Illinois Environmental Protection Agency
Bureau of Water, Permit Section
(IEPA)

1021 North Grand Avenue East, Post Office Box 19276, Springfield, Illinois 62794-9276, 217/782-3362

The IEPA has issued a Public Notice of a request for a Clean Water Act Section 401 water quality certification that would allow the issuance of a federal permit for the discharge of pollutants to waters of the State.

Public Notice Beginning Date:	**Public Notice Ending Date:**
Thursday, January 26, 2023	Wednesday, February 15, 2023

Agency Log No.: C-0265-22

Federal Permit Information: Federal permit/license no. LRL-2021-00898 is under the jurisdiction of Louisville District, Regulatory Branch U.S. Army Corps of Engineers

Name and Address of Discharger: Ameren Illinois Company, Kevin Atkins - 1901 Chouteau Avenue MC 602, St. Louis, MO 63166

Discharge Location: In Section 12 of Township 3-North and Range 12-West of the West 2nd Principal Meridian in Lawrence County. Additional project location information includes the following: 2021 16th Street, Lawrenceville, IL 62439

Name of Receiving Water: Unnamed Emergent Wetlands

Project Name/Description: Ameren Lawrenceville South Substation Expansion- the purpose of this project is to expand the existing substation to the west and upgrading the existing aging equipment to increase reliability and operability.

Construction Schedule: Undetermined

The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice. Interested persons are invited to submit written comments on the project to the IEPA at the above address. Commenters must provide their name and address along with comments on the certification request. The IEPA Log number must appear on each comment page. Commenters may include a request for public hearing. Only hearing requests and comments that pertain to Clean Water Act Section 401 authority will be considered. This authority provides consideration of whether the permit or license would be consistent with Sections 301, 302, 303, 306, or 307 of the CWA, as well as "any other appropriate requirement of State [or tribal] law". Requests for additional comment period must provide a demonstration of need. The final day of comment acceptance will be on the Public Notice Ending date shown above, unless the IEPA grants an extended notice period. The attached Fact Sheet provides a detailed description of the project and the findings of the IEPA's antidegradation assessment.

If written comments or requests indicate a significant degree of public interest in the certification application, the IEPA may, at its discretion, hold a public hearing. Public notice will be given 30 days before any public hearing. If a Section 401 water quality certification is issued, response to relevant comments will be provided at the time of the certification. For further information, please see the contact information below.

Name: Francisco Herrera Email: Francisco.Herrera@Illinois.gov Phone: 217/782-3362

Post Document. No. C-0265-22-01262023-PublicNoticeAndFactSheet.pdf

401 Water Quality Certification Fact Sheet for Ameren/Lawrenceville South Substation Expansion
IEPA Log No. C-0265-22
Lawrence County
Contact: Angie Sutton 217-782-9864

Ameren Illinois Company ("Applicant") has applied for a 401 Water Quality Certification for impacts associated with the expansion of the Lawrenceville South electric substation for system replacement. The 8.3 Acre (Ac) project site is located in Township 3 North, Range 12 West, Section 12, Lawrence County, Illinois, on property owned by Ameren located at 2021 16th Street in Lawrenceville. The existing 138 kV substation is in poor condition due to age. Ameren proposes to replace the existing substation equipment with a new, more reliable configuration that will require expansion of the substation to the west. Further, upgrading the aged equipment will include upgrading transmission lines and structures adjacent and west of the existing substation, where two new, wooden dual-pole H-Frame structures will be placed in an upland area of the ROW, and one existing wooden dual-pole H-Frame will be replaced with a wooden tri-pole structure in emergent wetland. Construction would permanently fill approximately 1.59 acres of jurisdictional emergent wetlands and temporarily impact 0.49 acre via temporary access roads and temporary workspaces.

The existing substation was constructed in 1965 and is currently in a degraded condition due to its age. In order to provide customers with safe, reliable, efficient and environmentally responsible energy, the substation needs to be replaced. The existing substation configuration (straight bus) is one which cannot isolate failures, thus causing outages of the entire substation during events such as a faulty transformer or breaker failure. It was determined that during upgrade of the existing, aged equipment, a new ring bus configuration would be more reliable and safer as failures within a ring bus configuration can be isolated and minimize impact to customers.

The proposed project would involve construction of temporary and permanent transmission structures in the right-of-way (ROW), including the rerouting of transmission lines. Two temporary wooden pole structures will be installed in the footprint of the expansion area within emergent wetland (WET-01) while the other will be placed in an upland area. Four permanent wooden poles will be installed with one occurring in WET-01, two in the upland portion of the ROW and the fourth as a replacement pole in WET-02. The applicant will also relocate within the existing alignment, 3 distribution poles adjacent to the rail line and interconnect a below-ground feed to the above-ground distribution lines.

The substation expansion construction will include grading and fill activity to create a building pad, stormwater infrastructure, and foundations for the substation expansion. The proposed substation building pad would consist of crushed stone surfacing, extending a minimum of 6 feet outside of the new substation fence. Once the substation foundation and building pad construction is complete, new electrical equipment would be installed and wired to the existing system. Once the new system is online and operational, existing substation equipment not incorporated into the new system would be removed and scrapped. The existing substation will remain in service while the new equipment is being constructed.

Temporary workspaces will include access roads and staging areas. Expansion of an existing access road used for maintenance may require minor expansion during construction activities and temporary workpads would be designated around wooden structures to be installed, removed, or replaced.

Jurisdictional WOTUS were identified within the project area and confirmed during the November 2021 site visit with the USACE. The Project would result in 1.59 acres of permanent impact to emergent wetland WET-01, and negligible impact (2 square feet) to emergent wetland WET-02 due to fill activities. Temporary impacts due to construction activities would include 0.31 acre of WET-02 from the access road and workpad needed for the new transmission line structure. The applicant proposes compensatory wetland mitigation requirements be fulfilled at the Raccoon Creek Wetland and Stream Mitigation Bank

or other acceptable mitigation bank in the same watershed as the proposed project. The mitigation to impact ratio for the low-quality wetland impacts is not yet known.

Information used in this review was obtained from the application documents dated August 2021, October 19, 2021, May 31, 2022, November 10, 2022, and November 11, 2022.

Identification and Characterization of the Affected Water Body.

On July 9, 2021, the applicant's consultant conducted a wetland delineation on an approximately 8.3 Ac area of the project area. The survey area is comprised of an approximately 8-acre field directly abutting the west side of the existing substation and the existing, maintained transmission line ROW that extends westward from the substation. A smaller drainage area abuts the south side of the substation just north of the railway berm. A forested stand sits north of the ROW and west of a gravel parking lot that services the substation. A rail line sits on an approximately 6 feet high berm and borders the southern portion of the survey area.

Two emergent wetlands were delineated within the survey area and designated WET-01 and WET-02. Wetland WET-01 is a 2.0-acre emergent wetland located just west and south of the raised platform that the existing substation sits upon and is bordered on its south side by a railroad line, and on its west side by a hillslope that travels along the ROW. WET-01 sits within a low-lying depression and drains to a culvert beneath that rail line berm on its southwest border. The majority of the wetland is located within maintained ROW, however a small portion extends to the north along a drainage feature into maintained lawn, and another portion extends east between the substation and berm constructed for the rail line. Within this eastern portion are old access roads that lead to the rail line and appear to be abandoned. The roads have culverts located under them that connect the eastern portion of this wetland with the larger area to the west. Dominant vegetation in WET-01 includes redtop (*Agrostis gigantea*), tall fescue (*Shedonorus arundinaceus*), American water horehound (*Lycopus americanus*), beaked panicgrass (*Coleataenia anceps*), bearded beggarticks (*Bidens aristosa*), rufous bulrush (*Scirpus pendulus*), green bulrush (*Scirpus atrovirons*), Torrey's rush (*Juncus torreyi*), Virginia wildrye (*Elymus virginicus*), and lateflowering thoroughwort (*Eupatorium serotinum*). WET-01 is characterized in wetland sample points WSP-01, WSP-02, WSP-03, WSP-04, and WSP-06. The culvert that drains the wetland on the south side of the rail berm does not appear to have an outlet, and therefore connection to another jurisdictional feature.

Wetland WET-02 is an 0.7-acre emergent wetland within the existing maintained transmission ROW on the west side of the survey area. WET-02 is a depressional feature that drains the abutting crop fields to the west and is bordered on the east by a hillslope and to the south by the rail line berm. Dominant vegetation included annual marsh elder (*Iva annua*), rufous bulrush, and narrowleaf cattail (*Typha angustifolia*). This wetland is characterized in wetland sample point WSP-05. There is a dilapidated culvert on the southern end of the portion of the wetland within the survey area, however it drains only to a swale that borders the northern side of the railway line berm just south of the survey area. No culvert or any other outlet from this swale was identified, therefore this area likely holds water after heavy precipitation events. This wetland does not appear to have a surface water connection to any other jurisdictional resource.

Identification of Proposed Pollutant Load Increases or Potential Impacts on Uses.

The pollutant load increases that would occur from this project include some possible increases in total suspended solids. These increases, a normal and unavoidable result of the placement of fill in the emergent wetland areas, may occur in the construction areas. The 1.59 acres of permanent impact to emergent wetland WET-01 is expected due to fill activities. Temporary impacts due to construction

activities would include 0.31 acre of WET-02 from the access road and workpad needed for the new transmission line structure.

Fate and Effect of Parameters Proposed for Increased Loading.

The increase in total suspended solids would be local and temporary. The property contains 2.9 Ac acres of palustrine emergent (PEM) wetland meadow. Of the acreage onsite, 1.59 Ac of the 2.21 Ac WET-01 are expected to be permanently impacted by the construction activities. Temporary impacts of 0.31 Ac will occur in the 0.69 Ac WET-02 in the form of 0.21 Ac of temporary workspace and 0.1 Ac of access road. There is expected to be only 2 square feet of permanent impacts to WET-02. Proposed mitigation for the wetland impacts is proposed to be fulfilled at the Raccoon Creek Wetland and Stream Mitigation Bank or other acceptable mitigation bank in the same watershed as the proposed project. The mitigation to impact ratio for the low-quality wetland impacts is not yet known.

The applicant will utilize conservation measures and best management practices (BMPs) in order to minimize potential impacts to Waters of the U.S. (WOUS). Some of the avoidance and minimization practices included layout changes that reduced wetland impacts by 0.11 Ac, access road designs that avoided identified wetlands, and utilization of existing ROW and paved areas for staging and storage. Once construction of the substation is complete, temporarily disturbed areas will be re-contoured and seeded with a suitable seed mix, including a native wetland mix where appropriate. BMPs will be utilized during construction to help reduce potential offsite sedimentation. Additionally, crane matting would be utilized around ROW structure workpads in wetland areas. Construction matting (i.e., timber crane) will be used to maintain construction access and minimize damage in construction areas located in wetlands. Should rutting occur, damage to the wetland will be repaired. Timber matting or steel plates would be used where heavy equipment may cross underground utilities. Ruts caused by vehicles or large equipment during construction activities will be minimized to the maximum extent practicable. Unavoidable ruts will be bladed smooth, backfilled, and seeded. The existing 19-inch diameter poles will be replaced with poles of the same diameter; therefore, only one pole will result in a net increase in wetland impact. Stripped topsoil may be stockpiled and reused for the top 6 inches of final surfacing. Excess topsoil and foundation spoil material would be hauled off site.

Per the draft Environmental Assessment, multiple avoidance and minimization measures and BMPs will be employed including the power line clearance recommendations listed in Ameren's corporate-wide Avian Protection Plan to preclude bird electrocutions.

Purpose and Social & Economic Benefits of the Proposed Activity.

The purpose of the Project is to upgrade the existing substation with more reliable and efficient equipment to meet the needs of the Lawrenceville community. In order to accomplish the purpose of upgrading the existing substation and retain electricity to the Lawrenceville community, the existing straight bus configuration must remain in service while the new ring bus configuration is constructed adjacently. Therefore, the expansion must occur to the west of the existing substation, impacting an emergent wetland.

Assessments of Alternatives for Less Increase in Loading or Minimal Environmental Degradation.

The Applicant used the following criteria to evaluate potential designs as well as sites in order to achieve the project's purpose:

- Design: Configuration would need to be technically and economically feasible.

- Location: The site would need to be in the vicinity of Lawrenceville and adjacent to existing ROW to avoid disturbance of land use, minimize property acquisition and residential and commercial displacement, and preferably be zoned commercial.
- Size: The site needs to be large enough to provide space for the substation with associated infrastructure, ROW structures, and access.
- Topography: Level ground at the work site would be needed in order to accommodate sensitive electrical equipment and have minimal grading requirements.
- Avoid Natural and Cultural Resources: The site should avoid impacts to streams, wetlands, open water features, forest, natural areas, protected species, and archaeological and historic architectural resources as reasonably feasible.
- Avoid Environmental Concerns: There should be little to no contamination, needed remediation, or environmental liens on the site.
- Cost: The site construction would need to be feasibly cost-effective.

Alternative sites were not considered due to the increased potential of greater impact as an alternative site location would require construction of a new substation as well as new ROW and transmission structures. Expansion location is additionally inhibited by the rail line to the south and the microwave tower with guy wires to the north. In addition, the current configuration has proven to be unreliable, rendering replacement unreliable and removing that option from consideration due to the unreliability. The criterion for this alternative analysis is to design the most reliable, safe, and efficient configuration possible while considering use of Ameren-owned property, and minimal environmental impacts. Expanding the current equipment with a ring bus configuration adjacent to the existing substation while it remains in service is the preferred alternative.

No Action Alternative:
This option results in the existing, aged 138 kV, substation not getting upgraded, leaving the substation susceptible to equipment failure and total outage of the substation under the current straight bus configuration. Additionally, maintenance activities would continue, with increased activity to address equipment and outage issues, resulting in potential impact from construction and/or emergency response equipment. This option was not considered further.

On Site Alternative (Preferred Alternative):
This alternative consists of expanding the existing 138 kV substation in order to upgrade equipment and increase reliability and readiness of the system to customers. The proposed project includes construction of a ring bus configuration while the existing substation remains in service. This option will include grading and filling to construct a building pad and stormwater infrastructure. New electrical equipment will be installed and wired, and once the new system is online and operational any existing equipment not used in the expansion will be removed and scrapped. This option was chosen as the preferred alternative.

Design alternatives were considered by analyzing different ring bus configurations. The initial layout considered would have impacted 1.7 acres of wetland WET-01. To reduce wetland impact, Ameren adjusted the initial layout to the layout currently proposed, reducing wetland impact by 0.11 acre.

Summary Comments of the Illinois Department of Natural Resources, Regional Planning Commissions, Zoning Boards or Other Entities.

An EcoCAT endangered species consultation submitted on October 18,2021 to the Illinois Department of Natural Resources determined that INAI Site Embarras River Bottoms, the Eastern Ribbon Snake *(Thamnophis sauritus)*, the Eastern Sand Darter *(Ammocrypta pellucidum)*, and the Yellow-Crowned Night Heron *(Nyctanassa violacea)* may be in the vicinity of the project location. On October 19, 2021,

the natural resource review evaluated the information and concluded that adverse effects are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 is terminated.

In November 2022, a draft Environmental Assessment (EA) was prepared on behalf of the U.S. Army Corps of Engineers, Louisville District and Ameren Services St. Louis, Missouri by WSP.

Review of the U.S. Fish and Wildlife Service's (USFWS's) Information for Planning and Consultation (IPaC) database resulted in identification of nine birds of conservation concern that have the potential to occur in the vicinity of the proposed Project: bald eagle (*Haliaeetus leucocephalus*), bobolink (*Dolichonyx oryzivorus*), cerulean warbler (*Dendroica cerulea*), Kentucky warbler (*Oporornis formosus*), lesser yellow legs (*Tringa flavipes*), prothonotary warbler (*Protonotaria citrea*), red-headed woodpecker (*Melanerpes erythrocephalus*), rusty blackbird (*Euphagus carolinus*), and wood thrush (*Hylocichla mustelina*). Of these nine species, only suitable habitat for bobolink is present in the project area. Preferred habitats of the other birds of conservation concern are wooded or wetlands with perennial water features, neither of which are located in the project area.

Federally and state-listed threatened, endangered, or protected species and/or habitats that could potentially occur in the project area were identified using the USFWS IPaC website and the Illinois Department of Natural Resources' (IDNR's) Ecological Compliance Assessment Tool (EcoCAT). Within the project area, the USFWS identified five threatened, endangered, protected, or candidate species, including the Indiana Bat (*Myotis sodalis*), the Northern long-eared bat (*Myotis septentrionalis*), the Fat pocketbook (*Potamilus capax*), the Rabbitsfoot (*Quadrula cylindrica cylindrica*), and the Monarch butterfly *(Danaus plexippus)*. USFWS did not identify any critical habitats in the project area.

To avoid the risk of direct impacts to the listed bat species, Ameren voluntarily implemented conservation measures to avoid clearing potentially suitable bat roosting habitat during the summer roosting season. As such, Ameren selectively removed three trees located within the northeast corner of the ROW in the project area in the winter of 2022 prior to the closure of the bat hibernation season on March 31, 2022. Further tree clearing is not necessary.

In accordance with the ESA, Ameren contacted USFWS regarding federally listed special status species. Ameren also consulted with IDNR with regards to any state issues of concern including state-listed species. Ameren conducted field surveys in the July 2021 for species of concern and the results are described in the Protected Species Section 3.6.1.2 of the draft EA. Effect statements for federally listed species were determined by USACE and are also reflected in the draft EA. In accordance with the USACE, consultation with the IL SHPO and Indian tribes is considered complete.

Agency Conclusion.

This preliminary assessment was conducted pursuant to the Illinois Pollution Control Board regulation for Antidegradation found at 35 Ill. Adm. Code 302.105 (antidegradation standard) and was based on the information available to the Agency at the time this assessment was written. We tentatively find that the proposed activity would result in the attainment of water quality standards; that all technically and economically reasonable measures to avoid or minimize the extent of the proposed increase in pollutant loading have been incorporated into the proposed activity; and that this activity would benefit the community of Lawrenceville by providing efficient and reliable energy. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.