LOUISIANA PUBLIC SERVICE COMMISSION

DOCKET NO. R-28271 SUBDOCKET B

LOUISIANA PUBLIC SERVICE COMMISSION, EX PARTE

In re: Re-study of the feasibility of a renewable portfolio standard for the State of Louisiana

LPSC Staff's Final Recommendation

I. Introduction

Staff recommends, as an alternative to the goals-based renewable portfolio standard that it recommended in its Strawman Policy Proposal issued February 5, 2010, that this Commission implement the Renewable Energy Pilot Program described herein ("the Pilot"). The Pilot will allow the Commission to accomplish its stated policy goals of: providing additional resources that result in reliable and economical long-term electric supply; diversification of Louisiana's fuel mix; greater energy security through the use of indigenous resources; encouraging private investment; improving air quality; developing additional in-state renewable resources; and encouraging job creation, while avoiding the uncertainty associated with the cost impacts of a long term policy decision in an uncertain economic and political climate. The Pilot is described in more detail herein and includes an implementation phase to begin immediately upon the approval of this recommendation.

II. Background

After nearly a year of formal and informal meetings, including those of the Louisiana Renewable Resources Task Force, several rounds of comments, and consideration

of the diverging interests of fifty intervenors in the above-captioned rulemaking¹, Staff issued its Strawman Policy Proposal on February 5, 2010. In its February 5 proposal, Staff recommended a "Renewable, Energy Efficiency and Alternative Energy Portfolio Standard" - a goals-based renewable portfolio with a target of 12.5% of retail sales from renewable resources by 2025. Staff included in its proposal a recommendation that the Commission open a second-phase proceeding in which certain implementation details would be developed including but not limited to the use of renewable energy credits (RECs), temporal resource targets, incentives, cost caps, and reporting periods.

Staff's Strawman Policy Proposal was presented to the Commission at its April 20, 2010 Special Business and Executive Session ("B&E"). In addition to the presentation of Staff, the Commission heard from several of the intervenors in this rulemaking as well as non-parties to the rulemaking who are otherwise interested in the Commission's decision, including the Alliance for Affordable Energy, Agrilectric Power Partners, Lite Solar, Corp., the Deep South Center for Environmental Justice at Dillard University, Louisiana Geothermal, LLC, the Baton Rouge Progressive Network, Forest Capital Partners, the Louisiana Energy Users Group, the Sierra Club, the Youth Alliance for LA Lenders, Sun Energy Group, the American Sugar Cane League, Entergy Gulf States, the Sierra Club Delta Chapter, the Wood Products Development Foundation, Bayou Greens, Southwestern Electric Power Company, Entergy Louisiana, LLC and Entergy Gulf States, L.L.C., Baton Rouge Community College, and the Louisiana Farm Bureau Federation. The April 20

A full list of intervenors in LPSC Docket No. R-28271 Subdocket B, as well as all reports filed by Staff and formal comments of parties can be found on the Commission's website at www.lpsc.org. For a lengthy discussion of the procedural history of this docket, please see the Final Task Force Report issued February 5, 2010.

meeting lasted more than six hours and was briefly summarized by Staff's consultant Phil Hayet at the regularly scheduled meeting the following day, April 21, 2010.

As stated by Mr. Hayet, there were some parties that favor a mandatory RPS (environmental groups and developers), some who favor an RPS but want a strict definition of renewables, and some who are opposed to a mandatory RPS due to concerns regarding costs (utilities, energy users). The potential to implement a pilot RPS was acknowledged during the meeting, and Commissioner Holloway in particular touted the advantage of having actual cost data through a pilot.

At its May 19, 2010 regularly-scheduled meeting, and at the request of Commissioner Holloway, Dr. Mark Zappi, P.E., Dean of Engineering, Director of the Bioprocessing Laboratory, and Professor of Chemical Engineering at the University of Louisiana, gave a presentation on the benefits and prudence of Louisiana-specified pilot programs regarding renewable energy projects and sources. Dr. Zappi advised the Commission to perform additional study of Louisiana-specific resources, and that pilot projects should be constructed in order to determine actual operational expenses and additional information necessary to answer questions regarding such things as capital costs, optimal feedstocks, sites, technologies, and developers. At the conclusion of Dr. Zappi's presentation, several Commissioners expressed interest in additional analysis that would provide Louisiana-specific, actual cost data and enable a long-term decision tailored to meet Louisiana's needs and reap the benefits of State's abundant natural resources and robust industry.

III. Recommendation

Staff agrees that the Commission can benefit from having actual data to assist it in this decision, and has worked diligently with Commissioners and interested parties to develop a proposal that is feasible and appropriate for the State of Louisiana. Staff believes that its pilot proposal, described in more detail below, will meet the Commission's objective of developing real cost data to assist the Commission in making a decision with regard to a long-term RPS, and at the same time provide developers with an incentive to market their resources to Louisiana utilities and take advantage of federal and state subsidies that may expire in the near term.

While there are many divergent interests in this rulemaking, Staff believes its pilot proposal is a workable compromise for all parties, which will move the State forward to implement cost-effective renewable resources, but will not have the potential risks associated with a long-term standard in terms of cost to ratepayers. Ultimately, the results of the Pilot can be used to determine if a long-term RPS should be implemented. The estimated cost impacts of the Pilot are provided in Section V below.

IV. Renewable Energy Pilot Program ("The Pilot")

A. Renewable Resources Defined. The renewable resources which should be considered herein are found in the following list. These resources must be new resources or an expansion of existing resources built in Louisiana. This list may be further revised in the implementation phase, as necessary.

- Biologically derived methane gas (including landfill gas)
- Biomass energy
- Black Liquor
- Combined Heat and Power ("CHP")

- Distributed generation systems
- Fuel cells
- Generation of electricity using by-products of the pulping process and wood
- Geothermal energy
- Municipal solid waste ("MSW")
- Ocean thermal, wave, tidal, hydrokinetic
- Qualified hydropower
- Solar photovoltaic energy
- Solar thermal
- Waste Heat Recovery ("WHR")
- Waste-to-energy
- Wind power
- B. The Pilot consists of two components: 1) a Research component; and 2) an RFP Component. Each component is described in more detail below.

1. Research Component

The first component of the program is a research component through which the best types of renewable resources will be identified and characteristics regarding specific renewable technologies will be evaluated. In addition, the research component will evaluate the best practices for implementing renewable resources such as what contract structure would provide for the greatest opportunity for implementing renewable resources without becoming overly burdensome for customers. The research component will result in small projects being developed, some as small as fractions of MWs.

- a. Purpose. The purpose of the Research Component of the Pilot is to conduct research and perform evaluations of renewable energy projects specifically sited in Louisiana.
- b. Requirement. In this component, utilities will be required to either develop at least 3 small self-build research projects or offer a tariff to

purchase renewable energy based on a specified price and based on standardized terms and conditions.

- c. Self-Build Projects. Projects developed as utility self-build projects will be limited in size to no larger than 300 kW per project.
- d. Affiliated Entities. For those utilities that offer a standardized tariff, the contracts must be with unaffiliated developers.
- e. PPAs. Under the standardized tariff option, sellers of renewable energy to utilities will be paid a standard price equal to the utility's avoided cost plus \$30 per MWH.
- f. Any purchase made under the standardized tariff option will be limited to a capacity limit of no greater than 5 MW, for a term no greater than 3 years, and the maximum total amount of capacity that any utility may acquire under the standardized option is 30 MW.

2. RFP Component

The second part of the Pilot is a Request for Proposals (RFP) component, which will allow utilities to evaluate characteristics of larger renewable projects.

- a. Purpose. The purpose of the RFP Component of the Pilot is to evaluate larger renewable energy projects specifically sited in Louisiana that could come on-line in the 2012 2013 time frame.
- Requirement. Each jurisdictional investor-owned utility, as well as
 jurisdictional electric cooperative will be expected to conduct RFPs.
 With regard to electric cooperatives, the requirement to conduct an

RFP should be timed such that the renewable resources would be available when the electric cooperative's existing full or partial requirements contracts expire.

- c. Capacity. A total of 350 MWs will be the maximum amount of capacity that all of the utilities (investor-owned utilities and electric cooperatives) will request in their RFPs. Each utility's portion of the 350 MW total will be determined based on the utility's retail sales compared to the total jurisdictional retail sales in Louisiana.².
- d. Commission Approval. The Commission will have the ultimate authority to approve the acceptance of any bids in an RFP issued in conjunction with the Pilot.
- e. Contract terms. The term of contracts awarded through an RFP issued herein shall not exceed twenty (20) years.
- f. Exception. For purposes of the pilot RFPs, utilities will not be permitted to submit self-build proposals. However, one exception is that a utility can propose a biomass co-firing self-build option in the RFP. If a utility desires to submit such a bid, the proposal would have to include the additional capital cost to convert an existing generating unit to accept biomass fuel, as well as the cost of the

² If this 350 MW were split up only among the investor-owned utilities and cooperatives, using 2009 retail sales data, it would break down approximately as follows: Electric Cooperatives – 12.2% or 42.7 MW, SWEPCO – 8.0% or 27.9 MW, CLECO – 11.7% or 40.8 MW, EGSL – 26.2% or 91.5 MW, and ELL – 42.0% or 147 MW. Staff will review this data with the utilities in the implementation phase.

biomass fuel, O&M costs, and any additional costs required to convert the unit and operate it as a biomass co-firing facility.

- C. Should the Commission approve this Pilot Proposal, Staff shall then work with utilities and other parties that the Commission designates to finalize the implementation details associated with the Program. While Staff has outlined many of the details in this proposal, additional details may be determined as part of the implementation phase, and in some cases, some of the details may change as part of the implementation process. Staff's intention will be to request approval of the implementation details within 90 days of issuance of the Order approving the Pilot.
- D. All electric utilities shall provide a report to Staff on December 31 of each year, beginning in 2010 and ending in 2012, detailing information gathered from the Pilot. Staff will review the information, collate the reports, determine if sufficient information has been provided, and present a single report to the Commission.
- E. At the conclusion of the Pilot, Staff will analyze and summarize the information obtained in the Pilot to assist the Commission in determining whether to implement a long-term RPS program, and if so, whether it should be a goals-based or mandatory RPS, and what the appropriate size of the program should be.

V. Cost Impact Analysis

In its Final Task Force Report, Staff provided a detailed analysis of the cost impacts of the mandatory RPS found in the Waxman-Markey legislation. At the April 20, 2010 B&E meeting, Staff updated the Commission with the cost impacts of Staff's goals-based RPS proposal. Staff will now compare the cost impact of its current Pilot

recommendation with these two sets of results for reference purposes. Staff's Final Task Force Report included the cost impacts of three different scenarios: 1) a base case with an expected forecast of gas prices and avoided costs, 2) a sensitivity case in which less energy efficiency could be implemented, and 3) another sensitivity case in which natural gas and avoided costs would be 20% higher than the base case. With regard to Staff's analysis of the Waxman-Markey legislation, Staff determined that the annual cost increase to typical residential customers of adding renewable resources per Staff's base case would be \$4.43 per customer on a levelized basis over the nine year period of 2012 -2020. Similarly, the added annual levelized cost in the case in which less energy efficiency could be implemented was \$26.30, but with 20% higher natural gas and avoided costs, customers would actually save money by acquiring renewable resources in the amount of \$6.37 per year. With regard to Staff's analysis of its 12.5% goals based RPS proposal, Staff determined that the annual cost increase to typical residential customers of adding renewable resources per Staff's base case would be \$2.05 per year on a levelized basis over the nine year period of 2012 - 2020.

Staff also conducted an analysis of the Pilot proposal. As discussed above, Staff's Pilot proposal is intended to have two components, the first of which is a fairly small research component and the second is for larger renewable resources (350 MW) that would be acquired via an RFP process and would be subject to the approval of the Commission finding that the projects are in the public interest. Since the research component is expected to be small, Staff focused its analysis on the 350 MW RFP component and attempted to perform a cost impact analysis of that component based on a set of assumptions that are somewhat uncertain. While these assumptions are uncertain,

the entire purpose of the Pilot will be to gather better data and perform additional economic evaluations. Again, if the results of the RFP proposals are not cost effective, the Commission will not be obligated to approve the projects. For purposes of this analysis Staff made the following assumptions:

- 350 MW of renewable resources will supply approximately 1.5 million MWH
 of energy on an annual basis assuming an average capacity factor of the
 renewable resources of 50%. This equates to approximately a 2% renewable
 energy requirement (2% of 70 million MWH).
- Renewable resources may cost \$30 per MWH above avoided cost. While this
 was the assumption made for study purposes, the bids received from the RFP
 will ultimately determine whether this assumption is reasonable.
- 3. No CO2 taxes were considered in this analysis as none currently exist and may not be in effect in the short term.
- 4. For purposes of this analysis, the renewable resources were not given any capacity credit under the assumption that the renewable resources will not provide any capacity scheduling rights. Should the developers be able to provide capacity that can be scheduled on a firm basis, the value of the energy and hence the cost to the utility may be higher. Whether developers will be able to provide capacity that can be scheduled on a firm basis will be determined from bids received as part of the RFP.

Based on these assumptions, Staff determined that acquisitions of renewable resources via RFPs of 1.5 million MWH priced at \$30 per MWH above avoided cost,

would cost typical Louisiana-jurisdictional residential customers using 1200 kWh per month approximately \$9 more per year than using non-renewable alternatives. Should the Commission accept fewer projects, or projects priced lower than the \$30 per MWH above avoided cost contemplated in the above analysis, the cost impact will be lower.

Some of the differences in the results of the Pilot compared to Staff's earlier proposals can be attributed to the fact that some types of renewable resources that were permissible in the Staff's earlier proposal have been excluded from the Pilot. For example, since the Pilot is geared to be research-oriented, the Pilot requires that only new renewable resources located in Louisiana can be considered. Furthermore, because the Pilot is intended to study renewable resources, energy efficiency is not permitted, but only for the Pilot. Keeping that in mind, Staff determined that the cost impact of the Pilot, while not nominal, will not be excessive, particularly given that the Commission will have the ultimate authority to approve or disapprove the larger RFP projects prior to the utilities entering into agreements with any developers.

Note that in the initial Waxman-Markey Analyses, certain sensitivity cases were performed as a way of examining the uncertainty in some of the data assumptions. While these data assumptions remain uncertain, at the conclusion of the RFP process, more information should be known such that the Commission should be able to determine whether the cost of renewable resources might actually cost \$30 per MWH above avoided cost. In some cases the Commission may find that some of the renewable resources actually cost less than \$30 per MWH above avoided cost, and in other cases, the Commission may find that the renewable resources will cost considerably more than \$30 per MWH above avoided cost.

VI. Conclusion

Staff recommends herein that the Commission implement this Renewable Energy Pilot Program for the purpose of obtaining more Louisiana-specific information regarding the availability and cost of renewable resources in Louisiana, and in order to make a more informed decision regarding a long term renewable portfolio standard.

Staff believes that this pilot is reasonable, and will achieve the objectives discussed herein. Finally, the Pilot will not delay the implementation of a long-term RPS and will in fact help to promote the development of cost-effective renewable resources that may contribute to a long-term supply in Louisiana.

Baton Rouge, Louisiana, this 15th day of June, 2010.

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CERTIFICATE OF SERVICE

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