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

Staff's Revised Proposed Renewable Energy Pilot Program Implementation Plan

1 Background

On January 9, 2009, the Louisiana Public Service Commission ("LPSC" or "the Commission"), voted to re-study the feasibility of implementing a renewable portfolio standard ("RPS") for the State of Louisiana. The Commission approved a budget for the consulting firm of J. Kennedy and Associates ("Kennedy") at the March 2009 Business and Executive Session ("B&E"). Kennedy, along with the LPSC Staff ("Staff") conducted several meetings from March 2009 through November 2009, including three Task Force meetings held for the purpose of developing an inventory of available resources in Louisiana and assessing the opportunity for providing additional resources. After consideration of the meeting outcomes, written comments submitted by parties to the docket, and Staff's own detailed study and analysis, Staff issued its final task force report and recommendation in February 2010. At that time, Staff recommended that the Commission adopt a voluntary renewable portfolio standard. Staff presented its recommendation to the Commission at its April 20, 2010 B&E. At its May 2010 B&E, the Commission expressed an interest in implementing a pilot program to obtain Louisiana-specific information to assist the Commission in its decision on whether to implement a long term RPS for the State of Louisiana.

Staff worked with Commissioners and parties to develop a renewable energy pilot program and issued a final recommendation June 18, 2010. At the Commission's June 23, 2010 B&E, Staff presented its proposed pilot program to the Commissioners and it was approved

unanimously. Corrected General Order No. R-28271 Subdocket B, dated July 21, 2010 ("the Order"), memorialized the Commission's approval and further required Staff to propose implementation details associated with the program within ninety (90) days of the date of the Order.

Pursuant to the Order, Staff issued a draft implementation plan for comments August 13, 2010, seeking red-line comments by August 27, 2010. Staff received comments from the following parties: Agrilectric Power Partners ("Agrilectric"), Entergy Gulf States Louisiana L.L.C. ("EGSL"), Entergy Louisiana LLC ("ELL"), Free Flow Power ("FFP"), Gulf Coast Clean Energy Application Center ("GC RAC"), GeoPower Texas, Lake Charles Cogeneration ("LCC"), Louisiana Energy Users Group ("LEUG"), The Louisiana Forestry Association ("LFA"), Louisiana Geothermal ("LA Geothermal"), Louisiana Pulp and Paper Association ("LPPA"), Noble Environmental Power ("Noble"), Pattern Energy Group LP ("Pattern"), TradeWind Energy Group ("TradeWind"), and Weyerhauser Company ("Weyerhauser"). Staff also received joint comments from Boise Packaging & Newsprint, LLC, Temple-Inland, Inc., Georgia Pacific LLC and MeadWestvaco Corporation ("Joint Participants").

After analyzing the comments, Staff issued a proposed implementation plan on September 8, 2010, that briefly summarized the approved pilot program and set forth its requirements going forward. Upon its issuance, however, parties raised a multitude of issues, including some legitimate concerns regarding Staff's revisions. Staff thereafter determined that a more thorough discussion of some of the issues was in the best interest of all parties. Staff therefore issued a notice on September 10, 2010, requesting additional comments and scheduled a technical conference to be held September 29, 2010. The September 10, 2010 notice sought brief position statements by September 20, 2010, on the following contested issues: 1) the exclusion of wood from eligible biomass; 2) Cleco's requested exception from the RFP requirement; 3) the inclusion of combined heat and power (CHP) as an eligible resource; 4) the inclusion of waste heat recovery (WHR) as an eligible resource; and 5) the inclusion of substitute natural gas (SNG) as an eligible resource.

The following parties filed position statements in response to the September 10 notice: Agrilectric, Cleco, EGSL and ELL, International Paper ("IP"), the Joint Participants, LCC, LEUG, LFA, Louisiana Geothermal, The National Alliance of Forest Owners ("NAFO"), Ormat

Nevada, Inc. ("Ormat"), Rain CII Carbon LLC ("Rain CII"), Sierra Club, Southwestern Electric Power Company ("SWEPCO"), and Weyerhauser.

Parties reiterated their positions at the technical conference and general agreement was reached regarding issues 2 through 5, above. Specifically, a compromise position was reached with regard to Cleco's exception, general support was provided for WHR, and most parties were opposed to the inclusion of SNG. With regard to CHP, all parties acknowledged that it is an important resource for Louisiana. Parties, agreed, however, that the availability and cost of CHP is generally well known in Louisiana, and its inclusion as an eligible resource would not serve the experimental purpose of the Pilot. Staff and the parties further agreed to examine CHP in the Commission's ongoing energy efficiency rulemaking (Docket No. R-31106). Staff recommends that the Commission acknowledge CHP as a very important resource in Louisiana, and consider the inclusion of CHP in any long-term RPS adopted at the end of the Pilot Program, should the Commission decide to implement such a policy at that time. Staff also recommends that the Commission urge the federal government to include CHP as an eligible resource in any federal renewable or alternative energy mandate.

Two issues that were discussed but not fully resolved at the September 29, 2010 technical conference are the definition of biomass and the eligibility of methane gas derived electricity produced from geothermal wells. Following the September 29, 2010 technical conference, Staff requested limited comments on the two aforementioned issues by October 6, 2010, and the following parties responded: Agrilectric, Cleco, EGSL and ELL, the Joint Participants, and Louisiana Geothermal.

After reviewing all of the comments, Staff determined that a broad definition of woody biomass is in the public interest, subject to certain limitations and safeguards. Staff and the parties agree that there will be an opportunity during the certification of these resources to present any concerns regarding potential economic harm that may result to the wood manufacturing industry as a result of this definition. Those concerns may be supported by actual data developed based on specific projects and may include studies the parties would like to provide. Nevertheless, a limitation on the megawatt (MW) size of any biomass energy generating facility may address some of the concerns raised by the Joint Participants and the LPPA over the potential for causing an increase in wood costs to the forest products industry.

Staff believes a limitation on any woody biomass energy generating facility of 50 MW is reasonable, and that sustainable forest practices should be used to the extent possible.

After considering the position of Louisiana Geothermal, it is Staff's understanding that Louisiana Geothermal's anticipated project, for which federal funds have already been allocated, may not be economical if the methane gas by-product is excluded from the definition of eligible renewable resources in the pilot. In addition, there are similarities to the production of methane gas in the geothermal process as the production of methane in a landfill process, which is generally considered a renewable fuel by most states. In order to adhere to the spirit of the pilot, however, Staff is recommending that the Commission place a limitation on the amount of methane gas associated with a geothermal resource that will be considered renewable. (See the glossary in Attachment 1 for a description of the limitation).

In addition to the issues discussed at the September 29 technical conference, the issue of cost recovery found in sections 8.1.2 and 8.2 of the draft plan was also raised during the implementation phase. EGSL and ELL took issue with Staff's revision to Sections 8.1.2 and 8.2 of the draft plan. After discussions with EGSL, ELL, and LEUG, the parties resolved all differences with regard to Section 8.1.2. Although parties were unable to agree upon specific language for Section 8.2, Staff believes the resolution stated in Section 8.2, below, is reasonable.

2 Purpose

The Commission has stated a desire to meet a set of policy objectives for renewable resources that include providing additional resources in Louisiana that result in a reliable and economical long-term electric supply; diversifying Louisiana's fuel mix; creating 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 and job retention, while avoiding the uncertainty associated with the cost impacts of a long term policy decision in an uncertain economic and political climate.

This pilot program is intended to be an experimental study for the purpose of determining what renewable resources found in Louisiana can be used by LPSC-jurisdictional utilities to meet a federal or state RPS should one be imposed, taking into consideration transmission and transportation constraints specific to Louisiana utilities, while at the same time ensuring that

Louisiana ratepayers are protected from a significant increase in rates. The outcome of this pilot, or study, will assist the Commission in making a long term policy decision for the State of Louisiana.

At the conclusion of the pilot, if the LPSC deems an RPS to be in the public interest, then the pilot will not have delayed the implementation of the RPS, and will have promoted the development of new renewable resources that may contribute to a long-term supply of renewable energy. Nor will it have precluded any resources from consideration in the implementation of a long term policy. That is, the Commission may determine, based on information that is obtained through the reporting requirements of the pilot as well as information that is readily available, that additional resources should be eligible on a long-term basis. For example, resources such as CHP or out-of-state wind generation may enable Louisiana utilities to comply with a long-term state or federal RPS, despite the fact that their inclusion in the pilot would not provide the Commission with the Louisiana-specific information sought in this study.

The pilot has two major components: 1) a research component; and 2) an RFP Component for larger new renewable resources. All jurisdictional electric utilities will participate in the RFP Component; however, only investor owned utilities will participate in the research component. Both components are fully explained below.

3 Research Component

The research component will result in data being gathered from both the development of new renewable energy projects, and from research conducted based on other renewable technologies. For example, some technologies, such as hydrokinetic energy, may not become commercially feasible until sometime in the future. Therefore, participants shall provide written analysis for those technologies. This research is intended to be performed for those technologies that appear to be promising for Louisiana. Theoretical technologies will not be analyzed, until they have a proven operational project and can demonstrate cost assumptions derived from a rational stable process, or a utility is able to develop a self-build project as outlined below.

3.1 Options to Develop New Renewable Energy Projects

Utilities will be required to either develop at least 3 projects from a combination of either small self-build research projects (as defined in section 3.1.1 below), or projects offered on a tariff to purchase new renewable energy based on a specified price and based on standardized terms and conditions (as defined in section 3.1.2 below).

3.1.1 Self Build Options for New Renewable Resources

This option will include the following characteristics

- Each individual project shall have a nameplate capacity no larger than 300 kW.
- Exception: A utility may have one project that can exceed this cap, but that project may not exceed 5 MW.
 - Should the utility decide to construct a project that is greater than 300 kW but less than 5 MW, the utility must receive Commission approval through a certification proceeding.
- These projects should be fully operational by the end of 2013.
- Capital costs associated with these projects shall not exceed \$10 million per utility, or such other amount that the Commission deems appropriate at the time the Commission approves this implementation plan.

3.1.2 Standard Offer Tariff Option for New Renewable Resources

This option will include the following characteristics:

- Utility self-build projects will not be permitted under the Standard Offer Tariff option ("Tariff").
- This option will require the utility to develop a Tariff and an associated contract to purchase "as-available" renewable energy from a new renewable energy resource based on standard terms and conditions.
- Developers wanting to use this Tariff will have to deliver energy to the utility from new (as defined in section 5.2.2) renewable resources located within Louisiana.
- Each utility is limited to buying no more than 5 MW from any single project.

 New generation resources may not be split up so as to circumvent the 5 MW cap.

- Each qualifying project must have a minimum nameplate rating of 25 kW.
- Under this option, each utility has a total limit of 30 MW of nameplate capacity that it can purchase. If projects are offered that will result in a utility exceeding the 30 MW nameplate capacity limit, then the selection criteria to limit the capacity will be based on when the projects will be commissioned (i.e., first come first served when interconnected, operational, and delivering energy to the utility).
- The Tariff should seek projects to be fully operational by the end of 2013.
- The Tariff should allow for a contract term of up to five years. At the end of the
 five year term, the contract payments will revert to standard avoided cost
 payments for qualifying facilities unless the Commission determines otherwise
 prior to the expiration of the contract.
- The contract payment under this Tariff will be equal to the utility's avoided cost plus \$30/MWH for the associated renewable energy premium, also referred to as a Renewable Energy Credit ("REC"). In addition, in order to provide additional certainty as to the price that will be paid, a floor and a ceiling will be established on the total hourly price including the premium for the associated REC to be paid. The floor and ceiling prices will be established at \$60/MWH and \$120/MWH, respectively. No escalation of the floor and ceiling prices will occur during the 5 year period that the tariff is in place.
- In accordance with the Commission's 1983 and Market Based Mechanism General Orders as amended,^{2,3} ("1983 General Order" and "MBM Order", respectively), a certification proceeding will not be required for any resulting contract with a developer under this Tariff. Any contract executed per the Tariff

Louisiana Public Service Commission General Order No. U-22739 dated February 27, 1998.

² LPSC General Order dated September 20, 1983 (In re: In the Matter of the Expansion of Utility Power Plant; Proposed Certification of New Plant by the LPSC) (the "1983 General Order"), as amended by General Order in Docket No. R-30517 (In re: Possible modifications to the September 20, 1983 General Order to allow (1) for more expeditious certifications of limited-term resource procurements and (2) an exception for annual and seasonal liquidated damages block energy purchases) dated October 29, 2008, and corrected May 27, 2009.

³ General Order, Docket No. R-26172 Subdocket A, In re: Development of Market Based Mechanisms to Evaluate Proposals to Construct or Acquire Generating Capacity to Meeting Native Load, Supplements the September 20, 1983 General Order, dated February 16, 2004 (as amended by General Order, Docket No. R-26172 Subdocket B, dated November 3, 2006, and further amended by the April 26, 2007 General Order, and the amendments approved by the Commission at its October 15, 2008 Business & Executive Meeting and now in General Order, Docket No. R-26172, Subdocket C dated October 29, 2008).

will automatically be deemed prudent and in the public interest, and the associated costs shall be deemed eligible for recovery.

4 Request for Proposal ("RFP") Component

The second pilot component provides that each LPSC jurisdictional utility, including Investor Owned Utilities ("IOUs") and Cooperative Electric Utilities ("Coops") will be required to conduct RFPs pursuant to the MBM Order for new long-term renewable resources. The RFP Component will result in data being gathered concerning new renewable energy projects specifically sited in Louisiana that reasonably can be expected to come on line in the 2011 – 2014 time-frame. Staff will work with the Utilities pursuant to the MBM Order to ensure that they are furthering the goals of the Pilot throughout their RFP processes and to address specific concerns of fairness such as those raised by Agrilectric with regard to Entergy's upcoming RFP.

4.1 Requirements

- Participation In the case of a Coop, the requirement to conduct an RFP should be timed such that new renewable resources would be available when the Coop's existing full or partial requirements contracts expire.
- Capacity A total of 350 MWs will be the maximum amount of nameplate capacity that all of the utilities (IOUs and Coops) will request in aggregate in their RFPs. Each utility's portion of the 350 MW nameplate capacity will be determined based on 2009 retail sales as reported in each utilities FERC Form 1 or RUS Form 7. Each utility's portion of the 350 MW nameplate capacity total will be rounded to the nearest integer. This leads to the following allocations:

Electric Cooperatives – 13.2% or 46 MW

SWEPCO - 8.1% or 28 MW

CLECO - 12.2% or 43 MW

EGSL – 25.8% or 90 MW

ELL - 40.8% or 143 MW

Furthermore, the 46 MWs that are allocated to the Coops, are further allocated to the individual Coops as follows:⁴

Beauregard – 1.3% or 5 MW

Claiborne – 0.8% or 3 MW

Concordia – 0.3% or 1 MW

Demco - 2.9% or 10 MW

Jeff Davis – 0.3% or 1 MW

Northeast -0.3% or 1 MW

Penola -0.5% or 2 MW

Pointe Coupee -0.3% or 1 MW

Sleca -0.8% or 3 MW

Slemco 3.2% or 11 MW

Valley -0.9% or 3 MW

WST - 1.4% or 5 MW

- Contract term The term of contracts awarded through an RFP issued herein shall have a minimum of ten (10) years and a maximum of twenty (20) years.
- **Bids** Only bids from non-affiliated developers will be accepted.
- **Bid Thresholds** Eligible resource must deliver at least 2 MW, or 1 MW in the case of Coops, at the point of delivery to the purchasing utility.
- Exception to the Self Bid Requirement If a utility already has a solid-fuel-fired generating unit that has been designed to burn biomass fuel, such utility may defer conducting a capacity RFP for renewable resources, so that the utility may first evaluate the additional requirements necessary to be able to make use of the solid-fuel-fired generating unit for biomass co-firing operation, which includes conducting an RFP for biomass fuel. The utility shall use good faith, commercially reasonable

⁴ Coops are only obligated to acquire this amount of renewable resources to the extent that participation is required pursuant to Section 4.1 above.

efforts to complete this evaluation by December 31, 2011. At the completion of the evaluation process, the utility shall provide a written report to the Commission. As part of the report, the utility will have to request Commission approval concerning the next action it should take as part of the pilot. As to such next action, the utility shall have two options. As its first option, the utility may request an exemption from conducting a renewable resource capacity RFP, so that it may instead be permitted to use biomass co-firing at the solid-fuel-fired generating unit to satisfy its RFP obligation in the pilot. The utility will have to justify its request, and the Commission will have ultimate decision-making authority. As part of the utility's justification, it shall use the results from the evaluation it had just performed, along with any other justification it chooses to rely on in order to support its request for an exemption. As an alternative option, the utility may proceed with a renewable resource capacity RFP, and the utility would be permitted to submit a bid into the renewable resource capacity RFP to use biomass co-firing at the solid-fuel-fired generating unit it owns, if it so chooses. Should the utility choose the first option, but fail to justify its request to the Commission, the utility must then proceed to conduct the renewable resource capacity RFP. If the utility submits its own biomass co-firing option in the renewable resource capacity RFP, an independent monitor must be used in the RFP process.

As part of the economic evaluation that is performed in the RFP process, all capacity costs, operating and maintenance expenses, heat rate, capacity and availability degradation issues, if any, associated with converting the utility's solid-fuel-fired generating unit for biomass co-firing use must be captured in the analysis. Furthermore, the utility must fully disclose to the Commission the additional capital cost required to convert or adapt the existing solid-fuel-fired generating unit to accept biomass fuel, as well as the incremental O&M costs required to fire or co-fire biomass fuel, and any degradation issues that the plant experiences as a result of co-firing using biomass. Additionally, the utility may propose a cost-recovery mechanism in connection with any test burn that the utility proposes to conduct for biomass co-firing.

While the MBM Order does not, on its face, apply to an RFP for biomass fuel, the utility shall nonetheless adhere to the core principles of the MBM Order, as they may

be appropriately modified to account for the specific nature of the biomass fuel RFP, as follows:

- 1. The market-based mechanism shall be a competitive RFP solicitation process.
- 2. The utility shall submit an informational filing that includes: a description of eligible biomass fuel resources and required quantities; an RFP schedule; methods and criteria to evaluate bid responses; procedures to protect the confidentiality of bids and bidder information; a draft solicitation document; and a form of confidentiality agreement. The utility shall collaborate and consult with the LPSC Staff in the development of the utility's informational filing.
- 3. If deemed necessary by the LPSC Staff, the utility shall conduct one or more technical conferences with prospective bidders.
- 4. The utility shall review its bid results and evaluations with the LPSC staff prior to bid award.
- 5. No affiliate bids are permissible. Accordingly, an independent monitor will not be required for the RFP, provided that the LPSC Staff has concluded that the utility has implemented the appropriate procedures to protect the confidentiality of bids and bidder information.
- Certification In accordance with the Commission's October 29, 2008 and May 27, 2009 General Orders, a certification proceeding will be conducted for each selected resource, including any utility biomass co-firing resource, and other stakeholders will be able to express their support or objection for the renewable resource in the normal course of the certification proceeding. In the certification proceeding, evidence shall be presented on the economic evaluation performed, the selection criteria used to select the identified resource, and the expected net impact on rates as a result of the selected resource. As is normally the case, the Commission will have ultimate authority to approve or disapprove any new renewable resource seeking certification.

- Environmental and Renewable Energy Attributes Bidders will be required to transfer all renewable and environmental attributes of the renewable energy resource to the utility.
- Startup Fuel For those renewable generation resources that require the use of some amount of non-renewable fuel for ignition, startup, testing, flame stabilization, and control uses, the maximum amount of non-renewable fuel that may be used shall be limited to 5% of total fuel consumption. This is consistent with both the prior Geaux Green program and Green-e requirements.

5 Eligible Renewable Resources

5.1 Eligible Renewable Resources Include the Following New Resource Options:5

- Biologically-derived methane gas (including landfill gas)
- Biomass energy
- Black Liquor
- Combined Heat and Power ("CHP") based on non-fossil fueled resources
- Distributed generation systems based on non-fossil fueled resources
- Fuel cells
- Geothermal energy
- Low impact hydropower
- Ocean thermal, wave, tidal, hydrokinetic
- Solar photovoltaic
- Solar thermal
- Waste Heat Recovery ("WHR")
- Waste-to-energy including municipal solid waste ("MSW")
- Wind power
- Wood and wood waste
- Urban waste

⁵ See Attachment 1 for definitions of eligible resources.

5.2 Eligible Resources Special Considerations

5.2.1 Reserved for any additional issues that may need to be discussed.

5.2.2 Definition of New Renewable Resources

A "new" renewable resource is any qualifying electric generation facility (per Section 5.1) that (1) has entered commercial service on or after January 1, 2010, (2) has increased its nameplate capacity rating above what existed on December 31, 2009, with the increase in nameplate capacity qualifying as "new", or (3) a renewable resource that entered commercial service prior to January 1, 2010 and that has been re-tooled on or after January 1, 2010, if the electric generation equipment's appraised value after re-tooling is composed of 80% new invested cost at the time the project is re-launched. The other 20% of the appraised value at re-launch, can be made up of previously used electric generation equipment and associated infrastructure. The intention of condition 3 is that the existing resource will have almost entirely been rebuilt since all but 20% of the rebuilt plant will come from new investment.

Once a project qualifies as new under conditions 1 or 3 above, all of the energy associated with the project is classified as new energy production for purposes of the pilot. In the case that only an incremental amount of new capacity has been added under condition 2 above, only the energy production associated with the new capacity will count as new energy production.

5.2.3 Proven and Commercially Available Technologies

Each utility shall have the discretion to determine whether or not an RFP bid represents a technology that is proven and commercially available, and RFP bids representing technologies that are not commercially available may be rejected by the utility. Should a utility be close to deciding to reject a bid because it deems that bid to either be unproven or commercially unavailable, the utility must first allow for the opportunity to discuss the matter with Staff prior to the utility reaching a final decision on the matter. The outcome of such discussions may be: 1) the utility will reach the same decision; 2) the utility and Staff may identify a compromise; or 3) the utility may decide to permit such bid to go forward.

6 Grid Interconnection (Transmission and Distribution)

6.1 Interconnection

For any new eligible resource constructed pursuant to Sections 3 or 4 above, developers are responsible for adherence to all Federal, Commission, and utility policies and procedures in effect regarding facility interconnection with the utility's transmission and distribution ("T&D") system. Developers shall be responsible for initiating facility interconnection with the utility or cooperative. The cooperative may in turn coordinate with the appropriate Transmission Provider. As applicable, the Transmission Providers will also coordinate with the developer and any other affected system for projects that have an impact on more than one transmission network. Developers shall be responsible for all costs of interconnection including, but not limited to, studies, substations, necessary line extensions, T&D upgrades identified as part of the interconnection study process, etc., subject to each Transmission Provider's applicable tariffs.

6.2 Transmission Service

Each Cooperative or IOU shall be responsible for procuring network transmission service necessary to ensure deliverability of power produced by any new renewable resource constructed pursuant to Sections 4 and 5.

7 Information to be Collected

7.1 Information Gathered Concerning the Self Build, the Standard Offer Tariff Options or RFP options

For all of these resources, each utility shall collect information such as RFP bids received, data assumptions, economic evaluations performed, and evaluations of technology types and fuels.

7.2 Information Gathered Concerning Other Promising Technologies

Regarding the written analysis of other promising renewable energy technologies, each utility shall conduct investigations of data assumptions, perform economic evaluations, and include evaluations of relevant technology types and fuels. These evaluations will be limited to renewable energy technologies with proven commercial viability in Louisiana, and of a sufficient size and scale for utility applications. Utilities shall also include relevant information concerning nuclear, gas, and clean coal technologies for the purpose of making economic comparisons of the renewable resources to the conventional technologies. Should the Commission implement an Integrated Resource Planning ("IRP") requirement during the pendency of the Pilot Program, Utilities may satisfy these reporting requirements by including relevant information from any IRP that had been conducted within the last six months of the utility's reporting obligation in this proceeding. If Staff determines that additional analysis is necessary, however, Staff may request the utilities to provide such additional analysis prior to submitting the report to the Commission.

7.3 Specific Questions that Should be Addressed

At a minimum, the following specific questions should be answered.

Renewable resource types

- What is the utility's view as to the status of the different renewable resource types that have been investigated by the utility?
- To the extent the utility has developed cost estimates, what are the estimated capital costs of the different resource types and technology types within a given type of renewable resource?

- What are the estimated operating costs of the different renewable resource types that the utility has considered (non-fuel)?
- What uncertainties should be evaluated that would impact the costs to build and operate new renewable resources in Louisiana?
- To the extent available and known, where are the best locations to site the different types of renewable resources in Louisiana?
- Within a given renewable resource type, what specific technology types might be the most appropriate for Louisiana?

Fuel issues

- For renewable resources that have been evaluated by the utility, what are the fuel issues that should be addressed?
- What uncertainties should be evaluated that impact the fuel costs and fuel availability associated with renewable resources built in Louisiana?
- Please discuss how the use of this renewable fuel might impact other industries, and consider how those impacts might be evaluated in order to decide whether this renewable fuel should be used in Louisiana.
- Based on the utility's best estimate for technologies they have evaluated, what are the costs of the renewable fuels and how are the costs impacted by the risks discussed above?

Economic Evaluation

 Provide a levelized cost analysis comparing new renewable energy types, and even more specifically compare the cost of different technology types. This analysis should include the conversion of any existing solid fuel capacity resources to operate using biomass co-firing.

Job Impacts

Based on available information, discuss both job creation and job loss impacts
of the renewable resources considered in the pilot.

7.4 Report Deadlines

Each utility should plan to provide reports regarding the information discussed in Section 7 for the years 2010, 2011 and 2012, with the reports to be submitted annually by February 28th of the following year. Reports shall be made available to Intervenors and Intervenors shall have 30 days to file comments and questions. Staff will evaluate the information supplied and will potentially require additional information to be supplied by the utilities. Staff will then collate this information from the utilities and Intervenors and will include it in a combined report to the Commission that will be issued in May 2011, 2012 and 2013, unless additional time will be required to seek and acquire additional data, in which case the Staff will notify the Commission that additional time is required.

7.5 Confidentiality

Utilities shall be permitted to designate information in the reports that is confidential in accordance with LPSC Rule of Practice and Procedure 12.1 and the Commission's General Order dated August 31, 1992, governing the treatment of confidential information and Invervenors shall have access to the information through appropriate confidentiality agreements.

8 Cost Recovery and Cost Allocation Issues

8.1 Research Component

- 8.1.1 Self-Build Option Utilities are not required to seek Commission certification for any of the eligible self-build projects that are 300 kW or less. Costs associated with this option will be deemed eligible for recovery through normal ratemaking mechanisms, including the fuel adjustment clause consistent with Commission General Order No. U-21497 dated November 6, 1997, the utilities' individual formula rate plans where applicable, or otherwise through a base rate proceeding. In the case of the one self-build project that may be greater than 300 kW, but less than 5 MW, the utility will be required to seek Commission approval through a certification proceeding.
- 8.1.2 Standard Offer Tariff Option The cost of each utility's Standard Offer payments at avoided cost plus \$30/MWH, subject to the established floor and ceiling prices, and limited to 30 MW per utility, will be eligible for recovery through the Fuel Adjustment Clause, consistent with the Commission General Order No. U-21497, dated November 6, 1997.

8.2 RFP Component

Utilities are required to seek Commission certification for any contract entered into pursuant to bids received by the utility for long-term resources, biomass conversions of existing facilities to co-firing operation, and/or fuel supply as may be applicable. The Commission supports full cost recovery of all costs (including carrying costs) incurred by utilities in the RFP component of the program. Because each resource must be certified by the Commission, the specific ratemaking mechanisms through which cost recovery will be achieved will be determined in the certification order.

Costs associated with this option will be deemed eligible for recovery through normal ratemaking mechanisms, including the fuel adjustment clause consistent with Commission General Order No. U-21497, dated November 6, 1997, the utilities' individual formula rate plans where applicable, or otherwise through a base rate proceeding. If recovery for test years subsequent to 2010 is pursuant to a formula rate plan, the Commission supports the principle that capacity costs associated with a resource certified under the RFP component of this implementation plan be recovered dollar-fordollar (i.e., not subject to FRP sharing provisions) via an additional capacity mechanism, and that such costs will be not be considered in any FRP provision or calculation that seeks to limit or provide for less than full recovery of capacity costs when the utility's earnings exceed the upper end of the earnings band.

8.3 Cost Allocation

Cost allocation shall be consistent with sound ratemaking principles, relevant Commission Orders, and the utility's FRP provisions, as may be applicable.

9 RFP Documents

Entergy Services, Inc. ("ESI") is in the process of creating an RFP document for potential contracts with long-term new renewable generation resources. Staff prefers to use this document as the template for all of the RFPs designed to acquire long-term generation resources, in order to assure reasonable consistency between those RFPs. However, Staff recognizes that other utilities have significant experience with their own RFPs, and therefore those utilities are permitted to revise, or even substitute the template with another RFP document, if they prefer. Still, Staff prefers those utilities to make best efforts to remain consistent with the template RFP document for the acquisition of long-term generation resources. Each utility should develop RFP plans and should create a timeline for its RFP process. Each utility's RFP plan and timeline should be finalized and filed with the Commission within 30 days after the Commission issues an order approving the Implementation Plan. The timeline must indicate that the new renewable resources can reasonably be expected to begin delivering power within the 2011 – 2014 time period.

10 Standard Offer Tariff for New Renewable Resources

Staff requests that ESI develop an initial version of the standard offer tariff consistent with the provisions of the approved implementation plan. Once available, the document will be distributed in order to assist other utilities with development of their own standard offer tariffs. ESI's standard offer tariff shall be finalized and filed with the Commission within 30 days after the Commission issues an order approving the implementation plan. Each of the other utilities shall finalize its standard offer tariff within 60 days after the Commission issues an order approving the implementation plan.

11 Implementation of Long Term RPS

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 goals-based or mandatory RPS program, and if so, the appropriate size of the program.

12 Severability

If a court of competent jurisdiction finds any provision of these regulations to be invalid or unenforceable, the offending provision(s) shall be stricken and all other provisions of these regulations in all other respects shall remain valid and enforceable provided that the Commission, at its discretion, approves the continued implementation of the pilot program without such provision(s). In addition, in the event any provision of these regulations is stayed in conjunction with a judicial review of these regulations, the Commission shall, at its discretion, allow the other provisions of these regulations to remain in effect. Should the Commission so choose, the remaining provisions shall remain valid and enforceable.

Attachment 1

Glossary of Eligible Resources

Biologically-derived methane gas (including landfill gas) - gas that is derived from the anaerobic digestion or decay of organic matter.

Biomass energy – any organic material not derived from fossil fuels, including agricultural crops grown specifically for energy (closed loop including grasses and trees), agricultural wastes and residues, waste pallets, crates, dunnage, manufacturing and construction wood wastes, railroad tie derived fuel, landscape and right-of-way tree trimmings, mill waste residues, biosolids, sludge derived from organic matter, and all types and forms of woody biomass without restrictions.

The Commission may choose to limit woody biomass energy generating facilities to no greater than 50 megawatts (MWs) in size.

Black liquor - lignin-rich by-product of fiber extraction from wood in Kraft (or sulfate) pulping, which may be used to produce electricity.

Combined heat and power ("CHP") - a plant designed to simultaneously produce both electricity and thermal energy recovered for purposes other than electric power production. Also known as cogeneration. For purposes of the Renewable Energy Pilot, only CHP projects that are based on non-fossil fueled resources are permitted.⁶

Distributed generation systems based on non-fossil fueled resources — a small-scale electricity generation facility sited in or close to a load center or at a customer's site and used primarily to offset all or part of the customer's electrical load.

Fuel cells - an energy conversion device that combines hydrogen-bearing fuels with airborne oxygen in an electrochemical reaction to produce electricity.

Geothermal energy – natural heat from within the earth, and geothermally-derived methane and other energy which is all captured from a geothermal well-bore for the production of electricity. Geothermal Energy includes electricity produced from geothermal processes, including both "hydropressured" reservoirs (normal or below normal pressure) and "geopressured" reservoirs (above normal pressure). However, the amount of electricity from geothermally-derived methane and other energy produced from a geothermal well-bore and sold to a utility as renewable energy may not exceed, on an annual basis, the amount of electricity from natural heat produced at the same geothermal well-bore and sold to a utility as renewable energy.

⁶ Fossil fuel is defined as any fuel comprised of hydrocarbon constituents, including coal, petroleum, or natural gas, occurring in and extracted from underground deposits, and mixtures or byproducts of these hydrocarbon constituents.

Geothermally-derived methane – Naturally occurring methane dissolved in geothermal formation water, which is produced from a new geothermal well-bore drilled specifically to produce heat necessary to generate electricity from an Organic Rankine Cycle or similar unit.

Hydrokinetic – electricity produced by harnessing the kinetic energy of the motion of a body of running water such as a river.

Low impact hydropower - electricity produced by using falling water to turn a turbine generator.

Ocean thermal - any technology that uses the temperature gradient between deep and surface ocean water to produce electricity.

Ocean wave - any technology that extracts energy directly from the surface motion of ocean waves or from pressure fluctuations below the surface to produce electricity.

Solar photovoltaic - a technology that uses a semiconductor to convert sunlight directly into electricity.

Solar thermal - the optical concentration of solar rays through an arrangement of mirrors, lenses, or other reflective surfaces to heat a high temperature working fluid, which in turn is used to produce steam and consequently electricity.

Urban waste - wood, woody material, yard clippings, and other renewable waste products captured inside urban boundaries.

Waste heat recovery ("WHR") – any technology that recovers heat that is normally discharged to the atmosphere as a byproduct of a separate process and utilizes that waste heat to produce electricity.

Waste-to-energy including municipal solid waste ("MSW") – any technology that produces electricity from any putrescible and non-putrescible solid, semisolid, and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, demolition and construction wastes, dewatered, treated, or chemically-treated sewage sludge which is not hazardous waste, manure, vegetable or animal solid and semi-solid wastes, and other discarded solid and semi-solid wastes.

Wind power - energy from wind converted into mechanical energy, usually via a turbine, and then electricity.

Wood and wood waste - see definition of biomass energy above.