LOUISIANA PUBLIC SERVICE COMMISSION

***CORRECTED*[1] GENERAL ORDER**

Docket No. R-30021 - LPSC, ex parte. In re: Development and Implementation of Rule for Integrated Resource Planning for Electric Utilities

(Decided at the Commission's March 21, 2012 Business and Executive Session)

Overview

At its February 2007 Business and Executive Session ("B&E"), the Commission directed the Commission Staff ("Staff") to develop rules defining an integrated resource planning ("IRP") process for electric utilities in Louisiana. As further stated by the Commissioners at the May 2007 B&E, one of the primary motivations for the development of IRP rules was a desire to create a framework allowing regulators to stay informed and engaged during the utility planning process. While the planning process would not entail regulators setting out specific plans for utilities, it should allow for regular stakeholder input and comment. The rules adopted herein set forth specific requirements of LPSC-jurisdictional investor-owned electric utilities and are intended to achieve the goals of the Commission by balancing the varying interests and creating a practical framework for an open and collaborative process.

Jurisdiction and Law

The Commission has jurisdiction over electric utility resource planning matters pursuant to its constitutional authority found in Article IV § 21 of the Louisiana Constitution of 1974.

Procedural History

This rulemaking was originally published in the Commission's Official Bulletin dated March 9, 2007. The following parties intervened: Alliance for Affordable Energy ("Alliance"), America's Natural Gas Alliance ("ANGA"), Association of Louisiana Electric Cooperatives and its Cooperatives ("ALEC"), Cajun Gas Energy, Calpine Corporation, Cleco Power LLC ("Cleco"), Entegra Power Group ("Entegra"), Entergy Gulf States Louisiana, L.L.C. ("EGSL") and Entergy Louisiana, LLC ("ELL") (collectively, "Entergy"), Gulf Coast Clean Energy Application Center ("GCCEAC"), Lafayette Utilities System ("LUS"), Louisiana Energy Users Group ("LEUG"), Louisiana Generating LLC ("LaGen"), NRG Bayou Cove Peaking Power LLC ("Bayou Cove"), Big Cajun I Peaking Power LLC ("Big Cajun 1"), NRG Sterlington

1 A required signature page was inadvertently omitted from the previous version. There are no other changes.

Power, LLC ("Sterlington") and NRG Power Marketing, Inc. ("Power Marketing") (collectively, the "NRG Companies"), Marathon Oil Company, Occidental Chemical Corporation, Ormat Nevada, Inc. ("Ormat"), Plum Point Energy Associates, LLC, Sierra Club, SUEZ Energy North America ("SUEZ"), Southwestern Electric Power Company ("SWEPCO"), and Williams Power Company, Inc. ("Williams").

Staff issued an initial request for comments to parties on July 25, 2007 and held a technical conference May 12, 2008. Staff then circulated draft rules to the parties on September 25, 2008, and requested a second round of comments October 31, 2008. Reply responses were invited November 14, 2008. Staff extensively reviewed comments from the parties and also performed a review of IRP rules in other states. Staff then issued a second round of draft rules for comment May 13, 2011, and after several requests for extension, received comments in October and December 2011. Staff then took into consideration the comments of the parties, making changes to its proposed rule where appropriate.

Proposed Rules

In the proposed rules issues March 2, 2012, the Commission Staff attempted to develop a collaborative process with the recognition that the final resource planning decisions should be made by the utility. Staff intended for the proposed rules to work hand-in-hand with the rules being developed in the ongoing energy efficiency docket. As a result of specific comments and issues raised by the parties, Staff made several minor modifications to the organization and structure of the proposed rule as well as several substantive changes to the May 13, 2011 proposed rule. The substantive changes include the following: a delay of eighteen (18) months before a utility is required to initiate its first IRP cycle; the exemption of electric cooperatives due to their long term full requirements contracts; and the removal of energy efficiency requirements, as those are being addressed in Docket No. R-31106; Staff also declined to make certain changes requested by the utilities including requests to shorten the planning period of twenty (20) years, as the current proposal allows the utility to select an alternate period with appropriate justification; and Cleco's request for an alternative process, as Staff believes that additional stakeholder involvement at a time when utility decisions can be influenced is necessary in order to have an effective stakeholder process. And finally, Staff found it unnecessary to modify the rules with regard to Entergy's request for including alternative resource plans in the Action Plan. The goal of the IRP is to develop a defined resource plan, and the Action Plan is intended to specify implementing actions that the utility should take, however Staff

recognizes that these rules are not intended to replace or modify the normal docketed resource certification process, and a statement to this effect is included in the Action Plan section.

Staff Recommendation

Staff recommended that the Commission adopt the final proposed rules issued March 2, 2012.

Commission Consideration

On motion of Commissioner Field, seconded by Commissioner Skrmetta, and unanimously adopted, the Commission voted to accept Staff's Recommendation and adopt the final IRP rules issued March 2, 2012 with the modifications read into the record.

Commissioner Skrmetta directed Staff to conduct a comparison of the costs after the first IRP cycle against those of traditional mechanisms and to determine whether an IRP-type mechanism should continue into the future.

Commissioner Field's motion, as read into the record, was as follows:

1. *In Section 1 on page 1, at the end of the second paragraph, I would like to add the following sentence: "These rules are not intended to restrict the utilities' ability to acquire resources in an emergency situation or based on an extraordinary opportunity, with appropriate justification and in accordance with other Commission Orders."*

2. *In Section 2(g) on page 3, Demand Response is defined as "Load Management programs that have the intended goal of reducing or shifting load from hours with high electricity costs and/or reliability problems. Demand Response programs may include direct load control (such as air conditioners and water heaters), and interruptible rates which include incentive payments designed to induce lower electricity use at times of high wholesale market prices or when system reliability is jeopardized."*

   I move that we modify the last sentence to read, "Demand Response programs may include direct load control (such as air conditioners and water heaters), or incentive rates designed to induce lower electricity use at times of high wholesale market prices or when system reliability is jeopardized."

3. *In Section 10(d), page 16, the proposed rule states, "The Request to Initiate IRP Process filing shall contain a schedule in accordance with the table below for completing the utility's IRP process, and it shall contain a Proposed Confidentiality Agreement that will allow parties to have access to certain confidential information, in accordance with the Commission's rules concerning distribution of confidential information."*

   I move that the aforementioned language be modified as follows: "The Request to Initiate IRP Process filing shall contain a schedule in accordance

with the table below for completing the utility's IRP process; however, Commission Staff may allow a utility to deviate from the schedule in Section 10 with regard to the number and timing of events if it finds good cause for such deviation. The filing shall also contain a Proposed Confidentiality Agreement to protect confidential information in accordance with the Commission's Rules of Practice and Procedure and the Commission's General Order governing the treatment of confidential information."

4. *Finally, I also move that we modify Section 10(c) to read "Each successive IRP cycle will begin no later than 4 years after the request to initiate the prior IRP cycle."*

IT IS THEREFORE ORDERED THAT

1. **The Commission hereby adopts the attached IRP Rules[2]; and**

2. **Staff will compare the costs after the first IRP cycle to those of traditional mechanisms to determine whether the IRP or a similar mechanism should continue into the future.**

BY ORDER OF THE COMMISSION
BATON ROUGE, LOUISIANA

April 18, 2012
Corrected Order mailed April 20, 2012

/S/ FOSTER L. CAMPBELL
DISTRICT V
CHAIRMAN FOSTER L. CAMPBELL

/S/ JAMES M. FIELD
DISTRICT II
VICE CHAIRMAN JAMES M. FIELD

/S/ ERIC F. SKRMETTA
DISTRICT I
COMMISSIONER ERIC F. SKRMETTA

/S/ LAMBERT C. BOISSIERE
DISTRICT III
COMMISSIONER LAMBERT C. BOISSIERE, III

EVE KAHAO GONZALEZ
SECRETARY

/S/ CLYDE C. HOLLOWAY
DISTRICT IV
COMMISSIONER CLYDE C. HOLLOWAY

2 The attached rules are identical to the proposed final rules issued March 2, 2012, with the modifications read into the record by Commissioner Field and copies above.

LOUISIANA PUBLIC SERVICE COMMISSION

GENERAL ORDER

Docket No. R-30021 - LPSC, ex parte. In re: Development and Implementation of Rule for Integrated Resource Planning for Electric Utilities

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(Decided at the Commission's March 21, 2012 Business and Executive Session)

ATTACHMENT "A"

"Integrated Resource Planning Rules for Electric Utilities in Louisiana"

Integrated Resource Planning Rules for Electric Utilities in Louisiana

1) Overview

The following Integrated Resource Planning ("IRP")[1] Rules shall be used by jurisdictional investor owned utilities regulated by the Louisiana Public Service Commission ("Commission" or "LPSC")[2] to develop long-term resource plans, which include both supply and demand-side resources, and consider transmission needs, in order to satisfy the utility's load requirements. An electric utility's IRP shall be relied on by the utility as it creates its internal business plans. These rules are intended to provide utilities the flexibility to develop plans that meet their own specific needs and circumstances, to encourage a collaborative working process with stakeholders, and to be consistent with the requirements of the Commission's Market Based Mechanism Order ("MBM")[3] and the 1983 General Order, as amended.[4]

Resource planning under these rules does not change the fundamental relationship between the utilities and the Commission. The IRP Rules do not mandate a specific outcome, nor do they mandate any specific investment decisions to be made. Resource planning should reflect each utility's unique circumstances and the judgment of its management, and each utility will continue to bear the full responsibility for the consequences of its decisions. Resource planning decisions made as part of the utility's IRP process will be relevant to future investment decisions and approval proceedings, as well as revenue requirement and rate design proceedings. Consistency of a utility's Integrated Resource Plan with these IRP Rules will be an additional factor for the Commission to consider in evaluating the prudence of investments in construction and rate application proceedings. Any changed circumstances that occur after the IRP has been developed should also be considered in those proceedings. These rules are not intended to restrict the utilities' ability to acquire resources in an emergency situation or

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[1] Depending on the context, IRP may also refer to an Integrated Resource Plan, in other words, the resource plan developed based on the planning process.

[2] Staff considered including Cooperative Electric Utilities, however, the majority have full requirements contracts through 2025, and therefore, Staff felt it unnecessary for them to participate in the IRP requirements at this time.

[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, by the April 26, 2007 General Order, as referred to as the "MBM General Order", and further amended by the General Order, Docket No. R-26172 Subdocket C, dated October 29, 2008)

[4] General Order, *In re: In the Matter of the Expansion of Utility Power Plant; Proposed Certification of New Plant by the LPSC,* dated September 20, 1983, as amended by the General Order in Docket No. R-30517 dated October 29, 2008, and corrected May 27, 2009.

based on an extraordinary opportunity, with appropriate justification and in accordance with other Commission Orders.

2) Definitions

These definitions are to be used for this rule and are not intended to modify in any way the definitions used in any other Commission rule or order.

a) Allowance – In conjunction with environmental legislation, an allowance provides an entity the right to emit a certain amount of emissions. With regard to SO_2 provisions in the Clean Air Act Amendments of 1990 (PL 101-549) at Title IV (known as the Acid Rain Program), one allowance gives a utility the right to emit one ton of SO_2. Allowances may also be considered in conjunction with other pollutants such as NOx, CO_2 and similar greenhouse gas emissions, and mercury.

b) Avoided Cost

i) Avoided energy costs are the fuel, variable O&M, and possibly other variable costs a utility avoids (including losses), for example, by purchasing energy from another party or by relying on energy efficiency to reduce energy consumption.

ii) Avoided capacity costs reflect the value to the utility and its customers of generation facilities or purchases that could be avoided or deferred, for example, by reducing peak demand as a result of demand-side management or energy efficiency programs.

iii) Avoided transmission and distribution costs reflect the transmission and distribution costs that could be avoided or deferred by load reductions, for example due to demand-side management or energy efficiency programs.

iv) These definitions are intended to be consistent with the definitions found in the Commission's 1998 General Order (and other related orders) regarding Qualifying Facilities and Avoided Cost.

c) Cogeneration - Production of electricity by a Qualifying Facility, which the utility is required to purchase, as defined in the Public Utility Regulatory Policies Act ("PURPA") of 1978, at 16 U.S.C. Section 796. Additional policies concerning PURPA requirements were addressed in the Energy Policy Act of 2005, Title XII, Subtitle E, Section 1253, and in the Energy Independence and Security act of 2007, Section 515.

d) Collaborative Working Process - A process, implemented as part of these IRP rules, in which utility and non-utility stakeholders have an opportunity to

provide input into the development of the Integrated Resource Plans developed under these rules.

e) Commission – The Louisiana Public Service Commission.

f) Demand-side:

i) Management – All activities or programs undertaken to influence the amount and timing of electricity use. Note that the term "demand-side management" is often used in a general way to refer to all energy efficiency and load-management programs.

ii) Measure – Any device, technology, or operating procedure that makes it possible to deliver an equivalent level and quality of energy service while permitting the customer to use less energy or peak demand than would otherwise be required.

iii) Market Segment - A portion of the total customer load, which may be targeted for specific DSM programs. Market Segments are generally differentiated by customer class (residential, small C&I, large C&I), or other customer distinctions.

iv) Program – This is a collection of demand-side measures designed to operate as a single program, which serves to reduce a utility's capacity or energy requirements.

v) Portfolio - The totality of the utility's efforts to promote demand-side management.

g) Demand Response – Load management programs that have the intended goal of reducing or shifting load from hours with high electricity costs and/or reliability problems. Demand Response programs may include direct load control (such as air conditioners and water heaters), or incentive rates designed to induce lower electricity use at times of high wholesale market prices or when system reliability is jeopardized.

h) Energy Efficiency - Permanent changes to electricity use through replacement with more efficient end-use devices or more effective operation of existing devices, and any program or resource defined as an Energy Efficiency resource in any Energy Efficiency rule(s) issued by the Commission. Generally this type of resource results in reduced energy consumption across all hours rather than just event-driven targeted load reductions in specific hours.

i) Integrated Resource Planning – Integrated Resource Planning or IRP is a type of utility planning process that develops long-range resource plans by seeking

the optimal combination of resources (including demand, supply-side, and possibly other options) to meet forecasted load requirements at the lowest reasonable total cost, subject to various objectives and constraints, including but not limited to reliability, planning, regulatory, environmental and operational requirements. At times, and with proper justification, a utility may select resource options that are not exclusively least cost, for example, if the utility is able to justify that such selection is consistent with reliability, planning, regulatory, environmental and operational objectives or constraints, and will reduce the risk of customers incurring higher costs under certain scenarios.

j) IRP Report - The document that describes how the utility plans to meet its forecasted load requirements on a reliable and economic basis. The report should fully describe input data assumptions used, modeling methodologies relied on, evaluations performed, results produced, and conclusions reached, with regard to the selection of the utility's long-term resource plan.

k) Planning Period – The period for which resources must be planned to meet customer load requirements. The default planning period for the IRP is 20 years, but the utility may use an alternative period if it can provide justification supporting its use. Such justification should be included in the utility's IRP Report. In addition, a five-year Action Plan should be created and included as part of the IRP Report. The Action Plan should describe the specific actions that the utility expects to take during the first five years of the planning period in order to fulfill the requirements of the IRP.

l) Power Purchase – A transaction to purchase capacity and/or energy from another electric power supplier.

m) Screening Tests: These are evaluations that should be performed to determine which resource options should be eligible for further consideration in the remaining steps of the utility's IRP process.

Demand-side screening should be performed based on industry standard screening tests such as the California Standard Practice Tests. The California Public Utility Commission has published guidelines for evaluating DSM programs in its *Standard Practice for Cost-Benefit Analysis of Conservation and Load Management Programs,* which was first published in February 1983, and most recently updated in 2001.[5]

Supply-side screening should also be based on industry standard methods. For example, a common practice in screening supply-side alternatives is to compare alternatives based on a levelized cost or a present value analysis.

[5] http://www.energy.ca.gov/greenbuilding/documents/background/07-J_CPUC_STANDARD_PRACTICE_MANUAL.PDF

n) Stakeholders: This includes representatives from regulatory agencies, the utility performing the IRP, retail, wholesale and transmission customers of the utility, consumer and environmental advocacy groups that are duly constituted and organized as such and whose members are located within the service territory of the utility, and any other Party In Interest eligible to appear in Commission proceedings pursuant to Rule 10 of the Rules and Practice and Procedure of the Louisiana Public Service Commission.

o) Supply-side Resource - An electric generating unit, either owned or operated by the utility, or a capacity purchase. Capacity upgrades and retirements of existing supply-side resources are issues typically considered in a utility's IRP.

p) Utility - any electric utility furnishing service within the State of Louisiana and subject to the jurisdiction of the Commission.

3) Overview of the IRP Process

The overall objective of the IRP Process is to evaluate a comprehensive set of potential resource options, including supply-side, demand-side and economic transmission resource options, to determine a base or "reference resource" plan that offers the most economic and reliable combination of resources satisfying the forecasted load requirements.[6] The process shall account for significant constraints such as planning, regulatory, operational, reliability and environmental requirements, and shall take into account the sensitivity of the resource plan to variations in assumptions such as load forecasts, fuel costs, market prices, construction costs, environmental regulations, and other relevant assumptions. The process should also be flexible to account for changing conditions that affect the planning process.

An overview of the IRP process is as follows:

a) A forecast of peak load and energy requirements shall be developed.

b) The condition of all existing resources, including existing owned generating units, purchase and sale transactions, and demand-side resources shall be evaluated. Additionally, any planned additions and retirements shall be identified.

c) The amount of capacity required to serve the utility's forecasted load requirements shall be determined taking into consideration the utility's reliability requirements, existing supply and demand-side resources, and any planned additions and retirements (both supply-side and demand-side).

[6] Typically all generation resources will require transmission costs and those costs should be considered in the analysis. At times, there may be large transmission projects that could provide access to economic generation resources, and it may be desirable to treat those projects as separate resource options in the optimization process.

d) Potentially viable resource alternatives shall be identified (both supply-side and demand-side) for further consideration of satisfying the utility's resource needs over the planning period.

e) In the event the list of viable resource alternatives is large, a screening process may be employed to narrow the list of options (both supply-side and demand-side).

f) An optimization analysis may be used to identify the least cost set of resource options that satisfy the utility's load requirements over the planning period and that meet all specified constraints (e.g. reliability, operational, environmental, etc.). Normally, the resource plan that meets all constraints, and has the lowest net present value revenue requirement considering all relevant costs (fuel, O&M, capital and environmental), is considered the initial reference resource plan at this stage of the analysis.

g) The reference resource plan is further analyzed by conducting sensitivity and scenario analyses. The purpose is to examine how the reference plan would be affected by changes in input assumptions, and to evaluate alternative resource plans that would be more economic based on different assumptions. As a result of these analyses, modifications may be made to the reference resource plan.

h) The remaining step of the IRP process is to develop an Action Plan that details the specific actions the utility expects to perform to implement the IRP during the first five years of the planning horizon. The action plan serves to guide the utility's planning and decision-making process following the completion of the IRP, though it is not intended to replace or modify the normal docketed resource certification process as governed by various applicable LPSC General Orders.

The following sections provide more detailed requirements regarding the IRP process, including reporting requirements for information that must be included in the IRP Report.

4) Historic and Forecast Peak Demand and Energy

This section describes in additional detail the load forecast requirements, and explains the information that should be included in the IRP Report concerning both the utility's actual historical load and its forecasted load.

a) Historic Peak Demand and Energy. Historic data shall be reported covering the ten year period prior to the first year of the IRP planning period, and shall include:

i) The total annual energy consumption for the utility and for each customer class;

ii) The summer and winter utility peak demands. Also coincident peak demands for each customer class shall be provided, to the extent the utility develops this information by customer class;[7]

iii) Monthly energy consumption for the utility and for each customer class.

b) Prior Load Forecast Evaluation. Each IRP Report shall contain an evaluation of the previous IRP peak demand and energy forecast including:

i) An assessment of the annual accuracy of the previous IRP forecast;

ii) An explanation of the cause of any significant deviation between the previous IRP forecast and the actual annual peak demand and energy that occurred;

iii) An explanation of revisions to subsequent load forecast methodologies and assumptions utilized to correct for deviations in the prior IRP load forecast, if the utility determines that a change in the process is required;

iv) An explanation of the impact that demand-side programs, interruptible loads, or other important factors had on the prior load forecast.

c) Forecast Load Data

i) All energy and peak demand forecasts shall be developed for each year of the IRP planning period.

ii) The load forecasts shall be weather normalized and the IRP Report shall include the following information for the planning period:

(1) An explanation of the methodologies and processes used to develop the load forecast, including the method used to forecast on a weather normalized basis;

(2) The significant determinant variables that were incorporated in the load forecast methodology;

(3) The total annual energy consumption of electricity for the utility and for each customer class;

[7] The utility shall not be required to adjust its load research or forecasting methodology to calculate or estimate metrics by customer class, if it does not already do so.

(4) The summer and winter utility peak demands. Also coincident peak demands for each customer class, to the extent the utility develops this information by customer class;[8]

(5) Monthly energy consumption for the utility and for each customer class; and,

(6) The annual load factor for the utility and for each customer class, to the extent the utility develops this information by customer class.

iii) Additional Load Forecast Documentation. Each IRP Report shall contain the following additional load forecast information:

(1) A description of the impact that demand-side programs, interruptible loads, and other important factors are expected to have on the load forecast.

(2) A discussion of the amount of line losses included in the forecast, including the extent to which the forecast includes the effects of current and planned loss reduction programs.

5) Existing Resource Evaluation

This section describes the existing resource evaluation that shall be performed, and discusses information that shall be included in the IRP Report.

a) Existing Supply-Side Resources. The utility shall evaluate and discuss in its IRP Report all existing supply-side resources, including:

i) Utility-owned generation;

ii) Power purchase transactions of any type, one year or longer in duration, from any supplier;

iii) Sale transactions of any type, one year or longer in duration, to any purchaser;

iv) Exchange energy;

v) Cogeneration;

vi) Interruptible capacity;

vii) Pooling or coordination agreements that reduce resource requirements;

[8] Ibid.

viii) Any other supply-side resources.

b) Existing Supply-Side Resources. The following information concerning supply-side resources shall be supplied:

i) Resource type;

ii) Capacity;

iii) Fuel type;

iv) Ownership information;

v) Location (Parish, County and State);

vi) Commercial operation date;

vii) Condition of the resource;

viii) Expected retirement date for any resource expected to retire within the next ten years, and an explanation of the reason for the retirement;

ix) The utility shall also describe any important changes to the resources that occurred since the last IRP Report was filed or expected to occur prior to when the next IRP Report will be filed.

c) Existing Demand-Side Resources. Information concerning existing demand-side resource shall be provided in the IRP Report in accordance with the requirements described in the then current Energy Efficiency rules promulgated and approved by the Commission.

d) Existing Transmission System. The IRP shall include the most recent long-term transmission plan and planning study prepared by the entity charged with performing transmission planning pursuant to the effective FERC-jurisdictional open access transmission tariff. Unless this information is included in the transmission planning study provided, the utility shall identify and describe significant transmission constraints and limitations within its system, and identify and describe any Reliability Must Run ("RMR") units that it operates. Furthermore, the utility shall discuss any actions that could be taken to eliminate the constraints, limitations, and RMR units.

6) Development of the Integrated Resource Plan

This section describes the development of each utility's IRP, and discusses information that must be included in each utility's IRP Report.

a) System Reliability Assessment. The utility shall determine the reliability of its system, which is then used as part of the determination of its resource needs. This determination may be based on the rules and requirements of the reliability coordinating group or a Regional Transmission Organization that the utility is part of, or based on a system reliability assessment. If the utility conducts a system reliability assessment, it shall specify the reliability criterion selected, which may be based on a one day in ten year LOLP criteria, or a similar industry standard criteria. The LOLP result may be used as a target LOLP requirement in further analyses, or it may be converted to a target reserve margin requirement.[9] The utility shall document in its IRP Report, the reliability target it used and provide details about how it arrived at the target. This documentation shall include a description of any analysis that was performed, the data assumptions that were used, and the results of the reliability assessment.

b) Resource Needs Assessment – A resource needs assessment shall be performed and shall consider factors including the utility's reliability target, the load forecast, the existing supply and demand-side resources, and any committed additions and retirements (both supply and demand-side). The result of the resource needs assessment will indicate the utility's capacity needs over the planning period. The utility's resource needs assessment shall be fully described in the IRP Report.

c) Identification of Viable Resource Alternatives - Viable resource alternatives (both demand-side and supply-side) shall be identified for further evaluation to satisfy the utility's resource requirements.

   i) Supply-side Options - Supply-side options shall include a wide range of potentially feasible resource types, including renewable and non-renewable options. For each potentially feasible supply-side resource option identified for further examination, the utility shall include in its IRP Report at least the following information:

      (1) Description of the option;

      (2) Resource type;

      (3) Capacity;

      (4) Fuel type;

[9] Another reliability criteria also sometimes used is an emergency unsupplied energy target.

(5) Heat rate and availability;

(6) Ownership information;

(7) Location (if identified);

(8) Anticipated life:

(9) Operating costs, including O&M, property taxes and capital additions;

(10) Capital Cost and AFUDC assumption;

(11) Potential environmental costs associated with the operation of the resource during the planning period; and,

(12) Any other information deemed pertinent by the utility.

ii) Demand-side Options - A wide range of potentially viable demand-side options shall be identified in accordance with the then current Energy Efficiency rules as promulgated and approved by the Commission.

d) Demand-Side Resource Evaluation – An evaluation of demand-side resources shall be conducted. The utility shall provide information in the IRP Report regarding its demand-side resource evaluation and the resources selected. Specific requirements concerning the evaluation that should be performed and information that should be provided in the IRP Report shall be included in the then current Energy Efficiency rules as promulgated and approved by the Commission.

e) Supply-Side Resource Evaluation - If a large number of potential supply-side alternatives are identified, supply-side options may be screened in order to reduce the number of options for further consideration. One approach for screening supply-side options is to compare the levelized revenue requirements over the life of the resource at varying levels of capacity factor. Typically, supply-side resource screening curves are developed and certain resources can be eliminated based on the screening curve evaluation. If the utility eliminates any supply-side resources based on its screening analysis, each such resource shall be discussed in the IRP Report and the reason for eliminating the resource shall be explained. Other screening approaches may be used; however, the utility shall provide an explanation of its rationale for using the selected approach.

f) Optimization Analysis. The utility may perform an optimization analysis to develop a recommended least-cost reference plan. The optimization analysis

may rely on an expansion planning model that automatically selects resources over the planning period to minimize costs, given a set of operating constraints such as the system planning reserve margin requirement, operating and fuel constraints, and any regulatory policy constraints in effect at the time the IRP is conducted (for example, environmental regulations). The result of this analysis is the determination of an initial reference resource plan. The technique that is used to select resource options, including any optimization analysis, shall be fully described in the IRP Report, with particular emphasis focused on how supply-side and demand-side resources were evaluated in a consistent manner.

g) Sensitivity and Scenario Analyses - The utility shall conduct sensitivity and scenario analyses of major assumptions that might affect the results of the reference resource plan.

i) Sensitivity Analysis - Sensitivity analyses shall be performed to determine the risk that the reference resource plan might be exposed to unacceptable cost increases under certain conditions, and to evaluate alternative resource plans that would be more economic given the alternative assumptions. Though other assumptions may be considered, the following are often evaluated in sensitivity analyses in utility IRP studies:

(1) fuel prices;

(2) loads;

(3) capital costs for new generation resources;

(4) inflation and other financial parameters;

(5) probable costs of environmental regulations.

ii) Scenario Analysis - The IRP shall also include analyses of the impacts on the reference resource plan, by developing other alternative resource plans under consistent alternative futures involving changes of multiple input assumptions. For example, a potential Federal CO_2 policy may be considered and may require numerous changes to assumptions such as coal prices, gas prices, load growth, etc. Consideration of scenarios such as this may lead to entirely different resource plans, which should be analyzed and compared to the initial reference plan.

iii) An objective of these sensitivity and scenario analyses is for the utility to evaluate the robustness of its reference resource plan to alternative assumptions, and to consider whether any changes to the reference plan

should be made. The sensitivity and scenario analyses shall be fully described in the IRP Report.

h) Final Expansion Plan Selection Process – The next step is the selection of the final reference resource plan based on the optimization analysis, sensitivity and scenario analysis, and any other analyses the utility deems necessary. It is clearly understood that this is only a reference resource plan that will serve to guide the request for proposal ("RFP") competitive solicitation process, which utilities must follow for actual resource selection, pursuant to the Commission's MBM and 1983 General Order, as amended. Some judgment may be used in the Final Expansion Plan Selection Process in order to account for such factors as the potential exposure of customers to rate shocks, compliance with uncertain alternative-resource mandates and environmental regulations, and the utility's ability to finance the expansion plan. The IRP Report shall discuss the specific methodological approach and decision-making process followed to select the final IRP reference resource plan.

i) Revenue Requirements - The IRP Report shall include projections of annual and net present-value revenue requirements, disaggregated by cost category (e.g., generation capital recovery, transmission capital recovery, fuel, energy-efficiency investments, and possibly other categories defined by the utility) for the reference resource plan and the alternative resource planning scenarios evaluated. The IRP Report shall also include some measure of rate impacts for the reference resource plan and the alternative resource planning scenarios.

7) Development of the Action Plan

The final step of the IRP process is to develop an action plan, which creates a link between the Company's preferred portfolio and the specific implementation actions that need to be performed during the first five years of the planning period. The action plan is not intended to replace or modify the normal docketed resource certification process as governed by various applicable LPSC General Orders. The action plan shall be included in the IRP Report, and at a minimum, shall include the following elements:

a) A timetable indicating important activities or milestones related to solicitations, permitting requirements, construction activities, or other important events. This shall apply to potential acquisitions of demand-side and supply-side resources, retirements, power purchase agreements, or any other resource commitments. This information shall be provided for any activities that will be underway or planned to take place within the action plan period.

b) A description of the potential activity. Included with this information shall be a description of the activity, the amount of capacity involved, when the

activity is projected to be completed, and other details that the utility deems relevant.

c) The action plan shall discuss permitting issues or other regulatory actions that are required in order for the resource action to take place.

d) The action plan shall account for environmental impacts and shall discuss the plans to meet environmental regulatory requirements at existing resources subject to such requirements.

e) The action plan shall provide any other information as may be required by the Commission.

8) Reporting Requirements

a) Some of the information required to be included in the utility's IRP Report is discussed above in Section 4 concerning load data, Section 5 concerning the existing resource evaluation, Section 6 concerning the development of the IRP, and Section 7 concerning the Action Plan.

b) The IRP Report shall include a description of all models and methodologies used in performing the IRP, along with the utility's reasons for choosing those models and methodologies.

c) The IRP Report shall include an explanation of key data assumptions and judgments used in the IRP process, and how those assumptions and judgments were incorporated into the analyses. Data assumptions that shall be reported, include:

i) Fuel costs, including existing fuel contracts;

ii) Existing generating unit and transaction characteristics;

iii) Load forecast;

iv) Transmission topology;

v) QF/Merchant considerations;

vi) Renewable Resource considerations;

vii) Environmental issues;

viii) Financial information, including:

(1) The general rate of inflation;

(2) The AFUDC rates used in the plan;

(3) The cost of capital rates used in the plan (debt, equity, and weighted) and the assumed capital structure;

(4) The discount rates used in the calculations to determine present worth; and,

(5) The tax rates used in the plan.

d) The IRP Report shall include documentation of all analyses leading to recommendations to retire, life-extend or otherwise make major investments in existing generating units. The documentation shall include a complete description of all assumptions, models and results determined from these analyses;

e) All IRP Report filings shall include both a public version and, to the extent there is confidential information, a confidential version of the Report, filed in accordance with Rule 12.1 of the Commission's Rules of Practice and Procedure.

9) Collaborative Process and Stakeholder Comments

a) As stated elsewhere in these rules, a collaborative process shall be utilized, to provide stakeholders with a reasonable opportunity to meet with the utility and provide input into the development of the utility's IRP. This will be discussed further below in the next section.

b) In addition to participating in collaborative discussions stakeholders shall also have the opportunity to file written recommendations regarding the specific data assumptions and methods to be used in the IRP.

c) Regardless of whether the utility adopts the recommendations, the utility shall include a section in the IRP Report documenting all of the stakeholder's recommendations and explaining the Company's reasons for accepting or rejecting each recommendation.

10) IRP Schedule

a) Within sixty (60) days of the Commission's issuance of an order in this present docket, each jurisdictional electric utility shall be required to file a simplified IRP Report that describes its most recently developed long-range resource plan based on whatever resource planning process the utility currently relies on. The Commission does not anticipate that any additional studies will have to be performed to develop this long-range resource plan, as

resource planning is already performed on an on-going basis, and it is expected that utilities have already developed such resource plans. The initial IRP Report shall include:

i) a description of the load forecast and forecasting methodology;

ii) a summary of existing resources and transactions;

iii) a description of key input data assumptions;

iv) an explanation of the method that had been used to develop the long-range resource plan, including discussion of the modeling tools that had been used and the studies that had been performed to arrive at the resulting long-range resource plan; and,

v) a summary of the key results including the resulting long-range expansion plan.

b) Staff will review each utility's initial IRP Report to ensure it contains the required information. Should Staff identify any omissions, it will inform the utility about them. Once the utility addresses any deficiency to Staff's satisfaction, no further action will be required by the utility. Staff will then inform the utility in writing that the IRP is complete.

c) The utility will follow the schedule below to perform the first full IRP cycle (i.e. to conduct the complete IRP process). This cycle shall commence no later than eighteen (18) months after issuance of a final IRP General Order in this rulemaking. Each successive IRP cycle will begin no later than four (4) years after the request to initiate the prior IRP cycle.

d) Each full cycle will begin by the utility filing with the Commission Secretary a Request to Initiate IRP Process. The filing date of the Request shall be the "IRP Cycle Start Date" referenced in the Schedule of Events table below. The Request to Initiate IRP Process filing shall contain a schedule in accordance with the table below for completing the utility's IRP process; however, Commission Staff may allow a utility to deviate from the schedule in Section 10, with regard to the number and timing of events, if it finds good cause for such deviation. The filing shall also contain a Proposed Confidentiality Agreement to protect confidential information in accordance with the Commission's Rules of Practice and Procedure and the Commission's General Order governing the treatment of confidential information[10]. Also, in accordance with the schedule included in the table below, the utility shall file data assumptions to be used in the IRP and a description of the studies to be performed. The schedule shall also be published on an IRP website that the utility maintains for communicating information regarding its IRP process.

[10] LPSC General Order dated August 31, 1992.

e) Each IRP Process, as contemplated by this section will be docketed as a Staff-level proceeding beginning with the letter "I". An Administrative Law Judge will only be assigned in the event of a discovery or procedural dispute, or if so ordered by the Commission, at which time the docket would convert to a "U" docket.

f) The following table provides the relative schedule to follow for the full IRP process.

Schedule of Events

Event	Description	Number of Months from IRP Filing Date
1	Utility submits its request to initiate the IRP process, which should specify dates in accordance with this schedule of events, and a non-disclosure agreement.	At filing date
2	Utility files data assumptions to be used in the IRP and a description of studies to be performed.	1
3	Utility holds first Stakeholder Meeting.	2
4	Stakeholders may file written comments.	4
5	Draft IRP report published.	12
6	Utility holds second Stakeholders Meeting.	13
7	Stakeholders may file comments about the draft IRP Report.	15
8	Staff files comments about draft IRP Report.	16
9	Final IRP Report filed by the utility.	19
10	Stakeholders submit list of disputed issues and alternative recommendations.	21
11	Staff submits recommendation to the Commission including whether or not a proceeding is necessary for the resolution of disputed issues.	22

12	Commission Order acknowledging the IRP or setting disputed issues for hearing.	24

i) Event 1 – Utility initiates the IRP cycle by submitting its request including a timeline and a Proposed Confidentiality Agreement, if applicable.

ii) Event 2 - In accordance with the requirements of the Confidentiality Agreement, the utility shall publish the data assumptions it intends to use and a description of studies it plans to perform as part of its IRP process. This will allow Stakeholders the opportunity to review that information and prepare for the first Stakeholder Meeting with the Company.

iii) Event 3 - Stakeholders will meet with the utility to discuss the initial data assumptions that will be used and the sensitivity cases that will be performed in the IRP. This will allow stakeholders the opportunity to provide input by suggesting alternative data assumptions and sensitivity cases for the utility to consider.

iv) Event 4 - Stakeholders shall have the opportunity to file written recommendations requesting use of specific data assumptions and sensitivity cases by the utility. The utility will be required to consider the recommended data assumptions and sensitivity cases, but the utility will have no obligation to adopt them. Regardless of whether the utility adopts the recommendations, the utility will be required to include a section in the IRP Report documenting all of the stakeholder's recommendations, and explaining the Company's reasons for accepting or rejecting each recommendation. Stakeholder involvement is intended to be a collaborative process that will provide valuable insight regarding the utility's IRP.

v) Event 5 - The utility will conduct its IRP analysis and will write its IRP Report. The deadline for this event is the date when the utility shall publish its Draft IRP Report.

vi) Event 6 - Stakeholders shall have the opportunity to meet with the utility to discuss the Draft IRP Report.

vii) Event 7 and 8 - Stakeholders and Staff shall have the opportunity to review the Company's Draft IRP Report and file comments. Staff's review is primarily intended to determine whether the utility met the requirements established in these IRP rules. However, Staff shall not be limited by this and may provide additional comments if it deems it appropriate to do so. Staff may also take the Stakeholders comments into consideration as it develops its own comments.

viii) Event 9 - The Final IRP Report will reflect any changes that the utility makes in response to recommendations in Staff's and Stakeholders comments. The utility will be free to implement any changes to its IRP process that it chooses to, as recommended by Staff or the Stakeholders; however, the utility will be under no obligation to do so. Regardless of whether the utility chooses to implement any changes, the utility will be required to include a section in the Final IRP Report documenting all of Staff's and the Stakeholder's recommendations, and explaining the Company's reasons for accepting or rejecting each recommendation. Any changes to the Draft IRP Report made in response to Stakeholder or Staff's comments, or any other changes made by the utility to the Draft IRP Report, shall be clearly identified in some manner such as by providing a redline version of the Final IRP Report.

ix) Event 10 - Stakeholders will submit a list of disputed issues and alternative recommendations.

x) Event 11 - Staff will either recommend that the Commission acknowledge the IRP filed by the utility, or recommend a resolution of disputed issues.

xi) Event 12 - If the Commission determines there are any disputed issues it will need to resolve, it will establish a procedural schedule to address the issues. Once all issues are resolved, the Commission will issue an acknowledgement that the utility's IRP process and its IRP Report have fully complied with the requirements of these IRP rules, though the acknowledgement will not constitute Commission approval of the IRP. The Commission may also, at its discretion, provide recommendations to the utility for improvements to the utility's IRP inputs and process, including the IRP Report. Any such recommendations may be considered in any future Commission proceedings concerning the resource plans of the utility.

11) Integrated Resource Plan Update

a) If the utility desires, it <u>may</u> submit an updated IRP prior to the required submission of its next IRP. Reasons that might warrant the utility considering submitting an updated IRP include:

i) It anticipates submitting an application for a certificate to construct or purchase a supply-side or demand-side resource that was not previously included as part of the IRP;

ii) It anticipates the need to release an RFP for a demand-side or supply-side resource, which was not previously included as part of an integrated resource plan;

iii) The basic data used in the formulation of its last IRP requires significant modification that affects the choice of a resource or use of an RFP that was included as part of the integrated resource plan.

b) The Commission maintains the authority to require the utility to file an updated IRP, should it determine that conditions warrant the utility doing so.

c) Unless the Commission notifies the utility of any specific requirements, each utility shall determine which components of the IRP analysis to incorporate in any update performed. The filing of an IRP update does not alleviate the utility's obligation to file a new, complete IRP every three years.

12) Amendments to these IRP Rules

These Rules may be amended at any time by the Commission as it deems necessary.

13) References that were relied upon in developing these rules:

a) Georgia State Code - O.C.G.A. § 46-3A-1 – Chapter 3a covers Integrated Resource Planning - (http://www.lexis-nexis.com/hottopics/gacode/default.asp Search for 46-3a);

b) Georgia Public Service Commission Rules – IRP Rules - 515-3-4 (http://rules.sos.state.ga.us/cgi-bin/page.cgi?g=GEORGIA_PUBLIC_SERVICE_COMMISSION%2FGENERAL_RULES%2FINTEGRATED_RESOURCE_PLANNING%2Findex.html&d=1);

c) Utah Public Service Commission Order – Docket No. 90-2035-01 – Report and Order on Standards and Guidelines Concerning an Integrated Resource Plan for PacifiCorp – June 18, 1992. (Available as a word document);

d) Arkansas Resource Planning Guidelines for Electric Utilities – Approved in Docket 06-028-R, January 4, 2007 (http://www.apscservices.info/Rules/resource_plan_guid_for_elec_06-028-R_1-7-07.pdf);

e) Comments of Parties filed in this docket - LPSC Docket R-30021 – November 13, 2007, November 12, 2008; January 12, 2009, October 14, 2011, October 28, 2011; and,

f) Technical Conference – LPSC Docket R-30021 - May, 12, 2008.