#### Fresh surface water

#### (9.2.8.1) Relevance

Select from:

✓ Relevant

## (9.2.8.2) Volume (megaliters/year)

48843486

## (9.2.8.3) Comparison with previous reporting year

Select from:

Lower

## (9.2.8.4) Primary reason for comparison with previous reporting year

Select from:

✓ Increase/decrease in business activity

#### (9.2.8.5) Please explain

"Relevant" was chosen because large volumes of water are discharged to surface water annually. "About the same" is defined as less than 10% difference compared to the previous year. Surface discharge was 9% lower than previous year largely due to decreased withdrawal at our Osage Energy Center; due to lower water levels available. Keokuk Energy Center (hydroelectric) withdrew

#### **Brackish surface water/seawater**

### (9.2.8.1) Relevance

Select from:

✓ Not relevant

#### (9.2.8.5) Please explain

"Not Relevant" was chosen because our operations do not discharge to brackish surface water/sea water sources. This is not expected to change.

#### **Groundwater**

## (9.2.8.1) Relevance

Select from:

✓ Not relevant

## (9.2.8.5) Please explain

"Not Relevant" was chosen because our operations do not discharge to groundwater sources. This is not expected to change.

#### **Third-party destinations**

# (9.2.8.1) Relevance

Select from:

✓ Relevant

#### (9.2.8.2) Volume (megaliters/year)

39

## (9.2.8.3) Comparison with previous reporting year

Select from:

Much lower

#### (9.2.8.4) Primary reason for comparison with previous reporting year

Select from:

✓ Facility closure

#### (9.2.8.5) Please explain

"Relevant" was chosen because six of our CTG energy centers discharge to third-party sources. Discharge to third-party sources is much lower (more than 20% lower) than the previous year. This is because our Meramec Energy Center accounted for 73% of total discharges to third-party sources in 2022, the same year it was decommissioned. Future Outlook: Overall, these water volumes are negligible (less than 0.001%) compared to the volumes used for total operations and the remaining facilities are expected to operate similarly to previous years. So no significant changes in volume discharges from third-party sources are expected in the future.

[Fixed row]

#### (9.2.9) Within your direct operations, indicate the highest level(s) to which you treat your discharge.

#### **Tertiary treatment**

#### (9.2.9.1) Relevance of treatment level to discharge

Select from:

✓ Relevant

#### (9.2.9.2) Volume (megaliters/year)

6947

#### (9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

✓ About the same

#### (9.2.9.4) Primary reason for comparison with previous reporting year

Select from:

✓ Increase/decrease in business activity

## (9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:

**☑** 1-10

#### (9.2.9.6) Please explain

Some of the cooling water coming into our coal-fired Sioux Energy Center is used around the plant including for floor washes and other cleaning purposes. This water is treated before being returned to environment with an onsite tertiary level water treatment system in order to remove any impurities that might have been picked up in the water during wash or cleaning usage. This consists of a primary treatment of sedimentation, secondary of oil and grease separation and pH control, and a

tertiary clarification stage. Sioux is 1 of the 14 facilities included in our reporting boundary, which represents 7.14% of our facilities, that uses a tertiary waste water treatment system as the highest level of treatment. Tertiary treatment volumes are about the same (less than /- 10%) in 2023 as the previous year as Sioux generated about the same MWh as the previous year and therefore withdrew and discharged volumes of about the same. Future Outlook: The volumes of water treated at tertiary treatment levels is expected to stay the same in the short term but is expected to decrease after Sioux Energy Center is scheduled to retire by 2032.

#### **Secondary treatment**

## (9.2.9.1) Relevance of treatment level to discharge

Select from:

Relevant

#### (9.2.9.2) Volume (megaliters/year)

14016

# (9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

✓ Lower

## (9.2.9.4) Primary reason for comparison with previous reporting year

Select from:

✓ Increase/decrease in business activity

#### (9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:

**☑** 21-30

## (9.2.9.6) Please explain

A portion of cooling water at our coal-fired Rush Island and Labadie Energy Centers is used for floor washing or other general cleaning purposes. In addition, all of the water used at our Callaway nuclear energy center is treated at a secondary level, which makes up the bulk of the volume of discharge treated at a secondary level. These onsite secondary level water treatment systems consist of a primary treatment of sedimentation and a secondary treatment of oil and grease separation

and pH control, or a chemical treatment, all designed to remove impurities that might have been picked up in the water during wash or cleaning usage. Three of our fourteen facilities included in the reporting boundary, which represents 21.43% of facilities, have secondary treatment facilities as the highest level of treatment. Water discharge after secondary treatment is lower (10-20% lower) than the previous year. This is because both Rush Island and Labadie generated less MWh than the previous year (decrease in business activity). This resulted in comparatively less water (about 12% less) also being treated at a secondary level before discharge. Future Outlook: The volumes of water treated at secondary treatment levels is expected to stay relatively the same as our Callaway Energy Center is scheduled to continue operations. All coal-fired energy centers are scheduled to retire by 2042, but these volumes only make up a small portion of secondary treatment volume so discharge will only decrease slightly as these energy centers are retired.

#### **Primary treatment only**

#### (9.2.9.1) Relevance of treatment level to discharge

Select from:

✓ Not relevant

## (9.2.9.6) Please explain

Our coal-fired Meramec Energy Center, the only energy center in 2022's generation fleet with a wet ash handling system, was retired in December 2022. Primary treatment discharge is no longer applicable in 2023 and going forward.

#### Discharge to the natural environment without treatment

## (9.2.9.1) Relevance of treatment level to discharge

Select from:

Relevant

#### (9.2.9.2) Volume (megaliters/year)

48822523

## (9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

✓ Lower

#### (9.2.9.4) Primary reason for comparison with previous reporting year

Select from:

✓ Increase/decrease in business activity

#### (9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:

**✓** 41-50

## (9.2.9.6) Please explain

Our three hydroelectric energy centers do not have water treatment facilities on site, and two discharge untreated water to the environment. These include the Osage and Keokuk dams. Water flows through the turbines and out back to the Mississippi and Osage Rivers. Our pumped storage facility has negligible discharge to the environment and is considered a closed-loop system. Three of our coal-fired energy centers that have transitioned to dry-ash handling discharge untreated cooling water back to the environment (see other portions of this table for a description of the water pulled used for cleaning purposes and treated at secondary and tertiary levels). This water is used in non-contact cooling, so there is no opportunity for contamination during the cooling process. Water is tested for thermal limitations, in accordance with our discharge permits. Six out of 16 (37%) of our facilities discharge some water in this category. Discharge was about the same (less than /-10%) compared to the previous year mainly due to about the same generation (and therefore water usage) at our Keokuk and Osage hydroelectric energy centers. Hydroelectric generation makes up the vast majority of discharge to the natural environment (93%). Future Outlook: The volume of untreated water discharged to the environment is expected to mostly stay the same, but decreasing slightly after 2042. The vast majority of the total water discharged (93%) is used for hydroelectric generation which is expected to continue in future. The remaining 7% is used at our coal and nuclear energy centers, which we expect to decrease in the future, as we plan to retire all coal-fired generation by 2042

#### Discharge to a third party without treatment

## (9.2.9.1) Relevance of treatment level to discharge

Select from:

Relevant

## (9.2.9.2) Volume (megaliters/year)

39

## (9.2.9.3) Comparison of treated volume with previous reporting year



Much lower

#### (9.2.9.4) Primary reason for comparison with previous reporting year

Select from:

✓ Facility closure

#### (9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:

**41-50** 

#### (9.2.9.6) Please explain

Six of our CTG (combustion turbine) energy centers discharged to third-party sources and CTG discharge volumes make up a negligible amount (

#### Other

# (9.2.9.1) Relevance of treatment level to discharge

Select from:

✓ Not relevant

## (9.2.9.6) Please explain

We have no other discharge treatment types. [Fixed row]

(9.2.10) Provide details of your organization's emissions of nitrates, phosphates, pesticides, and other priority substances to water in the reporting year.

#### (9.2.10.2) Categories of substances included

Select all that apply

- Nitrates
- Phosphates

#### (9.2.10.4) Please explain

Ameren is unaware of any significant contributions of nitrates or phosphates to its water discharges from plant processes. Ameren's discharges do include these constituents, however it is known that the intake waters are the source for most, if not all, of those constituents. In future reports, Ameren intends to review this section in greater detail and determine if any additional reporting is appropriate.

[Fixed row]

(9.3) In your direct operations and upstream value chain, what is the number of facilities where you have identified substantive water-related dependencies, impacts, risks, and opportunities?

#### **Direct operations**

## (9.3.1) Identification of facilities in the value chain stage

Select from:

✓ Yes, we have assessed this value chain stage and identified facilities with water-related dependencies, impacts, risks, and opportunities

#### (9.3.2) Total number of facilities identified

6

## (9.3.3) % of facilities in direct operations that this represents

Select from:

**☑** 26-50

#### (9.3.4) Please explain

Ameren and its subsidiaries own over 800 separate facilities including generation centers, administrative and business buildings, substations and warehouses. The scope of this disclosure is limited to the 14 energy generation facilities (that use water for generation). Of these, only 6 have the potential to have substantive financial of strategic impacts and include our 3 coal-fired, 1 nuclear, and 2 hydroelectric energy centers. These 6 facilities represent approximately 43% of Ameren's total facilities in scope. These 6 energy centers accounted for about 93% of total net generation in 2023, withdrew about 99% of the total water withdrawn and discharge about 99% of the water they withdraw back to the environment. These energy centers rely on large volumes of water for operations and may be exposed to water risk due to flooding or insufficient flows or increasing regulatory risk. However, our 2018 Water Resilience Assessment concluded that the regions in which we operate have low risk of future water scarcity within our direct operations through 2030. The two hydroelectric dams may also be exposed to water risk due to insufficient flows. However, gross hydroelectric generation is relatively low (approximately 3%) of total net generation in 2023. In addition, the Water Resilience Assessment concluded that the major river basins (i.e. the Missouri and the Mississippi River Basins) in our operating regions are expected to have ample water supply into the long term. The greater risk is extreme weather and flood events as opposed to drought in these regions. The combustion turbines (CTGs) are not exposed to substantive water-related risk due to their very small reliance on water resources in comparison to the larger energy centers.

# (9.3.1) For each facility referenced in 9.3, provide coordinates, water accounting data, and a comparison with the previous reporting year.

#### Row 2

## (9.3.1.1) Facility reference number

Select from:

✓ Facility 1

## (9.3.1.2) Facility name (optional)

Labadie Energy Center

#### (9.3.1.3) Value chain stage

Select from:

✓ Direct operations

## (9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

✓ Yes, withdrawals and discharges
(9.3.1.7) Country/Area & River basin
Canada  ☑ Mississippi River
(9.3.1.8) Latitude
38.56419
(9.3.1.9) Longitude
-90.83728
(9.3.1.10) Located in area with water stress
Select from: ☑ No
(9.3.1.11) Primary power generation source for your electricity generation at this facility
Select from:  ☑ Coal - hard
(9.3.1.13) Total water withdrawals at this facility (megaliters)
1826797

# (9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:

✓ About the same

(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes
1821944
(9.3.1.16) Withdrawals from brackish surface water/seawater
0
(9.3.1.17) Withdrawals from groundwater - renewable
4844
(9.3.1.18) Withdrawals from groundwater - non-renewable
o
(9.3.1.19) Withdrawals from produced/entrained water
0
(9.3.1.20) Withdrawals from third party sources
9
(9.3.1.21) Total water discharges at this facility (megaliters)
1822555
(9.3.1.22) Comparison of total discharges with previous reporting year
Select from:  ☑ About the same
(9.3.1.23) Discharges to fresh surface water

#### (9.3.1.24) Discharges to brackish surface water/seawater

0

## (9.3.1.25) Discharges to groundwater

0

## (9.3.1.26) Discharges to third party destinations

9

#### (9.3.1.27) Total water consumption at this facility (megaliters)

4241

# (9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

About the same

### (9.3.1.29) Please explain

"About the same" is used to denote year-to-year changes being within 0%-10% compared to the previous year. Labadie generated about the same amount of energy in 2023 as compared to 2022 (4% less) and therefore used about the same volumes of water. Withdrawal and discharge volumes were increased about 3% when comparing 2023 to 2022 volumes and consumption decreased about 4%, all within the /- 10% "about the same" threshold. Water consumption is estimated monthly for all of our generation sites included in the scope and is calculated based on known generation consumption factors per MWh generated.

#### Row 3

#### (9.3.1.1) Facility reference number

Select from:

✓ Facility 3

## (9.3.1.2) Facility name (optional)

## (9.3.1.3) Value chain stage

Select from:

✓ Direct operations

# (9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

✓ Yes, withdrawals and discharges

## (9.3.1.7) Country/Area & River basin

#### Canada

✓ Mississippi River

## (9.3.1.8) Latitude

38.108722

## (9.3.1.9) Longitude

-90.258056

## (9.3.1.10) Located in area with water stress

Select from:

✓ No

# (9.3.1.11) Primary power generation source for your electricity generation at this facility

Select from:

✓ Coal - hard

(9.3.1.13) Total water withdrawals at this facility (megaliters)
828507
(9.3.1.14) Comparison of total withdrawals with previous reporting year
Select from:  ✓ Much lower
(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes
828460
(9.3.1.16) Withdrawals from brackish surface water/seawater
0
(9.3.1.17) Withdrawals from groundwater - renewable
47
(9.3.1.18) Withdrawals from groundwater - non-renewable
0
(9.3.1.19) Withdrawals from produced/entrained water
0
(9.3.1.20) Withdrawals from third party sources
0
(9.3.1.21) Total water discharges at this facility (megaliters)
828305

### (9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

Much lower

#### (9.3.1.23) Discharges to fresh surface water

828305

## (9.3.1.24) Discharges to brackish surface water/seawater

0

#### (9.3.1.25) Discharges to groundwater

0

#### (9.3.1.26) Discharges to third party destinations

0

# (9.3.1.27) Total water consumption at this facility (megaliters)

202

## (9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

Much lower

## (9.3.1.29) Please explain

"Much Lower" is used to denote year-to-year changes greater than 20% lower compared to the previous year. Water withdrawal, discharge and consumption at the Rush Island Energy Center were all much lower (withdrawals and discharge volumes were 29% lower and consumption volume was 85% lower when comparing 2023 to 2022 volumes). Rush Island generated about 85% less than the previous year as operations recede in preparation for retirement. Water consumption is estimated monthly for all of our generation sites included in the scope and is calculated based on known generation consumption factors per MWh generated.

#### Row 4

# (9.3.1.1) Facility reference number

Select from:

✓ Facility 6

# (9.3.1.2) Facility name (optional)

Osage Energy Center

## (9.3.1.3) Value chain stage

Select from:

✓ Direct operations

# (9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

✓ Yes, withdrawals and discharges

# (9.3.1.7) Country/Area & River basin

#### Canada

✓ Mississippi River

# (9.3.1.8) Latitude

38.2045

# (9.3.1.9) Longitude

-92.623

# (9.3.1.10) Located in area with water stress Select from: ✓ No (9.3.1.11) Primary power generation source for your electricity generation at this facility Select from: Hydropower (9.3.1.13) Total water withdrawals at this facility (megaliters) 3159564 (9.3.1.14) Comparison of total withdrawals with previous reporting year Select from: ✓ Much lower (9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes 3159559 (9.3.1.16) Withdrawals from brackish surface water/seawater 0 (9.3.1.17) Withdrawals from groundwater - renewable 3 (9.3.1.18) Withdrawals from groundwater - non-renewable

195

0

(9.3.1.19) Withdrawals from produced/entrained water
0
(9.3.1.20) Withdrawals from third party sources
3
(9.3.1.21) Total water discharges at this facility (megaliters)
3159564
(9.3.1.22) Comparison of total discharges with previous reporting year
Select from:  ✓ Much lower
(9.3.1.23) Discharges to fresh surface water
3159564
(9.3.1.24) Discharges to brackish surface water/seawater
o
(9.3.1.25) Discharges to groundwater
0
(9.3.1.26) Discharges to third party destinations
o
(9.3.1.27) Total water consumption at this facility (megaliters)
0

## (9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

✓ About the same

#### (9.3.1.29) Please explain

"Much Lower" is used to denote year-to-year changes more than 20% lower compared to the previous year. Osage generated much less energy when comparing 2023 to 2022 (about 67% less), therefore using much lower volumes of water. Withdrawal and discharge volumes decreased about 64% when compared to previous year.

#### Row 5

## (9.3.1.1) Facility reference number

Select from:

✓ Facility 7

## (9.3.1.2) Facility name (optional)

Meramec Energy Center

#### (9.3.1.7) Country/Area & River basin

#### Canada

✓ Mississippi River

## (9.3.1.10) Located in area with water stress

Select from:

✓ No

## (9.3.1.11) Primary power generation source for your electricity generation at this facility

#### Select from:

✓ Coal - hard

#### Row 6

# (9.3.1.1) Facility reference number

Select from:

✓ Facility 5

# (9.3.1.2) Facility name (optional)

Keokuk Energy Center

## (9.3.1.3) Value chain stage

Select from:

✓ Direct operations

# (9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

✓ Yes, withdrawals and discharges

# (9.3.1.7) Country/Area & River basin

#### Canada

✓ Mississippi River

# (9.3.1.8) Latitude

40.395833

# (9.3.1.9) Longitude

## (9.3.1.10) Located in area with water stress

Select from:

✓ No

## (9.3.1.11) Primary power generation source for your electricity generation at this facility

Select from:

Hydropower

## (9.3.1.13) Total water withdrawals at this facility (megaliters)

42205055

## (9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:

☑ About the same

## (9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

42205054

## (9.3.1.16) Withdrawals from brackish surface water/seawater

0

# (9.3.1.17) Withdrawals from groundwater - renewable

0

## (9.3.1.18) Withdrawals from groundwater - non-renewable

0

# (9.3.1.19) Withdrawals from produced/entrained water 0 (9.3.1.20) Withdrawals from third party sources (9.3.1.21) Total water discharges at this facility (megaliters) 42205055 (9.3.1.22) Comparison of total discharges with previous reporting year Select from: ☑ About the same (9.3.1.23) Discharges to fresh surface water 42205054 (9.3.1.24) Discharges to brackish surface water/seawater (9.3.1.25) Discharges to groundwater 0 (9.3.1.26) Discharges to third party destinations 1 (9.3.1.27) Total water consumption at this facility (megaliters)

### (9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

✓ About the same

#### (9.3.1.29) Please explain

"About the same" is used to denote year-to-year changes being within 0%-10% compared to the previous year. Keokuk generated about the same amount of energy in 2023 as compared to 2022 (about 7% less) and therefore used about the same volumes of water. Withdrawal and discharge volumes decreased about 5% when comparing 2023 to 2022, within the /- 10% "about the same" threshold.

#### Row 7

### (9.3.1.1) Facility reference number

Select from:

✓ Facility 2

## (9.3.1.2) Facility name (optional)

Sioux Energy Center

#### (9.3.1.3) Value chain stage

Select from:

✓ Direct operations

#### (9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

✓ Yes, withdrawals and discharges

## (9.3.1.7) Country/Area & River basin

#### Canada

✓ Mississippi River

#### (9.3.1.8) Latitude

38.914722

# (9.3.1.9) Longitude

-90.29

## (9.3.1.10) Located in area with water stress

Select from:

✓ No

## (9.3.1.11) Primary power generation source for your electricity generation at this facility

Select from:

✓ Coal - hard

## (9.3.1.13) Total water withdrawals at this facility (megaliters)

814193

## (9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:

✓ About the same

## (9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

814181

## (9.3.1.16) Withdrawals from brackish surface water/seawater

## (9.3.1.17) Withdrawals from groundwater - renewable

0

(9.3.1.18) Withdrawals from groundwater - non-renewable

0

## (9.3.1.19) Withdrawals from produced/entrained water

0

# (9.3.1.20) Withdrawals from third party sources

12

#### (9.3.1.21) Total water discharges at this facility (megaliters)

813373

## (9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

✓ About the same

## (9.3.1.23) Discharges to fresh surface water

813361

## (9.3.1.24) Discharges to brackish surface water/seawater

0

# (9.3.1.25) Discharges to groundwater

### (9.3.1.26) Discharges to third party destinations

12

## (9.3.1.27) Total water consumption at this facility (megaliters)

820

## (9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

Much lower

#### (9.3.1.29) Please explain

"About the same" is used to denote year-to-year changes being within 0%-10% compared to the previous year. Sioux Energy Center generated a lower amount of energy in 2023 as compared to 2022 (17% less) and therefore contributed to the lower volumes of water used although withdrawals and discharge remain with the "about the same" when comparing 2023 to 2022 (withdrawals and discharges both decreased 8%). Water consumption was "much lower" when comparing 2023 to 2022 (45% less), however consumption volume only accounts for 0.1% of total withdrawals from Sioux Energy Center in 2023. Water consumption is estimated monthly for all of our generation sites included in the scope and is calculated based on known generation consumption factors per MWh generated.

#### Row 8

#### (9.3.1.1) Facility reference number

Select from:

✓ Facility 4

## (9.3.1.2) Facility name (optional)

Callaway Energy Center

#### (9.3.1.3) Value chain stage

Select	from:
COICCE	monn.

✓ Direct operations

## (9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

✓ Yes, withdrawals and discharges

# (9.3.1.7) Country/Area & River basin

#### Canada

✓ Mississippi River

## (9.3.1.8) Latitude

38.761666

## (9.3.1.9) Longitude

-91.78

# (9.3.1.10) Located in area with water stress

Select from:

✓ No

# (9.3.1.11) Primary power generation source for your electricity generation at this facility

Select from:

Nuclear

# (9.3.1.13) Total water withdrawals at this facility (megaliters)

31441

(9.3.1.14) Comparison of total withdrawals with previous reporting year
Select from:  ☑ About the same
(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes
31142
(9.3.1.16) Withdrawals from brackish surface water/seawater
o
(9.3.1.17) Withdrawals from groundwater - renewable
299
(9.3.1.18) Withdrawals from groundwater - non-renewable
o
(9.3.1.19) Withdrawals from produced/entrained water
o
(9.3.1.20) Withdrawals from third party sources
o
(9.3.1.21) Total water discharges at this facility (megaliters)
9362
(9.3.1.22) Comparison of total discharges with previous reporting year
Select from:

☑ About the same

#### (9.3.1.23) Discharges to fresh surface water

9362

#### (9.3.1.24) Discharges to brackish surface water/seawater

0

#### (9.3.1.25) Discharges to groundwater

0

#### (9.3.1.26) Discharges to third party destinations

0

## (9.3.1.27) Total water consumption at this facility (megaliters)

21780

## (9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

About the same

#### (9.3.1.29) Please explain

"About the same" is used to denote year-to-year changes being within 0%-10% compared to the previous year. The Callaway Nuclear Energy Center generated about the same amount of energy in 2023 as compared to 2022 (3% more) and therefore used about the same volumes of water. Withdrawal and consumption volumes were decreased about 1% when comparing 2023 to 2022 volumes and discharge volumes decreased about 6%, all within the /- 10% "about the same" threshold. Withdrawal and discharge is measured and reported on monthly Discharge Monitoring Reports (DMRs).

[Add row]

# (9.3.2) For the facilities in your direct operations referenced in 9.3.1, what proportion of water accounting data has been third party verified?

Water withdrawals - total volumes

## (9.3.2.1) % verified

Select from:

**☑** 76-100

#### (9.3.2.2) Verification standard used

The verification was undertaken in accordance with the ERM CVS assurance methodology which is aligned with the International Standard for Assurance Engagements ISAE 3000 (Revised) and is a CDP-accepted standard.

#### Water withdrawals - volume by source

#### (9.3.2.1) % verified

Select from:

✓ Not verified

## (9.3.2.3) Please explain

We verify the total withdrawals with a third party. During this process, our third party partner does a deep dive on all data and process sourcing for the surface, groundwater, and third party sources of withdrawal, that add up to our total withdrawal volume

#### Water withdrawals - quality by standard water quality parameters

#### (9.3.2.1) % verified

Select from:

✓ Not verified

## (9.3.2.3) Please explain

Water quality standards are managed at the plant level through oversight of applicable permitting requirements

#### Water discharges - total volumes

## (9.3.2.1) % verified

Select from:

**☑** 76-100

## (9.3.2.2) Verification standard used

The verification was undertaken in accordance with the ERM CVS assurance methodology which is aligned with the International Standard for Assurance Engagements ISAE 3000 (Revised) and is a CDP-accepted standard.

#### Water discharges – volume by destination

#### (9.3.2.1) % verified

Select from:

✓ Not verified

## (9.3.2.3) Please explain

We verify the total discharges with a third party. During this process, our third party partner does a deep dive on all data and process sourcing for the surface, groundwater, and third party sources of discharge, that add up to our total withdrawal volume.

#### Water discharges – volume by final treatment level

## (9.3.2.1) % verified

Select from:

✓ Not verified

#### (9.3.2.3) Please explain

Water quality standards are managed at the plant level through oversight of applicable permitting requirements.

#### Water discharges – quality by standard water quality parameters

#### (9.3.2.1) % verified

Select from:

✓ Not verified

#### (9.3.2.3) Please explain

Water quality standards are managed at the plant level through oversight of applicable permitting requirements.

#### Water consumption - total volume

#### (9.3.2.1) % verified

Select from:

**☑** 76-100

### (9.3.2.2) Verification standard used

The verification was undertaken in accordance with the ERM CVS assurance methodology which is aligned with the International Standard for Assurance Engagements ISAE 3000 (Revised) and is a CDP-accepted standard. [Fixed row]

#### (9.5) Provide a figure for your organization's total water withdrawal efficiency.

#### (9.5.1) Revenue (currency)

7500000000

#### (9.5.2) Total water withdrawal efficiency

153.47

## (9.5.3) Anticipated forward trend

The majority of our withdrawal (93%) is due to our clean hydroelectric generation and is expected to remain similar in future. The remaining 7% is withdrawn (99% of which is discharged back to the environment) for our coal and nuclear-fueled generation. We anticipate our future withdrawal efficiency to increase slightly as withdrawal volumes are expected to decrease with the scheduled retirement of all of our coal-fired energy centers (3 by 2030, and all coal is scheduled to retire by 2042).

[Fixed row]

(9.7) Do you calculate water intensity for your electricity generation activities?

Select from:

Yes

(9.7.1) Provide the following intensity information associated with your electricity generation activities.

#### Row 2

## (9.7.1.1) Water intensity value (m3/denominator)

1534

#### (9.7.1.2) Numerator: water aspect

Select from:

✓ Freshwater withdrawals

## (9.7.1.3) Denominator

Select from:

**✓** MWh

#### (9.7.1.4) Comparison with previous reporting year

Select from:

☑ About the same

#### (9.7.1.5) Please explain

Water intensity is presented in cubic meters (m3) of freshwater withdrawn per MWh of net generation, including all generation facilities included in the reporting boundary. This intensity factor is about the same (increased 1%) compared to the previous year. "About the same" is defined to be within /-10% compared to the previous year. Our hydroelectric generation represents the largest source of withdrawal of freshwater (about 93% of total withdrawal), but only makes up about 3% of net generation. Fluctuations in river levels and seasonal weather (rain) have the largest impact on our total water withdrawal. In addition, we continue to add wind and solar capacity to our generation portfolio, increasing the proportion of MWh generated with technologies that do not use or consume water. We use water intensity to track and demonstrate progress in efficiency upgrade investment. Several measures of intensity (including various emissions intensities are included in our voluntary EEI Sustainability Template report posted on our website. Future Outlook: Our withdrawal intensity is expected to decrease in the future. Water Intensity Reduction Strategy: Our coal-fired generation technologies withdrawal water for thermal cooling in relation to generation amounts. We plan to retire 4,500 MW of fossil-fired generation by 2042, add 4,700 MW of new renewable generation and 800 MW of battery storage by 2040. To maintain energy reliability, we plan to add an 800 MW simple cycle and 1,200 MW combined cycle energy center to be in service by 2033 as well as adding 2,400 MW of clean dispatchable resources by 2045. The retirement of coal-fired generation and addition of renewable generation is expected to contribute to reduced freshwater withdrawal intensity in the future. Ameren Missouri's 2023 IRP is at Ameren.com/IRP.

## (9.13) Do any of your products contain substances classified as hazardous by a regulatory authority?

Products contain hazardous substances
Select from:  ✓ Yes

[Fixed row]

(9.13.1) What percentage of your company's revenue is associated with products containing substances classified as hazardous by a regulatory authority?

#### Row 1

## (9.13.1.1) Regulatory classification of hazardous substances

Select from:

✓ Other, please specify: Department of Transport (DOT) and Occupational Safety and Health Administration (OSHA)

#### (9.13.1.2) % of revenue associated with products containing substances in this list

Select from:

**☑** 10-20

#### (9.13.1.3) Please explain

We are an electric and natural gas utility that generates, transmits and distributes electricity, as well as distributes natural gas to our customers. The Department of Transportation Office of Pipeline Safety (DOT OPS) concluded crude oil and natural gas meet the standard's [Hazard Communication Standard (HCS), 29 CFR 1910.1200] definition of hazardous chemicals posing physical and health hazards to exposed individuals. The Occupational Safety and Health Administration (OSHA) has concluded that current OPS regulations address the hazards of fire and explosion in the natural gas distribution and transmission process. Percent revenue is estimated based on natural gas operating revenues. [Add row]

#### (9.14) Do you classify any of your current products and/or services as low water impact?

## (9.14.1) Products and/or services classified as low water impact

Select from:

Yes

# (9.14.2) Definition used to classify low water impact

Low water impact is defined as having little to no impact on the environment. Impact is defined by either removing and not returning water, or significantly reducing the quality of water returned.

#### (9.14.4) Please explain

We plan to add 2,800 MW of additional new, clean, renewable (wind and solar) generation by 2030 and a total of 4,700 MW by 2040. These technologies will help us to generate electricity without the use of water and are therefore considered low-water-impact technologies that produce electricity. Currently, 93% of the water we withdraw is for our hydroelectric operations, an emissions-free source of generation. For our overall operations, 99% of water withdrawn is returned to the environment.

[Fixed row]

#### (9.15) Do you have any water-related targets?

Select from:

Yes

(9.15.1) Indicate whether you have targets relating to water pollution, water withdrawals, WASH, or other water-related categories.

#### Water pollution

#### (9.15.1.1) Target set in this category

Select from:

✓ No, and we do not plan to within the next two years

## (9.15.1.2) Please explain

We maintain current National Pollutant Discharge Elimination System (NPDES) permits and comply with applicable state water quality standards. The NPDES process follows the pollutant list found in the Code of Federal Regulations at 40 CFR 401.15. The state permitting agency and Ameren work together to determine the applicable industrial processes present. We identify potential water pollutants that may include: hydrocarbons, coal combustion residuals (CCR), radiation, thermal discharges, and additional pollutants included on the federal Clean Water Act (CWA), and monitor these for compliance in association with our operations. We transitioned our coal-fired energy centers to dry ash handling, significantly reducing water contact with CCR, as well as are responsibly closing our ash pond basins (set to complete in 2024). This includes extensive investment in groundwater monitoring and treatment systems to ensure impacts from the basins do not affect human or environmental health.

#### **Water withdrawals**

## (9.15.1.1) Target set in this category

Select from:

Yes

Water, Sanitation, and Hygiene (WASH) services

## (9.15.1.1) Target set in this category

Select from:

✓ No, and we do not plan to within the next two years

#### (9.15.1.2) Please explain

Clean and safe potable water is already available for WASH services at all Ameren facilities for personnel use. The potable water is either provided by commercial or public water systems, or produced at one of our facilities. Potable water produced at our facilities is monitored at least daily using various sensors and sampling equipment at some sites to ensure its quality.

[Fixed row]

(9.15.2) Provide details of your water-related targets and the progress made.

#### Row 1

## (9.15.2.1) Target reference number

Select from:

✓ Target 1

#### (9.15.2.2) Target coverage

Select from:

✓ Organization-wide (direct operations only)

#### (9.15.2.3) Category of target & Quantitative metric

#### Water withdrawals

✓ Reduction of water withdrawals from surface water

#### (9.15.2.6) Base year figure

4746390

#### (9.15.2.8) Target year figure

227100

## (9.15.2.9) Reporting year figure

3495727

### (9.15.2.10) Target status in reporting year

Select from:

Underway

## (9.15.2.11) % of target achieved relative to base year

28

#### (9.15.2.13) Explain target coverage and identify any exclusions

Of water used, 93% is used in hydroelectric generation, although this only makes up 3% of overall energy generation. The majority of generation is from thermal energy centers (i.e., coal and nuclear) which rely on large volumes of fresh surface water for cooling purposes during operation. As we seek to transition our resources to a cleaner and more diverse generation portfolio, including the planned closure of an additional coal-fired energy center by 2030 and the remaining two coal-fired energy centers by 2042, we are targeting corresponding reductions in surface water withdrawal for thermal generation by 95% by 2045 according to a 2005 baseline. Interim targets include a 40% reduction by 2030 and 75% by 2040. The % of target achieved is determined by calculating the % reduction of total surface water withdrawal for thermal generation in the current year as compared to the baseline. Projected reductions are based on averaged withdrawal volumes of past years of operation.

[Add row]

#### C11. Environmental performance - Biodiversity

(11.2) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

# (11.2.1) Actions taken in the reporting period to progress your biodiversity-related commitments

Select from:

☑ Yes, we are taking actions to progress our biodiversity-related commitments

#### (11.2.2) Type of action taken to progress biodiversity-related commitments

Select all that apply

✓ Land/water management

✓ Education & awareness

[Fixed row]

## (11.3) Does your organization use biodiversity indicators to monitor performance across its activities?

Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Select from:	Select all that apply
✓ Yes, we use indicators	☑ Other, please specify: Ameren maps the areas where we planted native pollinator friendly plants in our rights-of-way.

[Fixed row]

(11.4) Does your organization have activities located in or near to areas important for biodiversity in the reporting year?

#### **Legally protected areas**

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

Yes

#### (11.4.2) Comment

There are U.S. Forest Service areas within our service territory. We have fully assessed and permitted our assets and activities within these areas with the US Forest Service.

#### **UNESCO World Heritage sites**

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

Yes

## (11.4.2) Comment

We have one UNESCO World Heritage site within our Service Territory. We work with the State Historic Preservation Office to review any work to assets located within the site and minimize any impacts.

#### **UNESCO Man and the Biosphere Reserves**

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

✓ No

#### Ramsar sites

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

✓ Yes (partial assessment)

#### (11.4.2) Comment

There are a few RAMSAR areas within our service territory. Construction projects are reviewed to determine potential impacts and Ameren works closely with Federal and State agencies to review any construction projects as required to avoid or minimize potential impacts, where possible, and mitigate impacts if they are impossible to avoid.

#### **Key Biodiversity Areas**

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

✓ Yes (partial assessment)

#### (11.4.2) Comment

Known pockets of protected species and habitats exist within our Service Territory. Ameren works closely with the U.S. Fish and Wildlife Service and State agencies as required to review any construction projects to avoid or minimize potential impacts, where possible, and mitigate impacts if they are impossible to avoid.

#### Other areas important for biodiversity

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

✓ Yes (partial assessment)

#### (11.4.2) Comment

In our effort to be good stewards of the thousands of acres of land we maintain, the Ameren Biodiversity Policy guides us in preserving natural habitats, supporting conservation efforts and minimizing our impacts on wildlife as much as practicable. We focus on where we can make the most impact in our service territory – rivers, pollinators, birds and bats for any voluntary enhancement projects. Ameren works closely with the U.S. Fish [Fixed row]

(11.4.1) Provide details of your organization's activities in the reporting year located in or near to areas important for biodiversity.

#### Row 1

# (11.4.1.2) Types of area important for biodiversity

Select all that apply

☑ Other areas important for biodiversity

#### (11.4.1.4) Country/area

Select from:

✓ United States of America

## (11.4.1.5) Name of the area important for biodiversity

Monarch Butterfly Habitat

#### (11.4.1.6) Proximity

Select from:

Overlap

(11.4.1.8) Briefly describe your organization's activities in the reporting year located in or near to the selected area

The Monarch butterfly primary migratory pathway through the Midwest US overlaps the Ameren service territory. Any construction and vegetation management activities in the Ameren service territory are in the migratory pathway and potentially in Monarch habitat areas.

# (11.4.1.9) Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Select from:

✓ Yes, but mitigation measures have been implemented

### (11.4.1.10) Mitigation measures implemented within the selected area

Select all that apply

- ✓ Project design
- Restoration

## (11.4.1.11) Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

Certain vegetation management activities and construction activities that might remove or destroy Monarch butterfly foraging plants or milkweed could negatively impact the Monarch butterfly. In recognition of that, Ameren developed an application to join the Monarch butterfly Candidate Conservation Agreement with Assurances (CCAA) in 2022. [The application was submitted in early 2023, but has not yet been accepted by the University of Illinois, Chicago CCAA management team.] Once Ameren is accepted and has signed on to the CCAA, implementation activities will include documenting Monarch butterfly habitat conservation measures throughout the Ameren service territory. Conservation measures currently include seeding for pollinator-friendly plants after construction when practicable and using Integrated Vegetation Management strategies such as only spot treating rights-of-way for woody and invasive species on existing transmission rights-of-way where possible.

[Add row]

#### C13. Further information & sign off

(13.1) Indicate if any environmental information included in your CDP response (not already reported in 7.9.1/2/3, 8.9.1/2/3/4, and 9.3.2) is verified and/or assured by a third party?

Other environmental information included in your CDP response is verified and/or assured by a third party
Select from:  ✓ No, and we do not plan to obtain third-party verification/assurance of other environmental information in our CDP response within the next two years

[Fixed row]

(13.3) Provide the following information for the person that has signed off (approved) your CDP response.

## (13.3.1) Job title

Senior Vice President, Chief Sustainability, Diversity & Philanthropy Officer

## (13.3.2) Corresponding job category

Select from:

☑ Chief Sustainability Officer (CSO)

[Fixed row]

(13.4) Please indicate your consent for CDP to share contact details with the Pacific Institute to support content for its Water Action Hub website.

Select from:

✓ No

#### **Independent Limited Assurance Report to Ameren Corporation**

ERM Certification & Verification Services Incorporated ("ERM CVS") was engaged by Ameren Corporation ("Ameren") to provide limited assurance in relation to the selected information set out below and presented in the 2024 CDP Climate Change and Water Security Questionnaires (the "Questionnaires"), where Ameren is reporting as a non-scoring option.

## **Engagement Summary**

Whether the 2023 data for the following selected disclosures, as indicated under Response C7 of the CDP Climate Questionnaire and Response C9 of the CDP Water Questionnaire are fairly presented in the Questionnaires, in all material respects, in accordance with the reporting criteria.

#### **GHG Emissions**

- Total Scope 1 GHG emissions (absolute) [metric tons CO2e]
- Total Scope 2 GHG emissions (absolute) (location-based) [metric tons CO<sub>2</sub>e]
- Total Scope 3 GHG emissions [metric tons CO₂e] consisting of the following categories:
  - Category 1: Purchased Goods and Services [metric tons CO<sub>2</sub>e]
  - Category 2: Capital Goods [metric tons CO<sub>2</sub>e]
  - o Category 3: Fuel- and Energy-related Activities [metric tons CO2e]
  - Category 4: Upstream Transportation and Distribution [metric tons CO<sub>2</sub>e]
  - Category 5: Waste Generated in Operations [metric tons CO<sub>2</sub>e]
  - o Category 6: Business Travel [metric tons CO<sub>2</sub>e]
  - o Category 7: Employee Commuting [metric tons CO2e]
  - o Category 11: Use of Sold Products [metric tons CO2e]

#### Water

- Total water withdrawal [megaliters]
- Total water discharged [megaliters]
- Total water consumption [megaliters]
- Water recycled/reused [megaliters]

[Our assurance engagement does not extend to information in respect of earlier periods or to any other information included in the Questionnaires.]

#### Reporting period

Scope of our

engagement

assurance

1st January 2023 to 31st December 2023

# Reporting criteria

- Ameren's Basis of Reporting
- The GHG Protocol Corporate Accounting and Reporting Standard (WBCSD/WRI Revised Edition 2015) for Scope 1 and Scope 2 GHG emissions
- GHG Protocol Scope 2 Guidance (An amendment to the GHG Protocol Corporate Standard (WRI 2015) for Scope 2 GHG emissions
- The Corporate Value Chain (Scope 3) Accounting and Reporting Standard (WBCSD/WRI 2011) for Scope 3 GHG emissions

Assurance standard and level of assurance We performed a limited assurance engagement, in accordance with the International Standard on Assurance Engagements ISAE 3000 (Revised) 'Assurance Engagements other than Audits or Reviews of Historical Financial Information' issued by the International Auditing and Assurance Standards Board.

The procedures performed in a limited assurance engagement vary in nature and timing from and are less in extent than for a reasonable assurance engagement and consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

# Respective responsibilities

Ameren is responsible for preparing the Questionnaires and for the collection and presentation of the information within it, and for the designing, implementing and maintaining of internal controls relevant to the preparation and presentation of the selected Information.

ERM CVS' responsibility is to provide a conclusion to Ameren on the agreed scope based on our engagement terms with Ameren, the assurance activities performed, and exercising our professional judgment.

#### Our conclusion

Based on our activities, as described below, nothing has come to our attention to indicate that the 2023 data and information for the disclosures listed under 'Scope' above are not fairly presented in the Questionnaire, in all material respects, in accordance with the reporting criteria.

#### **GHG Emissions**

Total Scope 1 GHG emissions	19,883,180 metric tons CO <sub>2</sub> e
Total Scope 2 GHG emissions (location-based)	84,832 metric tons CO <sub>2</sub> e
Total Scope 3 GHG emissions (consisting of categories 1-7 and 11)	16,599,962 metric tons CO <sub>2</sub> e

#### Water

Total water withdrawal	48,870,894 megaliters
Total water discharged	48,843,525 megaliters
Total water consumption	27,133 megaliters
Water recycled/reused	7,514 megaliters

#### Our assurance activities

Considering the level of assurance and our assessment of the risk of material misstatement of the Selected Information a multi-disciplinary team of sustainability and assurance specialists performed a range of procedures that included, but were not restricted to, the following:

- Evaluating the appropriateness of the reporting criteria for the Selected Information;
- Performing an analysis of the external environment, including a media search, to identify sustainability
  risks and issues in the reporting period that may be relevant to the assurance scope;
- Interviewing management representatives responsible for managing the selected information;
- Interviewing relevant staff to understand and evaluate the management systems and processes (including internal review and control processes) used for collecting and reporting the selected disclosures;
- Reviewing of a sample of qualitative and quantitative evidence supporting the reported information at a corporate level;
- Performing an analytical review of the year-end data submitted by all locations included in the
  consolidated 2023 group data for the selected disclosures which included testing the completeness and
  mathematical accuracy of conversions and calculations, and consolidation in line with the stated
  reporting boundary;

- Conducting one site visit to Ameren's Labadie site to review source data and local reporting systems and controls:
- Evaluating the conversion and emission factors and assumptions used; and
- Reviewing the presentation of information relevant to the scope of our work in the Questionnaires to
  ensure consistency with our findings.

#### The limitations of our engagement

The reliability of the assured information is subject to inherent uncertainties, given the available methods for determining, calculating or estimating the underlying information. It is important to understand our assurance conclusions in this context.

#### Our independence, integrity, and quality control

ERM CVS is an independent certification and verification body accredited by UKAS to ISO 17021:2015. Accordingly, we maintain a comprehensive system of quality control, including documented policies and procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory requirements. Our quality management system is at least as demanding as the relevant sections of ISQM-1 and ISQM-2 (2022).

ERM CVS applies a Code of Conduct and related policies to ensure that its employees maintain integrity, objectivity, professional competence and high ethical standards in their work. Our processes are designed and implemented to ensure that the work we undertake is objective, impartial, and free from bias and conflict of interest. Our certified management system covers independence and ethical requirements that are at least as demanding as the relevant sections of the IESBA Code relating to assurance engagements.

ERM CVS has extensive experience in conducting assurance on environmental, social, ethical, and health and safety information, systems, and processes, and provides no consultancy-related services to Ameren in any respect.

Heather I. Moore

Partner, Corporate Assurance

Forther I. Moone

Malvern, PA

October 24, 2024

On behalf of:
ERM Certification & Verification Services Incorporated
<a href="https://www.ermcvs.com">www.ermcvs.com</a> | <a href="mailto:post@ermcvs.com">post@ermcvs.com</a>

