NEW JERSEY'S 2011 ENERGY MASTER PLAN

FREQUENTLY ASKED QUESTIONS

Q: What is the Energy Master Plan (EMP)?
A: The EMP is a strategic vision for the use, management, and development of electricity in New Jersey over the next decade. As required by law, the 2011 EMP includes long-term objectives and interim measures consistent with and necessary to achieving those objectives. The Administration will manage electricity in a manner which saves money, stimulates the economy, creates jobs, protects the environment, and mitigates long-term cumulative impacts.

Q. How did the EMP originate?
A. In 1977, New Jersey enacted a law requiring a regularly updated Electricity Master Plan to address the production, distribution, consumption and conservation of electricity in New Jersey. The law requires the Plan to include not only long-term objectives, but also interim measures that are consistent with and necessary to achieving those objectives. The last update to the EMP was completed in October of 2008 and though several of the overarching goals are similar to those put forth in the 2011 EMP, the means to achieve them and the economic conditions and analysis are entirely different.

Q. Who was consulted in creating the 2011 EMP?
A. This EMP was developed following an electricity policy forum with Governor Christie, numerous public hearings, technical work group meetings, review of all written comments, and intra-agency discussions on various issues related to the Plan. Additionally, there was extensive consultation with CEEP, the Center for Electricity, Economic, Environmental Policy of the Edward J. Bloustein School of Planning and Public Policy as well as Levitan and Associates, Inc., regarding data and analysis.

Q. What are the primary goals of the plan?
A. The 2011 EMP contains five overarching goals:

1. **Drive Down the Cost of Electricity for All Customers**
   New Jersey's electricity prices are among the highest in the nation. For New Jersey's economy to grow electricity costs must be comparable to costs throughout the region; ideally these costs should be much closer to U.S. averages.

2. **Promote a Diverse Portfolio of New, Clean, In-State Generation**
   Developing efficient in-State generation while leveraging New Jersey's infrastructure will lessen dependence on imported oil, protect the State's environment, help grow the State's economy, and lower electricity rates. Electricity diversity is essential. Concentrating New Jersey's electricity future on any one form of electricity is ill-advised. Picking "winners" and "losers" should not be the State of New Jersey's job, but formulating incentives to foster the entry of both conventional and renewable technologies is required when market based incentives are insufficient.

3. **Reward Electricity Efficiency and Conservation and Reduce Peak Demand**
   The best way to lower individual electricity bills and collective electricity rates is to use less electricity. Reducing electricity costs through conservation, electricity efficiency, and demand response programs lowers the cost of doing business in the State, enhances economic development, and advances the State's environmental goals.

4. **Capitalize on Emerging Technologies for Power Production**

New Jersey should continue to encourage the creation and expansion of clean electricity solutions, while taking full advantage of New Jersey's vast electricity and intellectual infrastructure to support these technologies.

5. **Maintain Support for the Renewable Portfolio Standard Of 22.5% by 2021**
New Jersey remains committed to meeting the legislated targets for renewable electricity production. To achieve these targets, New Jersey must utilize flexible and cost-effective mechanisms that exploit the State's indigenous renewable resources.

Q. How does the EMP support economic development?
A. It is one the Christie Administration's primary objectives to develop and manage electricity in a manner that saves money, stimulates our economy and creates jobs. As we move forward with implementing this Plan these objectives can be achieved through:

- Supporting the development of new electricity-related technologies such as fuel cells, wind, alternatively fueled vehicles, etc., and encouraging the developers, providers and support businesses related to these technologies to locate in our state.

- Reducing the cost of electricity for all ratepayers (individuals and businesses) thus allowing that money to be used for other purposes to help support our economy.

- Encourage the development of new, efficient electricity generation in our state which will help increase reliability as well as reduce electricity costs and also provide jobs and the ability to grow our economy.

- Encourage electricity efficiency at all levels (from homeowner to businesses and state government) thus reducing overall electricity demand and helping to reduce costs.

- Improving transportation efficiency to increase our use of newer more efficient fuels for trains and buses as well as exploring the increased use of natural gas as an alternative to diesel for truck fleets. These efforts can ultimately result in reduced costs as well as pollution reduction.

- Facilitate the development of new and innovative businesses that will provide and support the next generation of electricity technologies and related businesses through the New Jersey Business Incubator Network.

Q. What is meant by the word "energy" as used throughout the EMP?
A. Energy is often used synonymously with the word "electricity," but it includes much more. Energy includes all the disparate technologies and fuels we use to heat and power our homes and businesses, manufacture goods and provide services, and power our cars, trucks and planes. The primary technology that powers most daily activities is electricity, while the fuels that produce electricity and provide energy to heat our homes and power our cars include natural gas, oil, coal, uranium, wind, and increasingly the sun.

Q. Where does our electricity come from?
A. Understanding where our electricity comes from and how much it costs is important information for all ratepayers to know so that they can better understand the implications of their own decisions as well as those of policy-makers. Retail electric service in New Jersey is provided by four electric distribution companies (EDCs): Atlantic City Electric, Jersey Central Power & Light, Public Service Electric & Gas and Rockland Electric Company. Each company services a specific geographic area of the state. The electricity they provide is generated from a variety of sources, including approximately 25% that is generated from out-of-state sources:

- 52 % of our electricity generation comes from nuclear
- 38% of our electricity generation comes from natural gas
- 9% of our electricity comes from coal
- 1.18% of our electricity generation comes from renewable sources
- .18% of our electricity generation comes from oil.

Q. What does electricity cost in New Jersey?
A. New Jersey has some of the highest retail electric rates in the nation. Residential and industrial rates are the sixth most expensive in the nation, while commercial rates are the seventh most expensive. Reducing rates and making them becoming comparable to costs elsewhere in the region and across the country is an important step in facilitating business growth and reducing the cost of living in New Jersey.

Q. What entities oversee the electricity industry?
A. The generation, transmission and distribution of electricity are a complex system involving agencies at the State, regional and Federal level.

- **The State of New Jersey through the New Jersey Board of Public Utilities** has primary regulatory authority over the EDCs. The BPU also participates in the planning process through the regional planning process, and the BPU advocates for the interests of the State before the Federal Electricity Regulatory Commission (FERC). The BPU also administers the electricity auctions that set prices for electricity production, administers the State's Clean Energy Program and approves ratepayer-supported utility programs.
- **The NJ Division of Rate Counsel** works to ensure that all classes of utility consumers receive safe, adequate and proper utility and certain insurance services at affordable rates that are just and nondiscriminatory. In addition, Rate Counsel works to insure that all consumers are knowledgeable about the choices they have in the age of utility competition**. Pennsylvania-New Jersey-Maryland Interconnection, LLC (PJM)** is the non-profit regional organization charged with the operation of the wholesale competitive market, management of the electric grid, and long-term planning and resource coordination within the region.
- **The Federal Electricity Regulatory Commission (FERC)** is an independent agency that regulates the interstate transmission of electricity, natural gas, and oil. FERC also reviews proposals to build liquefied natural gas (LNG) terminals and interstate natural gas pipelines as well as licensing hydropower projects.

Q. How will the EMP be implemented?
A. Implementation of the Plan will require the support and cooperation of all state agencies, together with electricity developers and suppliers, power plant owners, PJM, FERC, all levels of government and ratepayers. The BPU will serve as the lead implementing agency. In doing so the BPU will, among other things: coordinate with appropriate state agencies, electricity providers and other stakeholders; track and report on progress and develop or modify existing and future programs that support the goals in the Plan.

Q. Is New Jersey abandoning renewable energy?
A. Absolutely not. The Christie Administration is committed to accomplishing the goals of EDECA and the near-term goals of the Global Warming Response Act. Consequently, New Jersey remains committed to meeting its RPS target of 22.5% of state-wide electricity demand from renewable energy sources by 2021. The RPS target of 22.5% is merely a floor, and we will strive to not only meet that target but to exceed it.

Q. How was the RPS established?
A. The Electric Discount and Energy Competition Act (P.L. 1999, chapter 23) requires each electric power supplier or basic generation service provider serving retail customers in New Jersey to include in its power portfolio electricity generated from renewable energy sources. The original RPS directive has

been modified, and in 2006, the BPU issued new regulations that require 22.5% renewable energy by 2021.

Q. Why doesn't this plan have the 30% RPS goal contained in the 2008 Energy Master Plan?
A**.** The 30% goal in the 2008 plan was aspirational and had no basis in law or regulation. We remain committed to achieving the 22.5% goal and view that as a floor, not a ceiling. The legislature can change the RPS if they so chose.

Q. Does the EMP call for drastic changes to New Jersey's solar incentives?
A. No, the EMP recommends modifications in the solar incentive program to address the current drop in the market for SRECs. The solar industry in New Jersey is strong, and our incentives have been some of the most generous in the country. The EMP calls for a reevaluation of these incentives so that they are more in line with the economic realities of both the solar industry as well as the State of New Jersey, provide necessary certainty to all sectors of the solar industry, protect ratepayers and provide room to support other worthwhile renewable technologies.

Q. Does the EMP recommend abandoning renewable energy in favor of conventional generation technologies such as natural gas and nuclear plants?
A. No. Conventional generation technologies like natural gas and nuclear plants are distinct from those technologies that provide renewable energy, and therefore one cannot be a replacement for the other. Nuclear energy is considered baseload generation, and natural gas is usually considered mid-merit. What that means is nuclear plants usually run all the time and natural gas about half the time. Renewable energy, in contrast, is available only a fraction of the time and is intermittent depending on weather and other conditions. Without viable storage technologies we cannot rely on renewables to replace significant portions of our power generation.

Q. Does the EMP recommend building more nuclear plants?
A. Vexing economic, safety, and environmental questions have to be answered before the State can embark on or abandon the path of developing the next generation of nuclear power plants. As nuclear plants in New Jersey age and are decommissioned, the Christie Administration supports the consideration of new nuclear generation as a potential baseload resource. A State agency panel will be established to assess how or whether nuclear energy will play a role in the future diversified portfolio of in-state generation.

Q. Some comments to the EMP suggest closing all of New Jersey's nuclear plants. Is that realistic?
A. Nuclear plants currently provide over half of the electricity needs of this state. New Jersey would need to replace those plants with other baseload plants, as is evident from the description above on the differences between renewable energy and conventional generation sources. The only other fuel available to New Jersey that approximates baseload generation (e.g., it runs most of the time) is coal. Coal is a major source of CO2 emissions and will no longer be accepted as a new source of power in the State. New Jersey will work to shut down older, dirtier peaker and intermediate plants with high greenhouse gas emissions.

Coupled with the Global Warming Response Act, the BPU aspires to fulfill 70% of the State's electric needs from "clean" energy sources by 2050. This is achievable if the definition of clean energy is broadened beyond renewables to include nuclear, natural gas, and hydroelectric facilities. The State cannot achieve its 2050 greenhouse gas reduction goal without a significant portion of the energy supply coming from nuclear technology. Oyster Creek will close in 2019, and a planning process has begun to explore how the State will replace Oyster Creek capacity. Explicit tradeoffs among competing resource planning criteria should be examined in order to calibrate the reliability, environmental, and economic effects attributable to new nuclear, other carbon free technology options, versus "clean" technology options that contribute to greenhouse gas emissions.

More Information

Form more information about the Energy Master Plan please visit www.state.nj.us/emp

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