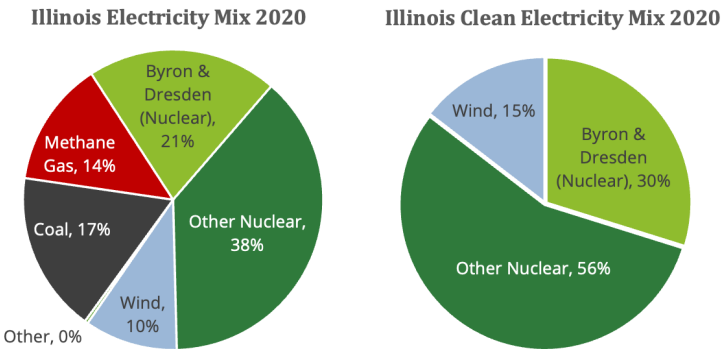
May 24, 2021

Dear Illinois Legislator,

We write you as a coalition of academics, activists, engineers, environmentalists, entrepreneurs, unionists, and concerned citizens that care deeply about addressing the climate crisis with evidence-based policies. We seek your assistance in preventing the *imminent* and *permanent* shutdown of the nuclear plants Byron and Dresden, which provide ⅓ of Illinois' carbon-free electricity. The premature shuttering of these plants will materially undermine Illinois' goal of zero-carbon electricity by 2030[1], increase electricity cost to consumers, eliminate over 1,500 well-paying union jobs, devastate communities that host the nuclear plants, and diminish the state's economic vitality. We are urging you to do whatever is needed to keep all of the Illinois plants open.

Climate Jobs Illinois (CJI) is a coalition representing hundreds of thousands of union members in Illinois. CJI has put forward the Climate Union Jobs Act (CUJA)[2] that would set strong labor standards for building a cleaner, fairer, more equitable Illinois, keep all nuclear facilities open, and invest in carbon-free schools. *We urge you to pass the CUJA during this legislative session.*[3]



Source: U.S. Energy Information Administration

Analysis by the Brattle Group[4] shows that losing nuclear generation would lead to a commensurate increasing fossil combustion – methane gas in new plants and coal at old plants. When nuclear plants close, Illinois' electricity exports will suffer, increasing fossil combustion in neighboring states too. Brattle findings:

> In recent years, wholesale electricity prices have declined significantly, due in large part to the shale gas revolution. [G]as is the price-setting fuel in many U.S. electricity markets… There is a gap in the market: electricity markets do not compensate nuclear plants for displacing carbon-emitting generation. Failure to correct this environmental externality is threatening the economic viability of the largest sources of zero-emission generation in Illinois… The replacement for the lost nuclear energy would be primarily fossil-fired. While Illinois has implemented policies to increase renewable generation, these are unlikely to increase more or faster if nuclear plants shutter, so the additional renewables cannot be considered a replacement for nuclear.

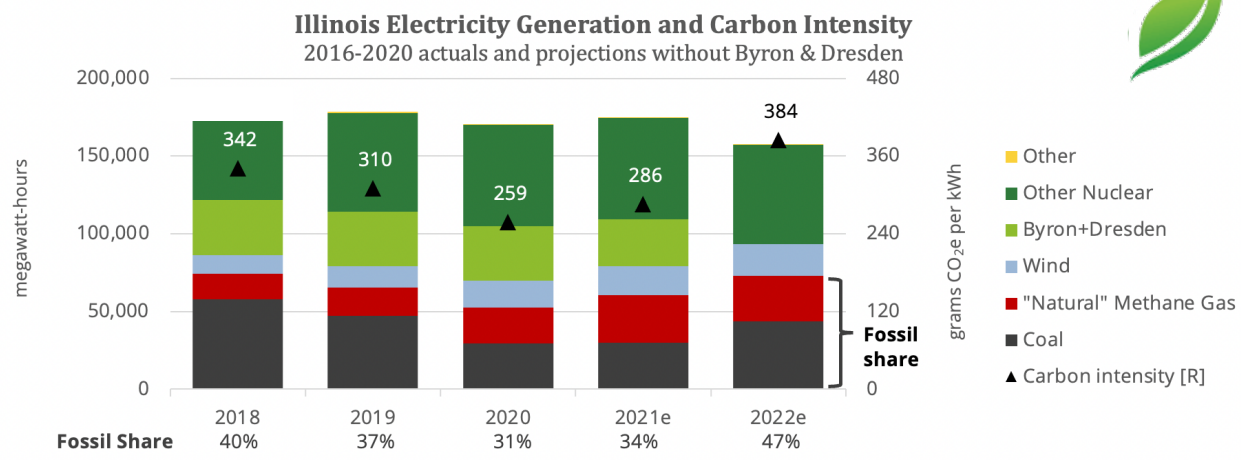
[1, 6] Advanced Reactors and Fuel Cycles, May 2021, Economic and Carbon Impacts of Potential Illinois Nuclear Plant Closures https://ws.engr.illinois.edu/sitemanager/getfile.asp?id=3012

[2] Build Illinois' Clean Energy Future, https://climatejobsillinois.org/0-emissions-100-union-built/

[3] The Consumers and Climate First Act, proposed by Gov. Pritzker recognizes the importance of nuclear energy and the need to keep these plants operating. However, it fails to offer adequate support for Byron and Dresden (or the other at-risk plants in the 'PJM' region) to compete with shale economics.

[4] The Brattle Group, December 2020, The Impacts of Illinois Nuclear Power Plants on the Economy and the Environment. https://www.brattle.com/news-and-knowledge/publications/the-impacts-of-illinois-nuclear-power-plants-on-the-economy-and-the-environment-re-issued-december-2020

The Protect Nuclear Now campaign is a coalition effort of environmental, energy and scientific organizations and individuals striving to free environmental thinking from the tyranny of EITHER and instead show the global benefits of the AND harmony on clean energy.



Source: Energy Information Administration, The Brattle Group (2019) for coal and gas growth.
Projected wind growth steady at '14-'20 rate. Exports drop from 19% of total generation to 8%.

Losing Byron and Dresden increases annual greenhouse gas emissions by over 26 million tonnes CO_2e[5]. Further, attempting to completely decarbonize Illinois with solar and wind would necessitate a massive encroachment on arable lands and generate an inordinate amount of e-waste.[6] Lastly, reaching decarbonization without employing firm carbon-free energy like nuclear will mean massive increases in costs to ratepayers.[7]

America's nuclear plants are among the best in the world. There is no technical reason they cannot operate for decades to come. The Nuclear Regulatory Commission, responsible for the safe operation of the U.S. nuclear fleet, has permitted plants similar to Byron & Dresden to operate for 80 years, and is already considering life extensions out to 100 years. With good maintenance and replacement of reactor system components, Illinois nuclear plants can continue to operate for decades longer. Moreover, the institutional knowledge of workers and engineers who operate the existing fleet of reactors must be sustained.

The Consensus Report "Accelerating Decarbonization of the U.S. Energy System" calls to preserve existing nuclear plants wherever possible.[8] Saving our existing nuclear plants is the simplest, cheapest, and most immediate action you can take to protect the global climate and Illinois communities threatened by air pollution. Without nuclear energy, the U.S. path to a clean and equitable energy future will not be possible. CUJA represents the most comprehensive plan for Illinois to succeed on these important goals.

We thank you in advance for your attention to this urgent matter.

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Nuclear New York
New York

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Generation Atomic
Minnesota

Valerie Gardner
Climate Coalition
California

[5] Switching from nuclear to burning fossil fuels causes 758 g CO_2e per kWh GWP_{20}, at a 2.3% methane leak rate.

[7] Three different models, using the same data from California in https://www.edf.org/cleanfirmpower, agree that in a carbon-free grid integrating firm carbon-free energy can cut ratepayer costs by half.

[8] National Academies of Sciences, Engineering, and Medicine, February 2021, Accelerating Decarbonization of the U.S. Energy System https://www.nap.edu/catalog/25932/accelerating-decarbonization-of-the-us-energy-system

Supporting Organizations (current list of here: protectnuclearnow.org/supporters)

CLIMATE COALITION

Nuclear New York

NAYGN
North American Young Generation in Nuclear

GENERATION ATOMIC

U.S. WIN
U.S. Women in Nuclear

mothers for nuclear

AMERICAN NUCLEAR SOCIETY

Citizens' Climate Lobby New York

Rethinking Nuclear

ENVIRONMENTAL PROGRESS

FOOTPRINT TO WINGS

GND
Campaign for a Green Nuclear Deal

STAND UP FOR NUCLEAR

Anthropocene Institute

Virginia Recycles Spent Nuclear Fuel

PROTECT ORANGE COUNTY · PROTECT OUR CHILDREN

STOP CVE
STOPCRICKETVALLEY.ORG

NUCLEAR FOR NET ZERO

CCEC
California Clean Energy Committee

eko-modernistit

Scientists for Accurate Radiation Information

NUCLEATION CAPITAL

Californians for green nuclear power

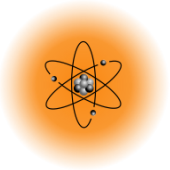

Environmentalists For Nuclear Energy

TEXAS
RECYCLES USED NUCLEAR FUEL

weCARE
Clean Affordable Reliable Energy for Societal Sustainability

DEUTSCHER ARBEITGEBER VERBAND

ATOMKRAFT? JA TAK
www.foratom.dk



Micro-Utilities, Inc

The Slovak Nuclear Society

New York Energy and Climate Advocates

Nuclear Matters