

103RD GENERAL ASSEMBLY

State of Illinois

2023 and 2024

HB4734

Introduced 2/6/2024, by Rep. Michael J. Coffey, Jr.

SYNOPSIS AS INTRODUCED:

415 ILCS 5/9.15

Amends the Environmental Protection Act. Extends deadlines for reduced or zero carbon dioxide emissions by 10 years for certain EGUs and large greenhouse gas-emitting units.

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1 AN ACT concerning safety.

Be it enacted by the People of the State of Illinois, represented in the General Assembly:

Section 5. The Environmental Protection Act is amended by
changing Section 9.15 as follows:

6 (415 ILCS 5/9.15)

7 Sec. 9.15. Greenhouse gases.

(a) An air pollution construction permit shall not be 8 9 required due to emissions of greenhouse gases if the equipment, site, or source is not subject to regulation, as 10 defined by 40 CFR 52.21, as now or hereafter amended, for 11 greenhouse gases or is otherwise not addressed in this Section 12 13 or by the Board in regulations for greenhouse gases. These 14 exemptions do not relieve an owner or operator from the comply with other 15 obligation to applicable rules or 16 regulations.

An air pollution operating permit shall 17 (b) not be required due to emissions of greenhouse gases 18 if the 19 equipment, site, or source is not subject to regulation, as defined by Section 39.5 of this Act, for greenhouse gases or is 20 21 otherwise not addressed in this Section or by the Board in 22 regulations for greenhouse gases. These exemptions do not relieve an owner or operator from the obligation to comply 23

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1 with other applicable rules or regulations.

2 (c) (Blank).

3 (d) (Blank).

4 (e) (Blank).

5 (f) As used in this Section:

"Carbon dioxide emission" means the plant annual CO₂ total
output emission as measured by the United States Environmental
Protection Agency in its Emissions & Generation Resource
Integrated Database (eGrid), or its successor.

10 "Carbon dioxide equivalent emissions" or "CO₂e" means the 11 sum total of the mass amount of emissions in tons per year, 12 calculated by multiplying the mass amount of each of the 6 13 greenhouse gases specified in Section 3.207, in tons per year, 14 by its associated global warming potential as set forth in 40 15 CFR 98, subpart A, table A-1 or its successor, and then adding 16 them all together.

17 "Cogeneration" or "combined heat and power" refers to any 18 system that, either simultaneously or sequentially, produces 19 electricity and useful thermal energy from a single fuel 20 source.

21 "Copollutants" refers to the 6 criteria pollutants that 22 have been identified by the United States Environmental 23 Protection Agency pursuant to the Clean Air Act.

24 "Electric generating unit" or "EGU" means a fossil 25 fuel-fired stationary boiler, combustion turbine, or combined 26 cycle system that serves a generator that has a nameplate

1 capacity greater than 25 MWe and produces electricity for 2 sale.

3 "Environmental justice community" means the definition of 4 that term based on existing methodologies and findings, used 5 and as may be updated by the Illinois Power Agency and its 6 program administrator in the Illinois Solar for All Program.

7 "Equity investment eligible community" or "eligible 8 community" means the geographic areas throughout Illinois that 9 would most benefit from equitable investments by the State 10 designed to combat discrimination and foster sustainable 11 economic growth. Specifically, eligible community means the 12 following areas:

(1) areas where residents have been historically excluded from economic opportunities, including opportunities in the energy sector, as defined as R3 areas pursuant to Section 10-40 of the Cannabis Regulation and Tax Act; and

(2) areas where residents have been historically
subject to disproportionate burdens of pollution,
including pollution from the energy sector, as established
by environmental justice communities as defined by the
Illinois Power Agency pursuant to the Illinois Power
Agency Act, excluding any racial or ethnic indicators.

24 "Equity investment eligible person" or "eligible person" 25 means the persons who would most benefit from equitable 26 investments by the State designed to combat discrimination and

- 1 foster sustainable economic growth. Specifically, eligible 2 person means the following people:
- 3 (1) persons whose primary residence is in an equity
 4 investment eligible community;

primary residence 5 (2)persons whose is in a 6 municipality, or a county with a population under 100,000, 7 where the closure of an electric generating unit or mine 8 has been publicly announced or the electric generating 9 unit or mine is in the process of closing or closed within 10 the last 5 years;

(3) persons who are graduates of or currently enrolled
 in the foster care system; or

(4) persons who were formerly incarcerated.

14 "Existing emissions" means:

(1) for CO₂e, the total average tons-per-year of CO₂e emitted by the EGU or large GHG-emitting unit either in the years 2018 through 2020 or, if the unit was not yet in operation by January 1, 2018, in the first 3 full years of that unit's operation; and

20 (2)for any copollutant, the total average tons-per-year of that copollutant emitted by the EGU or 21 22 large GHG-emitting unit either in the years 2018 through 23 2020 or, if the unit was not yet in operation by January 1, 2018, in the first 3 full years of that unit's operation. 24 "Green hydrogen" means a power plant technology in which 25 26 an EGU creates electric power exclusively from electrolytic

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1 hydrogen, in a manner that produces zero carbon and 2 copollutant emissions, using hydrogen fuel that is 3 electrolyzed using a 100% renewable zero carbon emission 4 energy source.

5 "Large greenhouse gas-emitting unit" or "large 6 GHG-emitting unit" means a unit that is an electric generating 7 unit or other fossil fuel-fired unit that itself has a 8 nameplate capacity or serves a generator that has a nameplate 9 capacity greater than 25 MWe and that produces electricity, 10 including, but not limited to, coal-fired, coal-derived, 11 oil-fired, natural gas-fired, and cogeneration units.

"NO_x emission rate" means the plant annual NO_x total output emission rate as measured by the United States Environmental Protection Agency in its Emissions & Generation Resource Integrated Database (eGrid), or its successor, in the most recent year for which data is available.

17 "Public greenhouse gas-emitting units" or "public GHG-emitting unit" means large greenhouse gas-emitting units, 18 19 including EGUs, that are wholly owned, directly or indirectly, 20 by one or more municipalities, municipal corporations, joint municipal electric power agencies, electric cooperatives, or 21 22 other governmental or nonprofit entities, whether organized 23 and created under the laws of Illinois or another state.

24 "SO₂ emission rate" means the "plant annual SO₂ total 25 output emission rate" as measured by the United States 26 Environmental Protection Agency in its Emissions & Generation

Resource Integrated Database (eGrid), or its successor, in the
 most recent year for which data is available.

3 (g) All EGUs and large greenhouse gas-emitting units that 4 use coal or oil as a fuel and are not public GHG-emitting units 5 shall permanently reduce all CO₂e and copollutant emissions to 6 zero no later than January 1, <u>2040</u> 2030.

7 (h) All EGUs and large greenhouse gas-emitting units that 8 use coal as a fuel and are public GHG-emitting units shall 9 permanently reduce CO₂e emissions to zero no later than 10 December 31, 2055 2045. Any source or plant with such units 11 must also reduce their CO2e emissions by 45% from existing 12 emissions by no later than January 1, 2045 2035. If the emissions reduction requirement is not achieved by December 13 14 31, 2045 2035, the plant shall retire one or more units or 15 otherwise reduce its CO_2e emissions by 45% from existing emissions by June 30, 2048 2038. 16

(i) All EGUs and large greenhouse gas-emitting units that use gas as a fuel and are not public GHG-emitting units shall permanently reduce all CO₂e and copollutant emissions to zero, including through unit retirement or the use of 100% green hydrogen or other similar technology that is commercially proven to achieve zero carbon emissions, according to the following:

24 (1) No later than January 1, 2030: all EGUs and large 25 greenhouse gas-emitting units that have a NO_x emissions 26 rate of greater than 0.12 lbs/MWh or a SO_2 emission rate of

1 greater than 0.006 lb/MWh, and are located in or within 3 2 miles of an environmental justice community designated as 3 of January 1, 2021 or an equity investment eligible 4 community.

5 (2) No later than January 1, 2040: all EGUs and large 6 greenhouse gas-emitting units that have a NO_x emission 7 rate of greater than 0.12 lbs/MWh or a SO_2 emission rate greater than 0.006 lb/MWh, and are not located in or 8 9 within 3 miles of an environmental justice community 10 designated as of January 1, 2021 or an equity investment 11 eligible community. After January 1, 2035, each such EGU and large greenhouse gas-emitting unit shall reduce its 12 CO_2e emissions by at least 50% from its existing emissions 13 14 for CO_2e , and shall be limited in operation to, on average, 15 6 hours or less per day, measured over a calendar year, and 16 shall not run for more than 24 consecutive hours except in emergency conditions, as designated by a 17 Regional 18 Transmission Organization or Independent System Operator.

19 (3) No later than January 1, 2035: all EGUs and large 20 greenhouse gas-emitting units that began operation prior 21 to the effective date of this amendatory Act of the 102nd 22 General Assembly and have a NO_x emission rate of less than 23 or equal to 0.12 lb/MWh and a SO_2 emission rate less than 24 or equal to 0.006 lb/MWh, and are located in or within 3 25 miles of an environmental justice community designated as 26 of January 1, 2021 or an equity investment eligible

community. Each such EGU and large greenhouse gas-emitting unit shall reduce its CO₂e emissions by at least 50% from its existing emissions for CO₂e no later than January 1, 2030.

5 (4) No later than January 1, 2040: All remaining EGUs 6 and large greenhouse gas-emitting units that have a heat 7 rate greater than or equal to 7000 BTU/kWh. Each such EGU 8 and Large greenhouse gas-emitting unit shall reduce its 9 CO₂e emissions by at least 50% from its existing emissions 10 for CO₂e no later than January 1, 2035.

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(5) No later than January 1, 2045: all remaining EGUs and large greenhouse gas-emitting units.

(j) All EGUs and large greenhouse gas-emitting units that use gas as a fuel and are public GHG-emitting units shall permanently reduce all CO₂e and copollutant emissions to zero, including through unit retirement or the use of 100% green hydrogen or other similar technology that is commercially proven to achieve zero carbon emissions by January 1, 2045.

19 (k) All EGUs and large greenhouse gas-emitting units that 20 utilize combined heat and power or cogeneration technology 21 shall permanently reduce all CO₂e and copollutant emissions to 22 zero, including through unit retirement or the use of 100% hydrogen 23 other similar technology green or that is 24 commercially proven to achieve zero carbon emissions by 25 January 1, 2045.

(k-5) No EGU or large greenhouse gas-emitting unit that

uses gas as a fuel and is not a public GHG-emitting unit may emit, in any 12-month period, CO₂e or copollutants in excess of that unit's existing emissions for those pollutants.

(1) Notwithstanding subsections (g) through (k-5), large 4 5 GHG-emitting units including EGUs may temporarily continue emitting CO₂e and copollutants after any applicable deadline 6 specified in any of subsections (g) through (k-5) if it has 7 8 been determined, as described in paragraphs (1) and (2) of 9 this subsection, that ongoing operation of the EGU is 10 necessary to maintain power grid supply and reliability or 11 ongoing operation of large GHG-emitting unit that is not an 12 is necessary to serve as an emergency backup to EGU 13 operations. Up to and including the occurrence of an emission 14 reduction deadline under subsection (i), all EGUs and large 15 GHG-emitting units must comply with the following terms:

16 (1) if an EGU or large GHG-emitting unit that is a 17 participant in a regional transmission organization 18 intends to retire, it must submit documentation to the 19 appropriate regional transmission organization by the 20 appropriate deadline that meets all applicable regulatory 21 requirements necessary to obtain approval to permanently 22 cease operating the large GHG-emitting unit;

(2) if any EGU or large GHG-emitting unit that is a
 participant in a regional transmission organization
 receives notice that the regional transmission
 organization has determined that continued operation of

the unit is required, the unit may continue operating 1 2 until the issue identified by the regional transmission 3 organization is resolved. The owner or operator of the must cooperate with the regional transmission 4 unit 5 organization in resolving the issue and must reduce its emissions to zero, consistent with the requirements under 6 subsection (g), (h), (i), (j), (k), or 7 (k-5), as 8 applicable, as soon as practicable when the issue 9 identified by the regional transmission organization is 10 resolved; and

11 (3) any large GHG-emitting unit that is not a 12 participant in a regional transmission organization shall 13 be allowed to continue emitting CO_2e and copollutants 14 after the zero-emission date specified in subsection (q), 15 (h), (i), (j), (k), or (k-5), as applicable, in the 16 capacity of an emergency backup unit if approved by the 17 Illinois Commerce Commission.

(m) No variance, adjusted standard, or other regulatory relief otherwise available in this Act may be granted to the emissions reduction and elimination obligations in this Section.

(n) By June 30 of each year, beginning in 2025, the Agency shall prepare and publish on its website a report setting forth the actual greenhouse gas emissions from individual units and the aggregate statewide emissions from all units for the prior year. – 11 – LRB103 38445 BDA 68581 b

(o) Every 5 years beginning in 2025, the Environmental 1 2 Protection Agency, Illinois Power Agency, and Illinois 3 Commerce Commission shall jointly prepare, release and publicly, a report to the General Assembly that examines the 4 5 State's current progress toward its renewable energy resource goals, the status of CO_2e and copollutant 6 development 7 emissions reductions, the current status and progress toward 8 developing and implementing green hydrogen technologies, the 9 current and projected status of electric resource adequacy and 10 reliability throughout the State for the period beginning 5 11 years ahead, and proposed solutions for any findings. The 12 Environmental Protection Agency, Illinois Power Agency, and 13 Illinois Commission shall Commerce consult PJM 14 Interconnection, LLC and Midcontinent Independent System 15 Operator, Inc., or their respective successor organizations 16 regarding forecasted resource adequacy and reliability needs, 17 anticipated new generation interconnection, new transmission development or upgrades, and any announced large GHG-emitting 18 unit closure dates and include this information in the report. 19 20 The report shall be released publicly by no later than December 15 of the year it is prepared. If the Environmental 21 22 Protection Agency, Illinois Power Agency, Illinois and 23 Commerce Commission jointly conclude in the report that the data from the regional grid operators, the pace of renewable 24 25 energy development, the pace of development of energy storage 26 and demand response utilization, transmission capacity, and

the CO₂e and copollutant emissions reductions required by 1 2 subsection (i) or (k-5) reasonably demonstrate that a resource 3 adequacy shortfall will occur, including whether there will be sufficient in-state capacity to meet the zonal requirements of 4 5 MISO Zone 4 or the PJM ComEd Zone, per the requirements of the regional transmission organizations, or that the regional 6 transmission operators determine that a reliability violation 7 8 will occur during the time frame the study is evaluating, then Power 9 Illinois Agency, in conjunction the with the 10 Environmental Protection Agency shall develop a plan to reduce 11 delay CO₂e and copollutant emissions reductions or 12 requirements only to the extent and for the duration necessary to meet the resource adequacy and reliability needs of the 13 14 State, including allowing any plants whose emission reduction 15 deadline has been identified in the plan as creating a 16 reliability concern to continue operating, including operating 17 reduced emissions or as emergency backup where with appropriate. The plan shall also consider the use of renewable 18 19 energy, energy storage, demand response, transmission 20 development, or other strategies to resolve the identified 21 resource adequacy shortfall or reliability violation.

(1) In developing the plan, the Environmental
Protection Agency and the Illinois Power Agency shall hold
at least one workshop open to, and accessible at a time and
place convenient to, the public and shall consider any
comments made by stakeholders or the public. Upon

development of the plan, copies of the plan shall be 1 2 posted and made publicly available on the Environmental 3 Protection Agency's, the Illinois Power Agency's, and the Illinois Commerce Commission's websites. All interested 4 5 parties shall have 60 days following the date of posting 6 to provide comment to the Environmental Protection Agency 7 and the Illinois Power Agency on the plan. All comments 8 submitted to the Environmental Protection Agency and the 9 Illinois Power Agency shall be encouraged to be specific, 10 supported by data or other detailed analyses, and, if 11 objecting to all or a portion of the plan, accompanied by 12 specific alternative wording or proposals. All comments shall be posted on the Environmental Protection Agency's, 13 14 the Illinois Power Agency's, and the Illinois Commerce 15 Commission's websites. Within 30 days following the end of 16 the 60-day review period, the Environmental Protection 17 Agency and the Illinois Power Agency shall revise the plan as necessary based on the comments received and file its 18 19 revised plan with the Illinois Commerce Commission for 20 approval.

(2) Within 60 days after the filing of the revised
plan at the Illinois Commerce Commission, any person
objecting to the plan shall file an objection with the
Illinois Commerce Commission. Within 30 days after the
expiration of the comment period, the Illinois Commerce
Commission shall determine whether an evidentiary hearing

is necessary. The Illinois Commerce Commission shall also
 host 3 public hearings within 90 days after the plan is
 filed. Following the evidentiary and public hearings, the
 Illinois Commerce Commission shall enter its order
 approving or approving with modifications the reliability
 mitigation plan within 180 days.

7 The Illinois Commerce Commission shall only (3) approve the plan if the Illinois Commerce Commission 8 9 determines that it will resolve the resource adequacy or 10 reliability deficiency identified in the reliability 11 mitigation plan at the least amount of CO₂e and copollutant 12 emissions, taking into consideration the emissions impacts on environmental justice communities, and that it will 13 14 ensure adequate, reliable, affordable, efficient, and 15 environmentally sustainable electric service at the lowest 16 total cost over time, taking into account the impact of 17 increases in emissions.

(4) If the resource adequacy or reliability deficiency
identified in the reliability mitigation plan is resolved
or reduced, the Environmental Protection Agency and the
Illinois Power Agency may file an amended plan adjusting
the reduction or delay in CO₂e and copollutant emission
reduction requirements identified in the plan.

24 (Source: P.A. 102-662, eff. 9-15-21; 102-1031, eff. 5-27-22.)