## **New Jersey Integrated Energy Plan**

## **Written Comments of**

Vote Solar
Unitarian Universalists Faith Action New Jersey
Solar United Neighbors of New Jersey
New Jersey Sustainable Business Council
Earthjustice
Isles, Inc.

Via electronic submission to emp.comments@bpu.nj.gov

Submitted by: Pari Kasotia Mid-Atlantic Director Vote Solar pari@votesolar.org

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Vote Solar, Unitarian Universalists Faith Action New Jersey, Solar United Neighbors of New Jersey, New Jersey Sustainable Business Council, Earthjustice, and Isles, Inc. ("Commenting Parties") appreciate the opportunity to comment on the New Jersey's Integrated Energy Plan. The Commenting Parties are a diverse group of organizations that support measures to increase access to clean energy opportunities for all energy consumers in New Jersey.

We extend our thanks to BPU and Rocky Mountain Institute (RMI) for presenting the results of the Integrated Energy Plan (IEP) modeling. However, we would have benefited from opportunities that allowed more robust engagement from wide variety of stakeholder groups that could have informed on modeling assumptions and variations. For example, from the solar sector, the Solar Energy Industries Association (SEIA) was invited but that does not fully represent the priorities and goals of organizations such as Vote Solar, Mid-Atlantic Solar and Storage Industries Association (MSSIA), and others. In the future, we encourage BPU to provide opportunities for meaningful participation and input from diverse organizations.

We were pleased to learn that New Jersey can meet the requirements of the Global Warming Response Act (GWRA) that sets target of economy-wide emissions reduction to 80% below 2006 levels by 2050 and 100% clean energy goal by 2050 with existing technologies and with marginal cost increase compared to the business-as-usual case. We are glad to see that under the least-cost pathway, the costs would increase to \$34.7 billion in 2050 compared to \$32.6 billion with business-as-usual scenario, and in GDP terms, the increase will be from 3.5% to 3.7%. However, we highly encourage BPU to front load emissions reductions. As the Intergovernmental Panel on Climate Change (IPCC) 2018 report shows, we must achieve 45% reduction in greenhouse gas emissions from 2010 levels by 2030 to be able to prevent our global temperature from climbing above 1.5 degree Celsius.<sup>1</sup>

We agree that reaching these targets will require additional policies as the model assumes significant electrification of the transportation sector and use of electric heat pumps in buildings. We also appreciate BPU, through the Rutgers Energy Institute, for undertaking a parallel study on the ratepayer impact of the findings.

We are pleased that majority of the power by 2050 is projected to come from wind and solar. As noted, 34% of the power is slated to come from New Jersey solar and 23% will be coming from offshore wind farms on New Jersey's Coast. Additionally, 19% will come from other offshore wind and 1% from other solar sources. We also see that nuclear energy is still listed in the energy mix at 16% and biogas at 6%. We encourage BPU to explore if nuclear energy can be replaced by additional wind and solar energy as it is currently uncompetitive financially with a significant ratepayer impact at \$300 million per year as per the Clean Energy Act of 2018. We also project that the cost of storage will come down drastically in the next fifteen years to negate the need for 14% nuclear and 6% biogas that is included to provide firm capacity.

We appreciate BPU for calculating the fossil fuel cost savings and cost savings associated with reduced pollution. Just based on these two categories, the calculated benefits range from \$4.2 billion to \$6.3 billion. We encourage BPU to also undertake further benefits analysis so we get a full view on why transitioning to clean energy economy is beneficial on multiple fronts. This

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<sup>&</sup>lt;sup>1</sup> https://report.ipcc.ch/sr15/pdf/sr15\_spm\_final.pdf

should include jobs and workforce impact, local community/economic development impact and tax revenue impact. Additionally, the results show that transitioning to renewables reduce cost uncertainty which should be quantified to capture full benefits of renewable energy in addition to future avoided costs in responding to climate change related natural disasters. A detailed cost-benefits analysis will provide a compelling argument on why New Jersey should meet the emissions and clean energy targets.

We fundamentally disagree on the need for natural gas and biogas. Biogas, even though cleaner than coal and natural gas, still emits greenhouse gases like CO<sub>2</sub>, NO<sub>x</sub>, ammonia and hydrogen sulfide.<sup>2</sup> Our goal should be to move towards a zero-emissions future. Vote Solar's internal analysis on future solar penetration levels demonstrate that we can reach a fossil-fuel free future with the combination of renewable energy and storage. We believe storage will experience exponential growth just as solar has over the last decade or so.<sup>3</sup> Given the ambiguity around technological advancements, it is prudent that BPU allow flexibility in adopting some results of the IEP. A five-year periodic review and update of the modeling can help us ensure the cleanest technology is being deployed. Periodic update of the modeling assumptions should bring accuracy to the numbers over time especially knowing that investment decisions can be postponed until at least 2030. Furthermore, such periodic updates will also correctly account for future fossil fuel costs. Since these costs, especially for natural gas, are volatile, assuming that these costs will remain low in the future is unwise from our perspective.

Lastly, the modeling does not undertake scenario analysis on the emissions reductions from low-income and Environmental Justice communities as a result of more deployment of clean energy sources and closure of existing fossil fuel plants. The goal of any clean energy targets should not only be to reduce overall emissions but to ensure that all residents of New Jersey benefit from cleaner air and environment. The recent Executive Order 23 calls upon various state agencies and departments to consider environmental justice in meeting their statutory and regulatory responsibilities. <sup>4</sup> We encourage BPU to undertake a supplemental study to understand locational impact of existing policies over time in terms of clean energy deployment and emissions reduction. Additionally, serious thought and planning should be given to strategically halt fossil fuel burning from environmental justice communities and replacing that with clean energy deployment.

We also encourage BPU to set specific targets for increasing clean energy access for low-income and environmental justice communities. We are pushing New Jersey to set a target of 250,000 low-income households with clean energy access by 2030 and 400 MW of storage sited in environmental justice communities.

We envision a clean energy future for New Jersey that is resilient, equitable, inclusive, and community-centric. As we work to tackle the impacts of climate change and transition from fossil-fuels to clean energy, we must be bold and visionary to assure our most vulnerable and underserved neighbors benefit and thrive in this new economy.

<sup>&</sup>lt;sup>2</sup> https://www.foodandwaterwatch.org/insight/dirty-biogas-has-no-place-united-states-clean-energy-future

<sup>&</sup>lt;sup>3</sup> <u>https://sepapower.org/knowledge/lithium-ion-battery-prices-are-declining-powering-growth-and-opportunity-in-the-u-s-energy-storage-market/</u>

<sup>&</sup>lt;sup>4</sup> https://nj.gov/infobank/eo/056murphy/pdf/EO-23.pdf

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## About us:

**Vote Solar** is a national, non-profit, non-partisan grassroots organization with a mission to make solar a mainstream energy source. We aim to foster economic opportunity and support a cleaner, healthier environment by bringing solar energy into the mainstream. Vote Solar is not a trade group and does not have corporate members. Since 2002, Vote Solar has worked in states all across the country to remove market barriers and implement key policies needed to bring solar to scale.

**Universal Unitarian FaithAction** NJ (UU FaithAction NJ) coordinates grassroots social justice advocacy with member congregations and individual UUs and allies across the state of New Jersey. UU Faith Action NJ works to establish a just and compassionate public policy that is consistent with Unitarian Universalist principles and purposes.

**Solar United Neighbors of New Jersey** envisions a clean, equitable energy system that directs control and benefits back to local communities, with solar on every roof and money in every pocket. NJ-SUN is a community of people building a new energy system. They help people go solar, join together, and fight for their energy rights. Partner organizations range from nonprofits to municipal governments, universities to community organizations, and individual "super volunteers" to houses of worship.

New Jersey Sustainable Business Council is where like-minded businesses are joining together for the purpose of creating a new and dynamic 21st century economy for the Garden State based on the "triple bottom line": people, profit, and planet. As a state affiliate of the American Sustainable Business Council (ASBC), NJSBC and its members are working together to: 1. Constructively influence and shape relevant public policy and legislation at the state level. 2. Amplify the voice of sustainable businesses at the national level, and 3. Serve as inspirational models, collaborators and educators for all New Jersey businesses and organizations that wish to adopt or improve their own triple bottom line strategies and results.

**Earthjustice** is the nation's original and largest nonprofit environmental law organization that leverages its expertise and commitment to fight for justice and advance the promise of a healthy world for all.