Exhibit No. 22

Ameren – Exhibit 22
Jeffrey R. Holmstead
Surrebuttal Testimony
File No. ER-2022-0337

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MISSOURI PUBLIC SERVICE COMMISSION

FILE NO. ER-2022-0337

SURREBUTTAL TESTIMONY

OF

JEFFREY R. HOLMSTEAD

ON

BEHALF OF

UNION ELECTRIC COMPANY

d/b/a AMEREN MISSOURI

St. Louis, Missouri
March 2023

SURREBUTTAL TESTIMONY

OF

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FILE NO. ER-2022-0337

Q. Please state your name and business address.

A. My name is Jeffrey R. Holmstead. My business address is 2001 M Street NW, Washington, DC 20036.

Q. What do you do for work?

A. I am an environmental lawyer and a partner at the law firm of Bracewell LLP, where I co-chair the firm's Environmental Strategies Group.

Q. Are you the same Jeffrey R. Holmstead who previously provided testimony in this case?

A. Yes.

Q. What is the purpose of your surrebuttal testimony?

A. The purpose of my surrebuttal testimony is to respond to certain statements made by Claire M. Eubanks and Keith Majors in their Rebuttal Testimony.

Q. Mr. Majors and Ms. Eubanks suggest that, in your testimony, you are seeking to "re-litigate" whether Ameren Missouri violated the Clean Air Act by failing to get New Source Review ("NSR") permits for the Rush Island Projects. [Majors Rebuttal Test. at 23, Eubanks Rebuttal Test. at 2.] Is this characterization of your testimony accurate?

A. No. I am not disagreeing with or criticizing the decisions of the District Court or the U.S. Court of Appeals for the Eighth Circuit. But these courts issued their opinions long

after Ameren Missouri officials decided, based on their understanding of the relevant regulations when they planned and undertook the Rush Island Projects, that they did not need to get NSR permits for those projects. Mr. Majors and Ms. Eubanks rely entirely on hindsight when they use the District Court and Eighth Circuit opinions to criticize Ameren Missouri's decisions. In my direct testimony, I explained why Ameren Missouri officials decided that they did not need NSR permits for the Rush Island Projects and why these decisions were reasonable based on what they knew and could have known at the time.

Q. How do you square your claim that Ameren Missouri acted reasonably with the District Court's statement in the 2019 remedy opinion "that Ameren's failure to obtain PSD permits was not reasonable"?

A. This quote, upon which Ms. Eubanks relies, is not from the relevant District Court opinion—the 2017 liability opinion in which the court found that Ameren Missouri had violated the Clean Air Act by commencing construction without the necessary Prevention of Significant Deterioration ("PSD") preconstruction permit.[1] Instead, the quote above is from the 2019 remedy opinion, which dealt with a different issue: what injunctive relief should be imposed for the violation the District Court found in the 2017 liability opinion.

Q. Did the 2017 liability opinion establish that Ameren Missouri's failure to obtain PSD permits was "not reasonable"?

A. No. The Clean Air Act is a strict liability statute. Negligence (or imprudence) is not something that a plaintiff has to prove or a court has to find in order for a defendant to be liable under the statute.

[1] As I described in my direct testimony, PSD is the NSR program that applies in areas meeting the National Ambient Air Quality Standards ("NAAQS"). [Holmstead Direct Test. at 5-6.]

Moreover, the District Court's liability opinion made no findings of fact concerning whether Ameren Missouri was reasonable or acted reasonably under the circumstances. The only time that the District Court characterized something as "not reasonable" in the liability opinion came in its conclusions of law. And there, each reference to "not reasonable" concerned only the emissions calculations offered by Ameren Missouri at trial. See 229 F. Supp. 3d at 1010 ("Ameren's emissions calculations are not reasonable analyses ***under the PSD rules*** and therefore do not show that Ameren should not have expected an emissions increase.") (emphasis added); id. at 1012 (emissions analyses did not comply with NSR requirements "***and therefore*** was not reasonable under the law") (emphasis added); id. at 1014 (post hoc calculation offered "does not serve as a reasonable emissions calculation"); id. ("Ameren failed to perform a reasonable analysis ***under the PSD rules***") (emphasis added). As each of these quotes from the liability opinion make clear, the District Court was commenting on the reasonableness of the emissions analyses Ameren Missouri offered at trial—nothing else. Moreover, the District Court's characterization of those analyses as "not reasonable" meant only that the calculations did not conform to the requirements of the PSD rules as the court had declared them in its summary judgment order and in the liability opinion itself.

Nowhere did the District Court pass judgment on whether it was reasonable for Ameren Missouri to believe that its projects would not trigger PSD permitting under the Missouri SIP, because they would not increase potential emissions. Nowhere did the District Court pass judgment on whether it was reasonable for Ameren Missouri to believe that its projects would not cause annual emissions to increase, because the Rush

Island units were capable of accommodating increased utilization and emissions. And nowhere did the District Court pass judgment on whether Ameren Missouri's interpretation and application of the "routine" exclusion for the Rush Island projects was reasonable. Staff's selective quotes from various opinions issued in the litigation fail to rebut the facts I have laid out in my direct testimony: Ameren Missouri's actions comported with the law as it was widely understood at the time and were consistent with the approaches taken by similarly situated electric utilities across the country.

Q. In your direct testimony, you pointed to evidence that power companies had done hundreds of the same types of projects at their coal-fired power plants without getting NSR permits. [Holmstead Direct Test. at 37-38.] Did Ms. Eubanks or Mr. Majors disagree with this assertion or identify any case where a power company had obtained a NSR permit for any such project?

A. No. In fact, Mr. Majors discusses another case where a power company had undertaken similar projects without seeking NSR permits. [Majors Rebuttal Test. at 26-29.]

Q. Why do you think this is relevant?

A. As I discussed in my direct testimony, NSR does not apply to "routine maintenance, repair or replacement," and this was widely understood to mean projects that are "routine within the relevant industry." [Holmstead Direct Test. at 12, 37-38.] When Ameren Missouri officials planned and undertook the Rush Island Projects, they were aware of the scope of the NSR rule and were also aware that other power companies had done the same type of projects hundreds of times without seeking NSR permits. Under these circumstances, I believe it was reasonable for Ameren Missouri to decide that it did not need to seek NSR permits for the Rush Island Projects, even though a court later found that NSR permits were required.

Q. In your direct testimony, you mentioned that Ameren Missouri had three independent reasons for concluding that it did not need to obtain NSR permits for the 2007 and 2010 Rush Island Projects. Can you briefly summarize these reasons?

A. Yes.

1. Under the applicable Missouri regulations as they had been interpreted by the Missouri Department of Natural Resources ("DNR"), an NSR permit was not required unless a project would cause an increase in "potential emissions" at a facility, and none of the Rush Island Projects would increase potential emissions.
2. None of the Rush Island Projects would be expected to cause an increase in actual annual emissions and thus would not trigger NSR.
3. These same types of projects were done routinely throughout the industry. The Rush Island Projects were therefore considered "routine maintenance, repair and replacement" ("RMRR"), which is explicitly excluded from NSR.

Q. Does Mr. Majors disagree with your summary of Ameren Missouri's permitting decisions?

A. No. Mr. Majors does not address any of the reasons why Ameren Missouri did not believe the Rush Island projects triggered NSR. He simply says that, in his opinion, "the Commission has only to look at the Court of Appeals decision to conclude that Ameren Missouri violated the Clean Air Act." [Majors Rebuttal Test. at 24, line 2]. But the question here is ***not*** whether Ameren Missouri violated the Clean Air Act. That issue was decided

by the courts. As I understand it, the question before the Commission is whether Ameren Missouri officials acted prudently in deciding that they did not need NSR permits for the Rush Island Projects, based on the facts and circumstances known to them in 2007-2010. Ameren Missouri had three reasons for reaching this conclusion, and I believe that each of them was reasonable based on what they knew or could have known at the time. Mr. Majors does not discuss any of them and thus makes no case that Ameren Missouri's decisions were unreasonable or imprudent.

Q. What about Ms. Eubanks? Does she address these issues?

A. Like Mr. Majors, Ms. Eubanks improperly uses hindsight—referring to and quoting from the opinions of the District Court and the Court of Appeals. Unlike Mr. Majors, however, she does try to address Ameren Missouri's compliance process and reasoning by quoting from the District Court opinions.

Q. Did the District Court address the issues currently before the Commission?

A. No. As I said earlier, the District Court ruled on whether Ameren Missouri violated the Clean Air Act, not on whether Ameren Missouri officials acted prudently or had a reasonable basis for believing that Ameren Missouri did not need NSR permits for the Rush Island Projects at the time those projects were being planned.

Q. But doesn't Ms. Eubanks quote portions of the District Court opinion that relate to these questions—for example, Ameren Missouri's reliance on the Missouri SIP?

A. Yes, but notably, the quoted opinion nowhere says that Ameren Missouri's understanding of the Missouri SIP was unreasonable—just that it was incorrect. As quoted

on page 4, lines 2-3 of her Rebuttal Testimony, the District Court found that the key Ameren Missouri employees reviewing the projects for NSR compliance "started with an incorrect understanding" of the Missouri SIP. As I discussed in my direct testimony, however, it wasn't just Ameren Missouri employees that had this "incorrect understanding." Ms. Kyra Moore, the Director of MDNR's Division of Environmental Quality, testified that state officials had the same understanding—that a project would not trigger NSR unless it would increase "potential emissions." Nobody disputes that this was the way that MDNR officials understood their own regulations.

In my direct testimony, I also explained why, based on my years of experience as a Clean Air Act attorney and government regulator, the way in which MDNR and Ameren Missouri had been interpreting the Missouri SIP was reasonable. As I noted, before the District Court's decision, I would have interpreted the Missouri SIP in the same way.

Q. Does Ms. Eubanks provide evidence showing that Ameren Missouri did not have a reasonable basis for believing that the Rush Island Projects were the type of projects routinely done in the industry and therefore excluded from NSR?

A. No. Again, she simply quotes from the District Court's liability decision, highlighting that Ameren Missouri officials had acknowledged that the Rush Island Projects occurred during the most significant outages in the history of the plant. But there is nothing in the applicable rules saying that "significant outages" and RMRR are mutually exclusive. Ms. Eubanks does not identify any other company that had sought NSR permits for similar types of projects. Nor does she dispute that the consensus industry view at the time was that these types of projects were routine in the industry and not subject to NSR permitting. Nowhere does the District Court find that Ameren Missouri did not have a

reasonable basis for believing that the Rush Island Projects were routine in the industry and thus excluded from NSR at the time those decisions were made.

Q. Does Ms. Eubanks provide evidence showing that Ameren Missouri did not have a reasonable basis for believing that the Rush Island Projects would not increase annual emissions?

A. Here again, Ms. Eubanks just quotes from the District Court's liability decision. But as I have explained, the District Court was not addressing the issues involved here. The District Court found that the approach Ameren Missouri used for evaluating whether the Projects would increase annual emissions was the wrong one, but it did not find that Ameren Missouri had no reasonable basis for the approach it took. And as I noted in my direct testimony, this was the approach that other power companies were also using at the time.

Q. But doesn't Ms. Eubanks quote the District Court as finding the approach used by EPA was "well known" since 1999 and that, under this approach, Ameren Missouri should have expected an increase in annual emissions?

A. The District Court's liability decision notes that "Ameren's testifying expert conceded that the method used by the United States' experts . . . has been 'well-known in the industry' since 1999." 229 F. Supp. 3d at 915. This approach, known as "the Koppe-Sahu method" after the names of EPA's testifying experts, was used only in NSR enforcement cases. It was never established in any EPA regulations, and Ameren Missouri (and other power companies) argued vigorously that it was not a valid method for determining whether repair and replacement projects would cause an increase in annual emissions. I have worked with many power companies on NSR issues over the last 30

years, and none of them, even today, use the Koppe-Sahu method to determine whether repair and replacement projects will cause an increase in annual emissions. The District Court ultimately decided that the Koppe-Sahu method should be used in the enforcement case against Ameren Missouri. But the District Court did not hold that it was the only acceptable method, nor that Ameren Missouri lacked a reasonable basis for rejecting it. In my experience, utilities did not use the Koppe-Sahu method for purposes of NSR compliance.

Ms. Eubanks also quotes language from the District Court's opinion, adopting the Koppe-Sahu method and saying that "Ameren should have expected and did expect unit availability to improve by much more than 0.3%, allowing the units to operate hundreds of hours more per year after the project" and that this would allow the plant to "to burn more coal, generate more electricity, and emit more SO2 pollution." [Eubanks Rebuttal Test. at 3, lines 19-24.] Putting aside for the moment whether it was reasonable to expect an increase in overall average annual availability, it is undisputed that Ameren Missouri officials knew, prior to the project, that Rush Island had been operating below its available capacity. Ameren Missouri thus believed that, even if the projects would improve availability, this would not actually cause an increase in annual emissions because the plant could have accommodated a large increase in emissions even without the projects. As I explained in my direct testimony, this is the approach that other power companies often took in evaluating whether repair and replacement projects would cause an emissions increase, and it was certainly a reasonable approach at the time.

Q. On page 24 of her Rebuttal Testimony, Ms. Eubanks quotes your direct testimony as supporting her view that Ameren Missouri did not properly

consider whether the Projects would cause an increase in annual emissions. Does she accurately characterize your testimony?

A. Her quote is accurate, but it certainly doesn't support the point she's trying to make. I said that, in making NSR applicability determinations there "are basically two questions: (1) Will a proposed project be a 'physical change or change in the method of operation'? and (2) will the project cause an increase in emissions? You don't trigger NSR unless the answer to both questions is 'yes.' Although you can conclude that an NSR permit is not required if the answer to either question is 'no,' **sources generally examine both questions out of an abundance of caution.**" [Emphasis in Eubanks Rebuttal Testimony.]

Ms. Eubanks apparently understood my quote as saying that companies, to be cautious, normally do quantitative emission calculations, but my direct testimony makes it clear that this is not what I said. Even the language she quotes says that companies "generally examine" whether a "project will cause an increase in emissions." It is certainly possible to examine a project and conclude, as Ameren Missouri did, that it will not cause an emissions increase without doing a quantitative calculation of emissions.

She claims that the District Court found that Ameren Missouri did not examine whether their Projects would cause an increase in emissions, but the court found only that Ameren Missouri had not done so properly – not that the company had failed to consider this issue. See 229 F. Supp. 3d at 1012 (calculation offered by expert at trial "does nothing to support Ameren's belief that emissions would not increase"). The District Court interpreted the applicable rules as requiring a quantitative assessment or "calculation" of future emissions, but, prior to this ruling, Ameren Missouri officials did not believe such a quantitative assessment was needed where the facts and circumstances made clear that

emissions would not increase over historical levels as a result of the projects. Before moving forward with the Projects, Ameren Missouri certainly did examine whether they would cause an increase in emissions and concluded that they would not. They did this "out of an abundance of caution," even though they had also concluded that (1) under the Missouri SIP, as they and MDNR understood it at the time, their Projects would not be modifications for which an emissions assessment was needed; and (2) the Projects were routine in the industry and therefore excluded from NSR.

Q. Ms. Eubanks cites evidence presented at the liability trial that annual emissions increased following the projects. [Eubanks Rebuttal Test. at 16 – 17.] Are these changes in emissions relevant to whether Ameren Missouri's permitting decisions were reasonable?

A. No. As I mentioned in my direct testimony, annual emissions at a facility can change (sometimes substantially) from year to year for reasons that have nothing to do with any changes at the facility itself. [Holmstead Direct Test. at 15-16.] At power plants, annual emissions depend on how often and how hard it is called upon to operate, which depends on a number of things, including weather, the number and operating status of other power plants in the area, the transmission infrastructure, and overall economic activity.

Under the NSR program, the question is whether an increase in emissions is ***caused*** by the project in question. It is undisputed that, before the Rush Island Projects, the plant was "capable of accommodating" greater levels of utilization and emissions. As EPA and courts have repeatedly emphasized, the NSR program is a pre-construction permitting program, and the question is whether the company should have anticipated that a project or group of projects would in the future cause an emission increase. When a unit is capable

of accommodating increased utilization and emissions, the fact that emissions increased after the fact does not shed any light on whether the company should have expected, before the outage, that component replacements would be the "predominant cause" of such an increase. It also sheds no light on whether the company was reasonable in its understanding of the NSR program.

Q. Ms. Eubanks suggests that Ameren Missouri should have sought "a no permit required determination from MDNR related to the 2007 and 2010 outage work." Is this required?

A. As I explained in my direct testimony, pre-approval is not required under any federal or state rules, and EPA has acknowledged that it is not practical for companies to do so. In my experience, it is very rare for companies to seek such a determination, and they do so only when they have a unique situation.

Q. Even if not required by the regulations, was obtaining pre-approval required in order for Ameren Missouri to make a prudent decision?

A. No. If Ameren Missouri had sought such a determination, MNDR would have found that no permit was required for the Rush Island Projects. This is clear from the testimony offered by Kyra Moore, the Director of MDNR's Division of Environmental Quality, and from prior "no permit determinations" referenced in her testimony. She testified that, as MNDR understood its own rules at the time, a project at an existing power plant would not need an NSR permit unless it was a "modification," and a project is not a modification unless it would increase potential emissions at a plant. It is undisputed that none of the Projects increased potential emissions at Rush Island. The District Court found that the definition of "modification" in the Missouri SIP did not apply to NSR, but the court

did not find that MDNR's and Ameren Missouri's understanding of the MDNR SIP was unreasonable.

Q. Ms. Eubanks asserts that if there is a difference in interpretation between EPA and MDNR, then the EPA interpretation controls. Is this correct?

A. No. When a state has a SIP-approved NSR program (as Missouri does), the state has primary responsibility for implementing it. If EPA disagrees with a state's interpretation of the SIP, EPA's interpretation does not automatically control. In enforcement cases, the court will decide which interpretation is correct, which is what happened here. There is a long line of cases on this issue.

Although Ms. Eubanks never mentions Kyra Moore's testimony supporting Ameren Missouri's interpretation of the Missouri's SIP, she does quote Ms. Moore as saying, in response to a question in a deposition, that if there is a disagreement between EPA and MNDR regarding an interpretation of the Missouri SIP, "I would say EPA because it is EPA's federal rules." It's clear from the deposition that Ms. Moore was not prepared for this question and was not offering a legal opinion on behalf of MDNR. In any case, her response is not correct as a matter of law.

Q. Ms. Eubanks discusses a study conducted by Black & Veatch ("B&V") on behalf of Ameren Missouri, dated July 2009, and titled *Report on Life Expectancy of Coal-Fired Power Plants*. Why is this relevant to the question of whether Ameren Missouri's decisions not to seek NSR permits for the 2007 and 2010 Rush Island Projects was reasonable?

A. Ms. Eubanks implies that, when Ameren Missouri requested a study on retrofitting SO2 scrubbers at Rush Island (and another of its major coal-fired power

plants), this is tantamount to an admission by Ameren Missouri that it should have sought NSR permits for the Rush Island Projects, which may have required the company to install scrubbers at Rush Island.

Q. Is this a fair implication?

A. No. There are many different Clean Air Act regulatory programs that are designed to reduce SO2 emissions from coal-fired power plants, and in 2009, every major coal-fired power plant in the eastern half of the country was aware that it might be required to install scrubbers in the near future, regardless of whether it triggered NSR. It is not unusual for a power company to commission studies to look at different options for controlling pollution in expectation of upcoming regulatory requirements.

Q. In 2009, what regulatory programs might have been expected to require the installation of scrubbers to control SO2 emissions at Rush Island?

A. The most important was probably the updated "national ambient air quality standard" (NAAQS) for fine particles, known as the PM2.5 NAAQS. (The term "PM2.5" stands for particulate matter 2.5 microns or less in diameter.) EPA has found that SO2 emissions from coal-fired power plants are a major contributor to levels of PM2.5 in the eastern United States and has issued a series of increasingly stringent rules to reduce SO2 emissions from power plants in eastern and midwestern states.

These rules create cap-and-trade programs that do not mandate emission controls on individual power plants but set state-by-state and regional emission caps. Each coal-fired power plant is given a certain number of SO2 emission allowances, which decreases over time. Plants must either reduce emissions to stay within their allocation or purchase allowances from other plants that "over-comply" and have excess emissions to sell.

Power plants in the eastern half of the country must evaluate whether it makes sense to install scrubbers or plan to purchase allowances from other plant operators that do. Coal-fired power plants in Missouri have been always covered by these SO2 cap-and-trade programs, and it was apparent in 2009 that the caps would continue to be lowered.

There are also other Clean Air Act programs that regulate SO2 emissions from coal-fired power plants, including national ambient air quality standards for SO2, the Acid Rain Program, and a program to increase visibility in National Parks and other federal lands. All these programs could cause a coal-fired power plant to retrofit with scrubbers to reduce its SO2 emissions.

Q. Is there anything in the Black & Veatch study quoted by Ms. Eubanks that is relevant to the question of whether Ameren Missouri had a reasonable basis for concluding that it did not need NSR permits for the Rush Island Projects?

A. No. Nothing whatsoever.

Q. On page 26 of his rebuttal testimony, Mr. Majors refers to decisions made by other utilities to "address ever-increasing requirements for emissions controls on coal-fired power plants." Are any of these relevant to the reasonableness of Ameren Missouri's pre-project decisions on whether a PSD permit was required under the Missouri SIP?

A. Yes. He focuses in particular on the Jeffrey Energy Center ("JEC"), a large three-unit coal-fired power plant in Kansas, with total generating capacity of about 2160 MW, that was owned and operated by Westar Energy. He points out, on page 28, that JEC undertook a number of repair and component replacement projects that were the same as some of the Rush Island Projects without obtaining NSR permits. Thus, Westar

Energy's JEC is another example of a power company that concluded it did not need an NSR permit for the types of projects that Ameren Missouri undertook at Rush Island in 2007 and 2010.

Q. Is this the reason Mr. Majors refers to JEC—to support the reasonableness of Ameren Missouri's decision not to seek NSR permits for the Rush Island Projects?

A. Apparently not. He discusses JEC and its "notice of violation" (NOV) from EPA alleging that the company had violated NSR. He points out that, unlike Ameren Missouri, Westar Energy settled this case with EPA rather than litigating it to conclusion. He argues that Ameren Missouri should have done the same thing.

Q. Is this relevant to the question of whether Ameren Missouri's decision not to seek NSR permits for the Rush Island Projects was reasonable?

A. Only in that it underscores the fact that Ameren Missouri was not alone in believing that projects like those at Rush Island did not require NSR permits.

The fact that Westar Energy settled the NSR enforcement cases that EPA brought against it has no bearing on whether Ameren Missouri's decision not to seek NSR permits was reasonable. In fact, the settlement agreement Westar Energy signed specifically says that the company does not agree that it violated NSR. United States v. Westar Energy, Inc., No. 09-CV-2059 JAR/DW, ECF No. 67 at 4 ("Westar has denied and continues to deny the violations alleged in the Complaint; maintains that it has been and remains in compliance with the Act and is not liable for civil penalties or injunctive relief….").

I am not aware of Westar Energy's particular reasons for settling that case. I can say, however, that I have worked with a number of companies who have entered into settlements with EPA to resolve NSR enforcement cases, and in all of those settlements, the companies largely just agreed to do things that they would have done anyway for business reasons or to comply with other upcoming regulatory requirements. Coal-fired power plants are regulated under many different Clean Air Act programs—not only related to SO2 but to NOx and PM as well. As these regulatory programs have become more stringent over time, coal-fired plants sometimes need to upgrade their pollution controls. In settling NSR cases, they often simply agree to upgrade or install pollution controls that they believe they will need to upgrade or install to meet other upcoming regulatory requirements.

Q. Does this conclude your surrebuttal testimony?

A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Union Electric Company	)	
d/b/a Ameren Missouri's Tariffs to Adjust	)	Case No. ER-2022-0337
Its Revenues for Electric Service	)	

AFFIDAVIT OF JEFFREY R. HOLMSTEAD }
}ss
WASHINGTON, D.C. }

Jeffrey R. Holmstead, being first duly sworn states:

My name is Jeffrey R. Holmstead, and on my oath I declare that I am of sound mind and lawful age; that I have prepared the foregoing *Surrebuttal Testimony*; and further, under the penalty of perjury, that the same is true and correct to the best of my knowledge and belief.

Jeffrey R. Holmstead

Sworn to me this 8th day of March, 2023

Notary Public

TERESA E. PERMENTER
NOTARY PUBLIC DISTRICT OF COLUMBIA
My Commission Expires April 30, 2027

TERESA E. PERMENTER NOTARY PUBLIC EXP. 4-30-27 DISTRICT OF COLUMBIA