

STATE OF NORTH CAROLINA ENERGY POLICY COUNCL

PROPOSED MEMORANDUM

TO:

ENERGY POLICY COUNCIL MEMBERS

FROM:

LONG RANGE ENERGY GENERATION PLANNING AND RENEWABLES COMMITTEE

DATE:

JANUARY 14, 2016

RE:

RECOMMENDATIONS FOR THE ENERGY POLICY COUNCIL'S CONSIDERATION

In accordance with the Energy Policy Council Committee Recommendation Policy and General Statute §113B-5, the Long Range Energy Generation and Renewables Committee requests that the full Council consider supporting a recommendation that North Carolina adopt a Clean Energy Portfolio Standard.

Background

North Carolinians breathe cleaner air today than at any time since the Clean Air Act was enacted in 1970 due in large part to electric utilities moving to cleaner generation. Over the past decade, at a cost of almost \$6 billion, electric utilities have shut down their older coal power plants, replaced them with highly efficient, clean burning gas-fired electric generation facilities and equipped all remaining coal power plants with state of the art emission controls. In addition, electric power providers have implemented energy conservation and demand side management programs and added photovoltaic solar energy and other renewable resources into their energy portfolios. These changes have led to a more than 80 percent reduction in nitrogen oxides and sulfur dioxide emissions and a nearly 25 percent decrease in carbon dioxide from electric power generation within the state.

The majority of carbon dioxide reductions is due to newly constructed gas-fired power facilities. Today, clean energy resources provide more than half of North Carolina's electricity with nuclear energy plants supplying the bulk of the state's emissions free power generation.

Federal regulations and state policies are expected to continue the push towards clean energy generation. If it withstands all legal challenges, the federal power plan will fundamentally change the way electricity is generated and consumed in the state and, according to one study, increase utility bills in North Carolina by an average of \$434 a year by 2020, a 22 percent increase from current rates. Existing renewables, demand-side management and energy efficiency riders already cost Duke Energy Carolina residential customers \$78.36 a year and Duke Energy Progress residential customers \$60.96 a year. A Clean Energy Portfolio Standard, built upon North Carolina's Renewable Energy and Energy Efficiency Portfolio Standard, would lower potential compliance costs, lessen regulatory exposure, strengthen the diversity of the state's energy supply and continue to reduce criteria pollutant and carbon dioxide emissions from power generation.

Clean Energy Portfolio Standard

The Clean Energy Portfolio Standard shall be added to Chapter 62: Public Utilities of the N.C. General Statutes as follows:

§ 62-2. Declaration of policy.

- (a) Upon investigation, it has been determined that the rates, services and operations of public utilities as defined herein, are affected with the public interest and that the availability of an adequate and reliable supply of electric power and natural gas to the people, economy and government of North Carolina is a matter of public policy. It is hereby declared to be the policy of the State of North Carolina:
- (11) To promote the development of low emissions energy sources and measures through the implementation of a Clean Energy Portfolio Standard (CEPS) that will do all of the following:
 - a. Reduce emissions of all pollutants.
 - b. Provide improved air quality and other benefits to energy consumers and citizens of the State.
 - c. Diversify new power generation resources to ensure baseload energy is available to reliably meet the energy needs of consumers in the State.
 - d. Help rates to remain affordable by lowering regulatory compliance costs and maintaining diversity.

§ 62-133.8A. Clean Energy Portfolio Standard (CEPS)

- (a) Definitions As used in this section:
- (1) "Clean energy facility" means a natural gas combined cycle plant, a nuclear power station or a facility that generates electricity from renewable sources including solar, wind, hydropower, geothermal, ocean current, waves, biogas, landfill gas, waste heat derived from a clean energy resource or hydrogen.
- (2) "Clean energy certificate" means a tradable instrument that is equivalent to one renewable energy certificate and that can be used by an electricity provider to fulfill its Renewable Energy Portfolio Standard (REPS) requirement. One clean energy certificate is equal to:
 - a. One (1) megawatt-hour of electricity consumed in North Carolina and generated by a nuclear energy facility placed into service or acquired after January 1, 2008;
 - b. One (1) megawatt-hour of electricity consumed in North Carolina and generated by the net increase in nuclear power capacity through plant uprates completed on or after January 1, 2008;
 - c. Three (3) megawatt-hours of electricity consumed in North Carolina and generated at a natural gas combined cycle plant placed into service or acquired on or after January 1, 2008.
- (b) Clean Energy Portfolio Standard (CEPS) for Electric Public Utilities. -
- (1) Each electric public utility, electric membership corporation and municipality in the State that is subject to the Renewable Energy and Energy Efficiency Portfolio Standard (REPS) may use clean energy certificates to fulfill all or part of its REPS requirement.
- (2) Each electric public utility, electric membership corporation and municipality in the State that is subject to a poultry litter set aside in the Renewable Energy and Energy Efficiency Portfolio Standard (REPS) may use three (3) clean energy certificates in place of one (1) megawatt-hour of poultry litter to fulfill all or part of its REPS poultry litter set aside requirement.

A have to generate 3x nuclear to make the credit count

- (3) Each electric public utility, electric membership corporation and municipality in the State that is subject to a swine set aside in the Renewable Energy and Energy Efficiency Portfolio Standard (REPS) may use three (3) clean energy certificates in place of one (1) megawatt-hour of swine waste renewable energy to fulfill all or part of its REPS swine waste set aside requirement.
- (4) Three (3) clean energy certificates that are used to meet the poultry litter or swine waste set aside REPS requirement shall equal one (1) megawatt-hour when used to fulfill the overall REPS requirement.