Entergy Services, Inc.
639 Loyola Avenue (70113)
P.O. Box 61000
New Orleans, LA 70161
Tel 504 576 4235
Fax 504 576 5579
jbilbe@entergy.com

Jason M. Bilbe
Assistant General Counsel
Legal Services - Regulatory

February 28, 2014

Via Hand Delivery
Ms. Terri Lemoine Bordelon
Records and Recording Division
Louisiana Public Service Commission
Galvez Building, 12th Floor
602 North Fifth Street
Baton Rouge, Louisiana 70802

Re: 2015 Integrated Resource Planning ("IRP") Process for Entergy Louisiana, LLC and Entergy Gulf States Louisiana, L.L.C. Pursuant to General Order April 20, 2012
LPSC Docket No. I-33014

Dear Ms. Bordelon:

During the January 22, 2014 Stakeholder Meeting in the above-captioned docket, a number of stakeholders requested additional data and information from Entergy Louisiana, LLC ("ELL") and Entergy Gulf States Louisiana, L.L.C.'s ("EGSL"). Enclosed are four documents that ELL and EGSL have prepared in response to those stakeholder requests: (1) a document titled "ELL's and EGSL's Responses to January 22, 2014 Informal Stakeholder Questions"; (2) a Summary Document; (3) a PowerPoint presentation, some of which contains HSPM information; and (4) an HSPM Excel workbook.

Two copies of the Confidential Versions of the above-identified PowerPoint presentation and Excel workbook are enclosed, and they are being provided to you under seal pursuant to the provisions of the LPSC General Order dated August 31, 1992, and Rules 12.1 and 26 of the Commission's Rules of Practice and Procedure. The confidential materials included in this submission consist of competitively sensitive projections, as well as competitively-sensitive cost and market information, the disclosure of which may create an artificial target for suppliers in an otherwise-competitive wholesale market that are required to be provided on a confidential basis. These materials accordingly are confidential and commercially sensitive. The public disclosure of the information contained herein would subject ELL and EGSL and/or their customers to a substantial risk of harm. Accordingly, we request that these materials remain confidential.

Please retain the original Confidential Versions for your files and return a date-stamped copy to our courier. The Confidential Versions of these documents will be provided to the parties who have executed the applicable Confidentiality Agreement in this docket.

Additionally, below is a revised IRP Schedule of Events/Timeline, filed in accordance with the Report of Stakeholder Meeting and Notice of Suspension of IRP Timeline issued by Staff on February 7, 2014:

Filing initiating First Full Cycle	October 21,2013 (already completed)
File data assumptions and description of studies to be performed	December 20, 2013 (already completed)
First Stakeholder meeting	January 22, 2014 (already completed)
Stakeholder written comments due	May 1, 2014
Publish draft IRP reports	January 1, 2015
Second Stakeholder Meeting	February 2015 (date TBD)
Stakeholder comments on draft IRP reports due	April 1, 2015
Staff comments on draft IRP reports due	May 1, 2015
Final IRP reports due	August 3, 2015
Stakeholder lists of disputed issues and alternative recommendations due	October 1, 2015
Staff recommendation to Commission on whether a proceeding is necessary to resolve issues	November 2, 2015
Commission order acknowledging IRPs or setting procedural schedule for disputed issues	January 4, 2016
Filing initiating 2nd full cycle	October 23, 2017

Should you have any questions regarding the enclosed documents, please do not hesitate to contact me.

Sincerely,

Jason M. Bilbe

JMB/tm
Enclosures

cc: Official Service List

CERTIFICATE OF SERVICE
LPSC Docket No. I-33014

I, the undersigned counsel, hereby certify that a copy of the above and foregoing has been served on the persons listed below by facsimile, electronic mail, hand delivery and/or by mailing said copy through the United States Postal Service, postage prepaid, and addressed as follows:

Melanie A. Verzwyvelt
Staff Attorney
Louisiana Public Service Commission
P.O. Box 91154
Baton Rouge, LA 70821-9154

Tulin Koray
Economics Division
Louisiana Public Service Commission
P.O. Box 91154
Baton Rouge, LA 70821-9154

Donnie Marks
LPSC Utilities Division
Louisiana Public Service Commission
P.O. Box 91154
Baton Rouge, LA 70821

James M. Ellerbe
Marathon Petroleum Company LP
539 South Main Street
Findlay, Ohio 45840-3295

Katherine W. King
J. Randy Young
Carrie R. Tournillon
Kean Miller LLP
P.O. Box 3513
Baton Rouge, LA 70821

Kimberly A. Fontan
Entergy Services, Inc.
4809 Jefferson Highway
Mail Unit L-JEF-357
Jefferson, LA 70121

Kathryn J. Lichtenberg
Karen H. Freese
Jason M. Bilbe
Entergy Services, Inc.
639 Loyola Avenue, 26th Floor
P.O. Box 61000
Mail Unit L-ENT-26E
New Orleans, LA 70161-1000

John H. Chavanne
Chavanne Enterprises
111 West Main Street, Suite 2B
P.O. Box 807
New Roads, LA 70760-0807

Chairman Eric F. Skrmetta
Office of the Commissioner
District I – Metairie
433 Metairie Road, Suite 406
Metairie, LA 70005

Commissioner Scott A. Angelle
Office of the Commissioner
District II – Baton Rouge
Post Office Box 2681
Baton Rouge, LA 70821

Commissioner Lambert C. Boissiere, III
Office of the Commissioner
District III – New Orleans
1450 Poydras Street, Suite 1402
New Orleans, LA 70112

Vice-Chairman Clyde C. Holloway
Office of the Commissioner
District IV – Forest Hill
11098 Hwy. 165 South
Forest Hill, LA 71430

Commissioner Foster L. Campbell
Office of the Commissioner
District V – Shreveport
Post Office Drawer E
Shreveport, LA 71161

Philip Hayet
Lane Kollen
Randy A. Futral
J. Kennedy and Associates, Inc.
570 Colonial Park Drive, Suite 305
Roswell, GA 30075

Rebecca E. Turner
Vice President
Regulatory Affairs & Market Design
Entegra Power Group LLC
100 South Ashley Drive, Suite 1400
Tampa, FL 33602

Thomas W. Milliner
Anzelmo, Milliner & Burke, LLC
3636 S. I-10 Serv. Rd., Suite 206
Metairie, LA 70001

Casey DeMoss Roberts
Executive Director
Alliance for Affordable Energy
2372 St. Claude Ave., #300A
New Orleans, LA 70117

Michelle Bloodworth
Senior Director, Power Generation
America's Natural Gas Alliance
710 8th Street NW, Suite 800
Washington, DC 20001

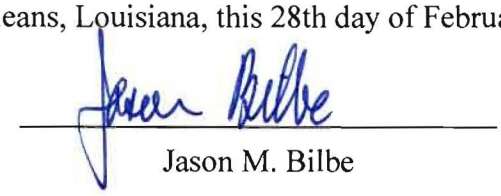
Gordon D. Polozola
NRG Energy, Inc.
General Counsel—South Central Region
112 Telly Street
New Roads, LA 70760

Robert P. Larson
Douglas A. Spaulding
Manager
Nelson Energy LLC
8441 Wayzata Blvd., Suite 101
Golden Valley, MN 55426

Casey Austin Roberts
Sierra Club Environmental Law Program
85 Second St., Second Floor
San Francisco, CA 94104

Haywood Martin
Sierra Club Delta Chapter Chair
P.O. Box 52503
Lafayette, LA 70505

New Orleans, Louisiana, this 28th day of February, 2014.



Jason M. Bilbe

LPSC DOCKET NO. I-33014
EGSL/ELL 2015 INTEGRATED RESOURCE PLAN

ELL'S AND EGSL'S RESPONSES TO JANUARY 22, 2014 INFORMAL STAKEHOLDER QUESTIONS

During the January 22, 2014 stakeholder meeting ("Stakeholder Meeting"), a number of stakeholders posed requests and questions to Entergy Louisiana, LLC ("ELL") and Entergy Gulf States Louisiana, L.L.C. ("EGSL")(collectively, the "Companies"), and the Companies hereby provide responses to those informal requests/inquiries.[1]

A theme in the Stakeholder Meeting comments was that stakeholders were interested in reviewing the Companies' "inputs" into the AURORA model, which is an important tool, but not the only tool that the Companies will use to develop the IRP preferred portfolio. Included in those "inputs" are the "key data assumptions" listed in Section 8(c) of the IRP Rules for Electric Utilities in Louisiana ("Rules") that were appended to the LPSC's April 18, 2012 General Order in this docket ("General Order"). As will be shown below and in the attached documents, the Companies are hereby providing all of the available, enumerated Section 8(c) "key data assumptions",[2] as well as a number of additional modeling inputs. Moreover, the Companies are providing descriptions of the scenarios and sensitivities to be analyzed, as well as many of the data inputs involved in that analysis. While IRP modeling is an iterative process and the above-identified inputs, scenarios and sensitivities are subject to change, the Companies nonetheless are providing a significant amount of data about which the stakeholders can provide comments.

Before responding to the specific inquiries, the Companies will briefly discuss the following three attachments to this document: (1) an HSPM PowerPoint presentation ("PowerPoint Presentation"); (2) an HSPM Excel workbook ("Workbook"); and (3) a Summary Document. The PowerPoint Presentation and the Workbook contain data that is responsive to Stakeholder questions, including data relating to IRP modeling inputs (including many of the inputs that will support scenarios and sensitivities as appropriate). The PowerPoint Presentation also contains descriptions of scenarios and sensitivities that the Companies plan to perform as a part of the IRP process. The Summary Document lists the IRP modeling inputs and provides information about those inputs. Specifically, while numerous "key data assumptions" and other inputs are being provided, not all of the modeling inputs, especially those around sensitivities/scenarios, are currently available. The Summary Document therefore has a "reference" column, and if there is a "check mark" in that column, then either the PowerPoint

[1] Because the Stakeholder Meeting was not transcribed, it is possible that the Companies did not capture all of the questions raised during the meeting. If a stakeholder believes that this document does not respond to a question raised during the Stakeholder Meeting, the stakeholder can contact the Companies.

[2] See the discussion below for an explanation as to how the Technology Assessment, which is scheduled to be updated by the end of March 2014, will provide Information relating to two of the Section 8(c) assumptions, "renewable resource considerations" and "environmental issues."

Presentation or the Workbook contains the input. A separate column identifies whether the inputs for sensitivities and scenarios are available, and if so, whether they are found in the PowerPoint Presentation or the Workbook. If a given input is not yet available, the Summary Document contains an estimate as to when that data will be available.

Below are the Companies' responses to the stakeholders' January 22 inquiries:

1. During the Stakeholder Meeting, the Companies confirmed that ELL and EGSL would each provide a separate IRP report. If it is determined in the future that EGSL and ELL will merge, such a merger could affect the Companies' decision to produce separate reports. After the Stakeholder Meeting, the Companies also provided to the stakeholders a copy of the ICF presentation that was made during the Stakeholder Meeting.

2. With respect to the Alliance for Affordable Energy's request that the IRP assume that carbon pricing would begin prior to 2023, the Companies have decided that they will wait until the Environmental Protection Agency issues its draft 111-D rules for CO2 New Source Performance Standards, which are scheduled to be issued in June of 2014. The Companies will review those draft Standards and determine whether they affect the Companies' current assumptions.

3. With respect to distributed generation, the IRP will reflect such generation in the IRP's load forecast. Because the Companies at this time have no plans to become suppliers of distributed generation such as rooftop solar or Combined Heat and Power, it does not seem reasonable to assume in the IRP that such distributed generation would be part of the Companies' supply-side portfolio. The load forecast, however, should reflect any decreased load that is assumed to result from customer-supplied distributed generation.

4. The Companies were also asked whether, as a part of the IRP, they will run sensitivities for the installed cost of available technologies. The Companies will run those sensitivities.

5. Based on comments that were made during the Stakeholder Meeting, the Companies have decided that they will rank results of ICF's DSM Potential Study based on the TRC test, as opposed to the PAC test.

6. The Companies were asked how the IRP would address transmission constraints, limitations, and "Reliability Must Run" issues. The PowerPoint Presentation provides details regarding the AURORA modeling process, and part of that presentation addresses transmission issues.

7. In response to an inquiry as to whether the draft IRP will show results for each year of the study, the Companies plan to provide annual data in its draft IRP, although some of that data might be designated HSPM/Confidential information.

8. The Companies were also asked during the Stakeholder Meeting to provide the merchant generation and QF assumptions that would be used in the IRP. See the attached Workbook.

9. As noted above, the Companies were asked to provide their IRP Aurora inputs, including the "key data assumptions" that are listed in Section 8(c) of the Rules. A number of those "key data assumptions", as well as numerous additional inputs and sensitivities are being provided, while other inputs/sensitivities/scenarios are not yet available. The attached Summary Document identifies the categories of inputs and notes whether those inputs are available. If they are available, they are contained in the attached Workbook or PowerPoint Presentation. If they are not available, the attached Summary Document identifies when those inputs are expected to be available. To the extent that a stakeholder has concerns about those inputs, those concerns can be addressed through written comments.
10. The Companies were also asked to provide, prior to the issuance of the draft IRP, their range of load forecasts. The attached Workbook contains annual peak, firm peak and annual energy forecasts. At this time, the Companies have completed the Reference Load forecast for the six operating companies, as well as for other load-serving entities in the modeled footprint. In addition for EGSL and ELL only, there is a forecast of annual peaks and annual energy by retail customer class. The Companies have not completed load forecasts to support other scenarios.

11. There was an inquiry regarding the outcome of the 2012 Baseload RFP involving 59 MW of capacity at Grand Gulf. Information regarding the outcome of that RFP can be found on the Companies' web site in the section relating to the 2012 Baseload RFP.

12. The Companies were asked to provide a schedule of generating unit retirements. A tab in the attached Workbook lists the total number of megawatts by year that are currently projected to be deactivated by the Entergy Operating Companies. The Workbook also contains certain deactivation assumptions for non-Entergy companies.

13. The Companies were asked about their assumptions regarding capacity from MISO North. The attached PowerPoint Presentation contains slides relating to the overall transfer limits between the various regions modeled, including direct transfer capability between the broad areas commonly referred to as MISO Midwest (also known as MISO North) and MISO South. Further, the attached Workbook contains the Companies' list of current supply-side resources, including capacity in the entire modeled footprint.

14. Rule 8(c) lists a number of "key data assumptions and judgments" that the "IRP Report shall include." The Companies were asked when they will provide those data assumptions and judgments. The responses are as follows:

Category	Companies' Response
i. Fuel Costs	See Summary Document & Workbook
ii. Existing generating unit &	

transaction characteristics	See Companies' response to Q13 & Summary Document
iii. Load forecast	See the Companies' response to Q10 & Workbook
iv. Transmission topology	See the attached Summary Document & PowerPoint Presentation
v. QF/Merchant Considerations	This is a subset of category (ii), above. See the Companies' response to Q8
vi. Renewable Resource Considerations	A "Technology Assessment", which included renewable resource considerations, was conducted in April 2013. The results of a screening level analysis for a broad set of resource options and the cost and performance capabilities of potential IRP Supply Side Resources were provided on slides 15-17 of the Companies' December 20, 2013 "Data Assumptions" presentation. Moreover, a Technology Assessment was conducted as a part of Entergy New Orleans, Inc.'s IRP, and that assessment can be found at http://www.entergy-neworleans.com/content/IRP/IRP_Technology_Assessment.pdf. Accordingly, through the ENOI assessment and the above-identified slides 15-17, the stakeholders have access to a number of renewable resource considerations. The Companies expect to update the April 2013 Technology Assessment by the end of March 2014, but at this time they do not expect significant changes from the April 2013 assessment.
vii. Environmental Issues	Two aspects of environmental considerations are inputs to the IRP process. One aspect is a forecast of emission allowance prices for SO_2, NOx and CO_2, and those forecasts are contained in the attached Workbook. The other environmental "input" is part of the technology assessment. As noted above, access to ENOI's technology assessment is being provided in this response, and that assessment identifies a number of environmental issues. Also as noted above, the Companies anticipate providing an updated technology assessment in March 2014. Environmental issues are also a risk factor that is considered in the IRP analysis. The risk factor is not

	an "input", and instead will be considered in IRP Scenario and Sensitivity Modeling, as well as in Preferred Portfolio development
viii. Financial Information	See Summary Document and Workbook

15. Rule 8(d) provides that the IRP Report will include documentation of all analyses leading to recommendations to retire, life-extend, or otherwise make major investments in generating units. The Companies were asked when that information will be provided. The Companies' current deactivation assumptions are being provided (see response to Q12, above). Recommended deviations, if any, from those current deactivation assumptions will probably not be available until the draft IRP report is presented. Any such recommended deviations would be outputs of the IRP process, as opposed to inputs.

16. The Companies were asked what sensitivities will be performed, when they will be performed, and whether stakeholders can recommend different sensitivities. As noted above, the attached PowerPoint Presentation contains descriptions of scenarios and sensitivities that the Companies plan to perform as a part of the IRP process. As is explained in the PowerPoint Presentation, the Companies will perform the sensitivities listed in Rule 6(g). After reviewing the PowerPoint Presentation, stakeholders may recommend changes to those sensitivities and/or propose different sensitivities in their written comments. The Companies will consider all stakeholder comments and recommendations. The results of the sensitivities are outputs of the IRP process, not inputs, and the Companies will provide the results of the sensitivity analyses as part of the draft IRP report. Stakeholders will be able to address those sensitivity results through future stakeholder comments.

17. The Companies were asked what assumptions would be used for reduced use of legacy gas-fired generating units. No "input assumptions" will be used. The AURORA modeling will project the amount of generation and ancillary services that legacy gas-fired generating units could be expected to provide.

18. As far as the requested baseline assumptions that will be used for upcoming capital investment for generation, transmission, and environmental regulations, those assumptions are contained in the attached Workbook.

19. The Companies were asked about the form in which they will produce the Action Plan that is required in Rule 7. One option for the Companies is to create Action Plans that are similar in form to that created by Entergy New Orleans in its IRP docket. As set forth in Rule 7, however, the Action Plan is the "final step of the IRP process", and the Action Plan "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." Because the Action Plan is the "final step" that will post-date the development of the IRP, the Companies have not decided the form in which the Action Plan will be developed.

20. The Companies were asked whether there will be separate IRP Reports and Action Plans for the Companies, and whether the Reports will include the other Entergy Operating Companies. The Companies currently intend to provide separate IRP Reports and Action Plans for ELL and EGSL. Those IRP Reports and their Action Plans will contain information relevant to ELL and EGSL. There will not be separate IRP Reports or Action plans for other Entergy Operating Companies.

21. The Companies were asked whether the draft IRP Report will include in the scenarios the economic results for each individual year, and whether, for each such year, the results will be provided for fixed, fuel and variable costs. The Companies do plan to provide economic results for each individual year, and fixed and variable cost results will be shown for each year. This detail may or may not be provided in the public report, but can be made available to stakeholders who sign a confidentiality agreement. The Companies have not yet made a decision about whether fuel costs will be broken out separately from other variable costs.

22. During the Stakeholder Meeting, the Companies provided responses to questions relating to (a) Slides 15-17 of their "Data Assumptions" presentation, (b) the CO2 price forecast on Slide 12 of that presentation, and (c) the AURORA model, so those responses will not be repeated here.

23. The Companies were asked the amount of QF generation that is now being scheduled as "Market Participant" versus the amount that is behind-the-meter. The attached Workbook identifies which QFs in MISO South are behind the meter QFs, and which have elected to participate in the MISO market (also known as "Hybrid" QFs).
24. The Companies were asked about the amount and nature of assumed existing remaining merchant generation that is available. Merchant generation information is contained in the attached Workbook.

25. The Companies were asked whether the load forecast slides (slides 9 and 10) of the Companies' January 22, 2014 "Data Assumptions" presentation included interruptible load. Slides 9 and 10 did include interruptible load in the reported peak loads and annual energy. As noted at the Stakeholder Meeting, the load forecast presented was prepared in the summer of 2013. It has been replaced with a new Reference Case load forecast that will be used as an input in the IRP. See response to Q10.

26. During the Stakeholder Meeting, the Companies provided responses to questions relating to (1) natural gas prices listed on Slide 11 of their "Data Assumptions" presentation, (2) coal fuel prices listed on Slide 6, (3) spot capacity prices listed on Slide 21, and (4) plans to build additional generation, so those responses will not be repeated here.

27. The Companies were asked about the anticipated impacts on the IRP from the "other considerations" listed on slide 24 of their January 22 "Data Assumptions" presentation. With respect to the effects of MISO implementation, we will model MISO in the IRP, and as we gain experience in the MISO market, that experience could affect how we model the IRP. See the attached PowerPoint Presentation. With respect to the potential

dissolution of the System Agreement, the Companies currently anticipate assuming a potential System Agreement termination date of February 15, 2019. That date is the logical extension of the fact that the Companies have requested FERC approval of a five-year System Agreement termination date, and the above date is consistent with the LPSC's request that the Companies provide notice of their intention to withdraw from that Agreement. The Companies have not yet determined how the potential merger of ELL and EGSL might affect the IRP. With respect to the three "other considerations", however, the Companies note that while those considerations will be factored into the IRP, they are not anticipated to drive the IRP results.

28. During the Stakeholder Meeting, the Companies confirmed that the next IRP process would be initiated in 2017, pursuant to the amended LPSC order. The Companies also briefly entertained a question about the Entergy 2014 Capacity RFP, which is the subject of a separate docket.

29. The Companies were asked about sensitivity cases to address the additional load that is anticipated from industrial plant expansions in Louisiana. The IRP's reference case will incorporate planned expansion, and the sensitivities will address upside and downside potential.

30. During the Stakeholder Meeting, the Companies were asked about topics irrelevant to the IRP, such as (a) what the Companies' transmission group will look like given the withdrawal of the ITC application; and (b) whether the Companies have additional divestiture or restructuring plans. The Companies briefly addressed those questions during the Stakeholder Meeting, and further responses are not necessary.

31. The Companies were asked to confirm that the DSM analysis will be consistent with (a) IRP Rule 3, Section 3; and (b) the Ratepayer Impact ("RIM") test. The Companies confirm that the DSM analysis will be consistent with all IRP Rules that apply to the DSM study. The Companies also anticipate that the DSM analysis will consider the RIM test, but the results of the RIM test analysis will not necessarily be dispositive on the level of DSM assumed in the IRP.

EGSL/ELL 2015 IRP Inputs Timeline & Status Report

LPSC Docket No. I-33014: Preliminary Subject to Change - February 28, 2014

Legend	
✓	Items complete or substantially complete*
	Underway/on track
	Additional items to be completed

Items are expected to be substantially complete by the dates shown

Status (Date Expected to Be Completed)				
Item #		Reference	Sensitivities / Scenarios	Deck with Current Assumptions
1	IRP Scenario Storylines & Proposed Sensitivities	✓	✓	PowerPoint Presentation
2	Inflation	✓	✓	Excel Workbook
3	Financial Factors (e.g. Discount Rates)	✓	✓	Excel Workbook
4	DSM Potential Study Inputs from SPO	3/31/2014	Not Applicable	Not Available Yet
5	Load Forecast (Entergy)	✓	3/31/2014	Excel Workbook (See Note 1)
6	Load Forecast (Non Entergy)	✓	3/31/2014	Excel Workbook
7	Henry Hub Gas Prices & Crude Oil Prices	✓	✓	Excel Workbook (See Note 1)
8	Delivered Coal Prices (Entergy)	✓	3/31/2014	Excel Workbook
9	Fuel Prices For Non Entergy Plants Methodology	✓	3/31/2014	PowerPoint Presentation
10	Nuclear Fuel Prices (Entergy)	✓	Not Applicable	Excel Workbook
11	Environmental Issues - CO2 Prices	✓	✓	Excel Workbook (See Note 1)
12	Environmental Issues - SO2 & NOx Prices	✓	Not Applicable	Excel Workbook
13	Utility Deactivation Schedule	✓	3/31/2014	Excel Workbook
14	Non Entergy Retirements	✓	3/31/2014	Excel Workbook
15	Current Entergy Power Purchase Agreements	✓	Not Applicable	PowerPoint Presentation
16	Technology Assessment/capital cost (Including renewables)	3/31/2014	Not Applicable	See Note 2
17	Short-Term Capacity Purchase Prices	✓	3/31/2014	Excel Workbook
18	Long-Term Capacity Purchase Prices (CT Replacement Cost)	✓	3/31/2014	Excel Workbook
19	MISO South Merchant and QF Considerations	✓	Not Applicable	Excel Workbook
20	Entergy/Non Entergy Existing Resource List & Characteristics	✓	Not Applicable	Excel Workbook
21	Transmission Topology (Including Upgrades)	✓	Not Applicable	PowerPoint Presentation
22	System and Area Reserve Requirements	✓	Not Applicable	PowerPoint Presentation
23	ICF Potential Study Analytics Results	4/30/2014	Not Applicable	Not Available Yet
24	ICF Potential Study Analytics Report	6/30/2014	Not Applicable	Not Available Yet

Note 1: There is also a graphical representation in the PowerPoint Presentation.

Note 2: In the December 20, 2013 Data Assumptions filing the results of a screening level analysis of a broad set of resource options and cost and performance information was provided from an April 2013 Technology Assessment. A comprehensive report of the 2012 Technology Assessment was published as part of the 2012 Entergy New Orleans IRP filing. It can be accessed at: http://www.entergy-neworleans.com/content/IRP/IRP_Technology_Assessment.pdf. An update of the Technology Assessment to support the EGSL/ELL IRP is currently under way with results expected by the end of March 2014. Results will be provided to stakeholders when the assessment is completed.

ENTERGY GULF STATES LOUISIANA, L.L.C. & ENTERGY LOUISIANA, LLC

LPSC DOCKET NO. I-33014

Portfolio Design Analytics (Scenarios & Sensitivities); AURORA Documentation

2014 EGSL & ELL Integrated Resource Plans

FEBRUARY 28. 2014

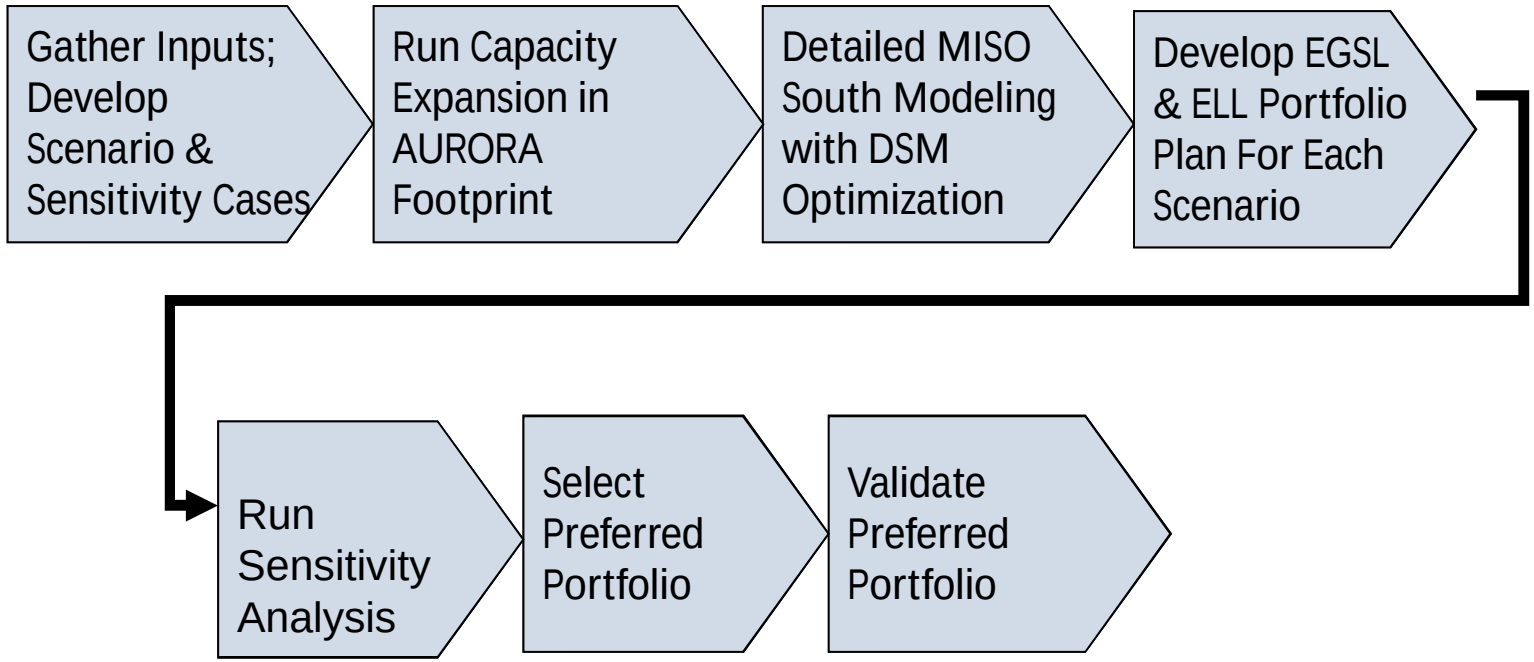
THIS VERSION HAS HAD BEEN REDACTED TO MAINTAIN CONFIDENTIALITY OF HIGHLY SENSITIVE PROTECTED MATERIAL PURSUANT TO THE CONFIDENTIALITY AGREEMENT IN THIS DOCKET. THE REDACTED MATERIAL IS NOTED. NOTE: ALL IRP MATERIALS ARE PRELIMINARY & SUBJECT TO CHANGE PRIOR TO THE FINAL REPORT FILING.

Entergy®

Portfolio Design Analytics (Scenarios & Sensitivities)

PORTFOLIO DESIGN ANALYTICS

As required in IRP Rule 6g, IRP analytics will rely on a combination of scenario and sensitivity analyses. The process will include seven broad steps:



The IRP is a dynamic process for long-range planning that provides for a flexible approach to resource selection. The Preferred Portfolio resulting from the IRP planning process provides guidance regarding long-term resource additions, but is not intended as a static plan or pre-determined schedule for resource additions. Actual portfolio decisions are made at the time of execution.

SCENARIOS AND SENSITIVITIES TO BE PERFORMED

The companies plan to examine four scenarios to assess alternative portfolio strategies under varying market conditions. The four scenarios are:

- Scenario 1
  - Reference Load, Gas, Oil, and Coal Prices
  - No direct CO_2 cap and trade or tax on existing resources or new resources but EPA CO_2 standards for new resources allowed go into effect as currently proposed.
  - Most renewable incentives allowed to sunset.
  - No new RPS Standards.
- Three additional scenarios listed below and described on the next page.
  - Scenario 2 (Industrial Renaissance)
  - Scenario 3 (Distributed Disruption)
  - Scenario 4 (Resource Shift)

The Sensitivity Analysis will consider the following uncertainties:

- Natural gas prices
- Coal prices
- Load (only change EGSL / ELL energy & peaks)*
- Capital cost for new generation
- General inflation and resulting cost of capital
- Implementation of CO_2 cost
- Gas and CO_2 combination**

*EGSL/ELL use MISO capacity market purchases/sales to ensure appropriate resource adequacy

**To the extent that there is a CO_2 cap and trade or tax it is assumed to apply to new and existing resources equally.

SCENARIO STORYLINES

	Scenario 2 Industrial Renaissance	Scenario 3 Distributed Disruption	Scenario 4 Resource Shift
General Themes	• U.S. energy boom continues with low gas and coal prices discounted to world prices. U.S. oil production remains strong but price stays linked to world market. • Low fuel prices drive high load growth especially in industrial class, but with Residential and Commercial class spillover benefits. • Higher capital cost for new power plants.	• States continue to support distributed generation. Consumers and businesses see it as a way to manage their own energy uses. • Medium-high oil prices drive consumer awareness across energy spectrum. • Overall economic conditions are steady with moderate GDP growth which enables investment in energy infrastructure.	• High natural gas exports and more coal exports lead to higher prices at home. • Slow economic growth due to higher energy prices. • Consumers and government look for utility transformation to cleaner and more stable fuels. • Conditions are ripe for renewables and new nuclear but their challenges remain.
Power Sales	• Power sales driven by industrial growth and modest rate increases due to low natural gas and coal prices.	• Power sales growth slows and ultimately turns negative. • Solar PV and Combined Heat and Power impact utility sales, however, most customers stay grid connected. • Customers seek maximum flexibility and reliability by relying on self generation and grid power to meet their needs.	• Slow economic growth leads to relatively low power sales.
CO_2 Policy	• Congress or the EPA ultimately passes a mild CO_2 cap and trade program (power sector only) effective in 2023.	• Congress or the EPA ultimately passes a mild CO2 cap and trade program (power sector only) effective in 2023.	• Congress takes control of CO2 cap and trade away from EPA and passes a Kerry -Lieberman style CO_2 program effective in 2023.
Energy Policy	• Most renewable energy subsidies sunset. • Not all states meet RPS goals.	• Net metering continues but issues related to cross subsidization are addressed. • Federal and state renewable subsidies continue	• Federal and state renewable subsidies continue • No new state RPSs.
Fuels	• Low fuel prices, but natural gas and coal still plentiful as exploration and production costs are also lower. Coal prices low to retain share.	• Natural gas prices are driven higher by EPA regulation of fracking & local opposition. Coal and oil prices also high.	• Natural gas, coal, and oil prices are high.

20 YEAR MARKET MODEL INPUTS (2015-2034)

	Scenario 1	Industrial Renaissance	Distributed Disruption	Resource Shift
Electricity CAGR (Energy GWh)	~0.8%	~TBD%	~TBD%	~TBD%
Peak Load Growth CAGR	~0.8%	~TBD%	~TBD%	~TBD%
Henry Hub Natural Gas Prices ($/MMBtu)	$4.89 levelized 2013$	Low Case $3.84 levelized 2013$	Same as Reference Case ($4.89 levelized 2013$)	High Case ($8.18 levelized 2013$)
WTI Crude Oil ($/Barrel)	$73.99 levelized 2013$	Low Case $69.00 levelized 2013$	Medium High ($109.12 levelized 2013$)	High Case ($173.71 levelized 2013$)
CO_2 ($/short ton)	None	Cap and trade starts in 2023 $6.70 levelized 2013$	Cap and trade starts in 2023 $6.70 levelized 2013$	Cap and trade starts in 2023 $14.32 levelized 2013$
Conventional Emissions Allowance Markets	CAIR & MATS	CAIR & MATS	CAIR & MATS	CAIR & MATS
Delivered Coal Prices – Entergy Owned Plants (Plant Specific Includes Current Contracts) $/MMBtu	Reference Case (Vol. Weighted Avg. $2.69 levelized 2013$)	Low Case (Vol. Weighted Avg. $TBD levelized 2013$)	Same as Reference Case (Vol. Weighted Avg. $2.69 levelized 2013$)	High Case (Vol. Weighted Avg. $TBD levelized 2013$)
Delivered Coal Prices – Non Entergy Plants In Entergy Region	Mapped to similar Entergy Plant	Mapped to Similar Entergy Plant	Mapped to Similar Entergy Plant	Mapped to Similar Entergy Plant
Delivered Coal Prices – Non Entergy Regions	Reference Case - Varies By Region	Low Case - Varies By Region	Same As Reference Case – Varies By Region	High Case – Varies By Region
Coal Retirements Capacity (GW)*	TBD	TBD	TBD	TBD
New Nuclear Capacity (GW)*	TBD	TBD	TBD	TBD
New Biomass (GW)*	TBD	TBD	TBD	TBD
New Wind Capacity (GW)*	TBD	TBD	TBD	TBD
New Solar Capacity (GW)*	TBD	TBD	TBD	TBD

*Figures shown are for the period 2015-2034 covering a sub-set of the Eastern Interconnect which is approximately 34% of total U.S. 2011 TWh electricity sales.
Note: Levelized prices refer to the price in 2013 dollars where the NPV of that price grown with inflation over the 2015-2034 period would equal the NPV of levelized nominal prices over the 2015-2034 period when the discount rate is 6.62%. (ELL WACC). Converting to EGSL WACC would lower the levelized value between 0.3% to 2.3%.

SENSITIVITY ANALYSIS

- Test sensitivity of objective function results of each portfolio by rerunning production cost and changing one or two variables.
- Run 15 sensitivity cases times 4 scenarios for a total of 60 cases. Yellow shading indicates the assumption in the respective scenario storyline.

	Scenario 1 (Reference)		
1 Natural gas prices	Reference	Low	High
2 Coal prices	Reference	Low	High
3 Load (only change EGSL/ELL energy & peaks)*	Reference	Scenarios 2, 3 and 4	
4 Capital cost for new generation	Reference	Low	High
5 General inflation and resulting cost of capital	Reference	Low	High
6 Implementation of CO2 cost	None	Reference	High
7 Gas and CO2 combination	Reference /None	Low /Reference	High /High

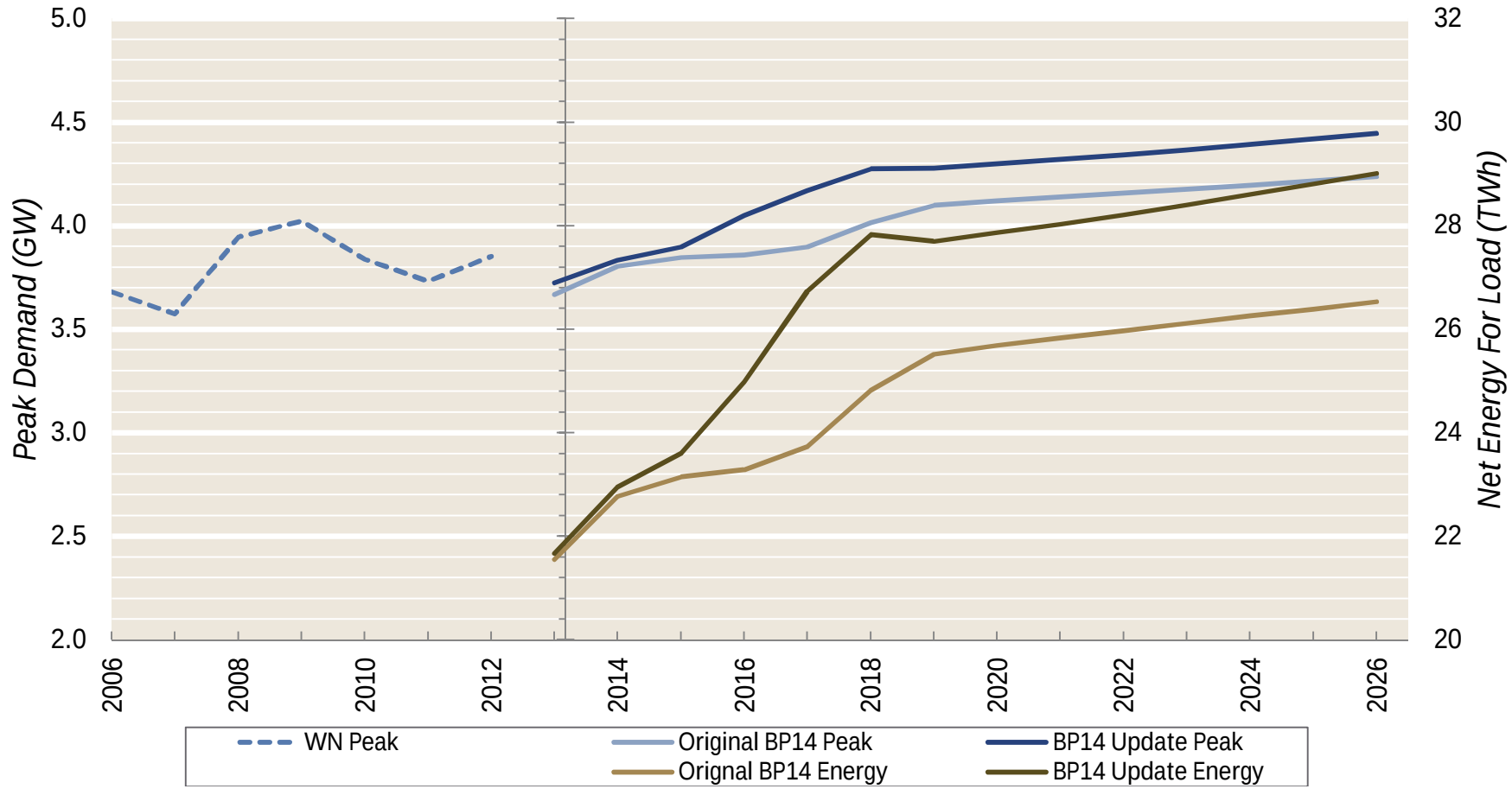
	Scenario 2 (Industrial Renaissance)		
1 Natural gas prices	Low	Reference	High
2 Coal prices	Low	Reference	High
3 Load (only change EGSL/ELL energy & peaks)*	Scenario 2	Scenarios 1, 3 & 4	
4 Capital cost for new generation	High	Low	High
5 General inflation and resulting cost of capital	Reference	Low	High
6 Implementation of CO2 cost	Reference	None	High
7 Gas and CO2 combination	Low /Reference	Reference /None	High /High

	Scenario 3 (Distributed Disruption)		
1 Natural gas prices	Reference	Low	High
2 Coal prices	Reference	Low	High
3 Load (only change EGSL/ELL energy & peaks)*	Scenario 3	Scenarios 1, 2 and 4	
4 Capital cost for new generation	Reference	Low	High
5 General inflation and resulting cost of capital	Reference	Low	High
6 Implementation of CO2 cost	Reference	None	High
7 Gas and CO2 combination	Reference /Reference	Low /None	High /High

	Scenario 4 (Resource Shift)		
1 Natural gas prices	High	Low	Reference
2 Coal prices	High	Low	Reference
3 Load (only change EGSL/ELL energy & peaks)*	Scenario 4	Scenarios 1, 2 and 3	
4 Capital cost for new generation	Low	Reference	High
5 General inflation and resulting cost of capital	Reference	Low	High
6 Implementation of CO2 cost	High	None	Reference
7 Gas and CO2 combination	High /High	Low /None	Reference /Reference

*EGSL/ELL use MISO capacity market purchases/sales to ensure appropriate resource adequacy

EGSL REFERENCE CASE (SCENARIO 1) LOAD FORECAST

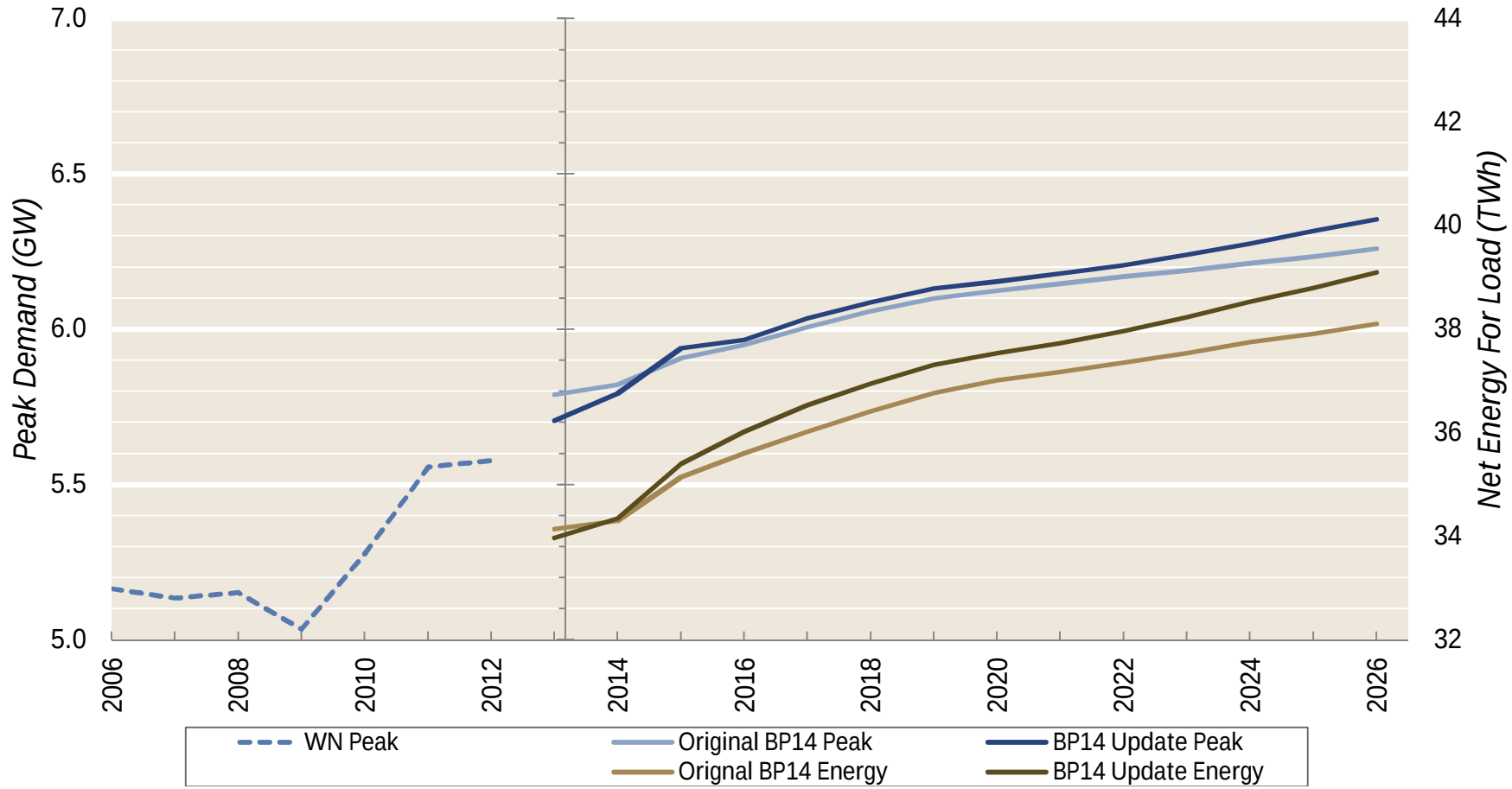


10-Yr CAGR From 2013	Original BP 14 F'cst	BP14 Update F'cst.
Peak:	1.31%	1.60%
Energy:	1.94%	2.74%

WN Peak = Actual peak adjusted to normal weather
BP = Business Plan which is the five year financial plan used for budgeting

BP14 Update	2013	2015	2020	2025	2030
Peak (MW)	3,723	3,898	4,297	4,419	4,548
Energy (GWh)	21,673	23,608	27,868	28,806	29,817

ELL REFERENCE CASE (SCENARIO 1) LOAD FORECAST



10-Yr CAGR From 2013	Original BP 14 F'cst	BP14 Update F'cst.
Peak:	0.67%	0.90%
Energy:	0.95%	1.19%

WN Peak = Actual peak adjusted to normal weather
BP = Business Plan which is the five year financial plan used for budgeting

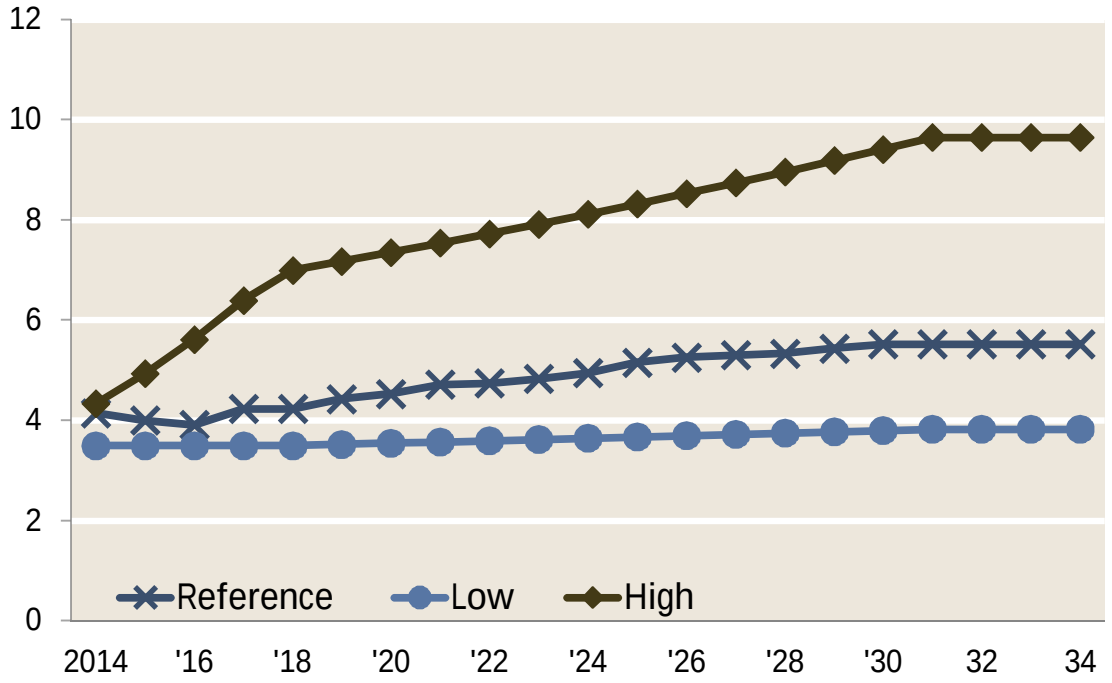
BP14 Update	2013	2015	2020	2025	2030
Peak (MW)	5,706	5,939	6,154	6,316	6,501
Energy (GWh)	33,973	35,404	37,317	38,802	40,242

HENRY HUB NATURAL GAS PRICE FORECAST

SPO January 2014 Long-Term Henry Hub Natural Gas Price Forecasts (2013$/MMBtu)

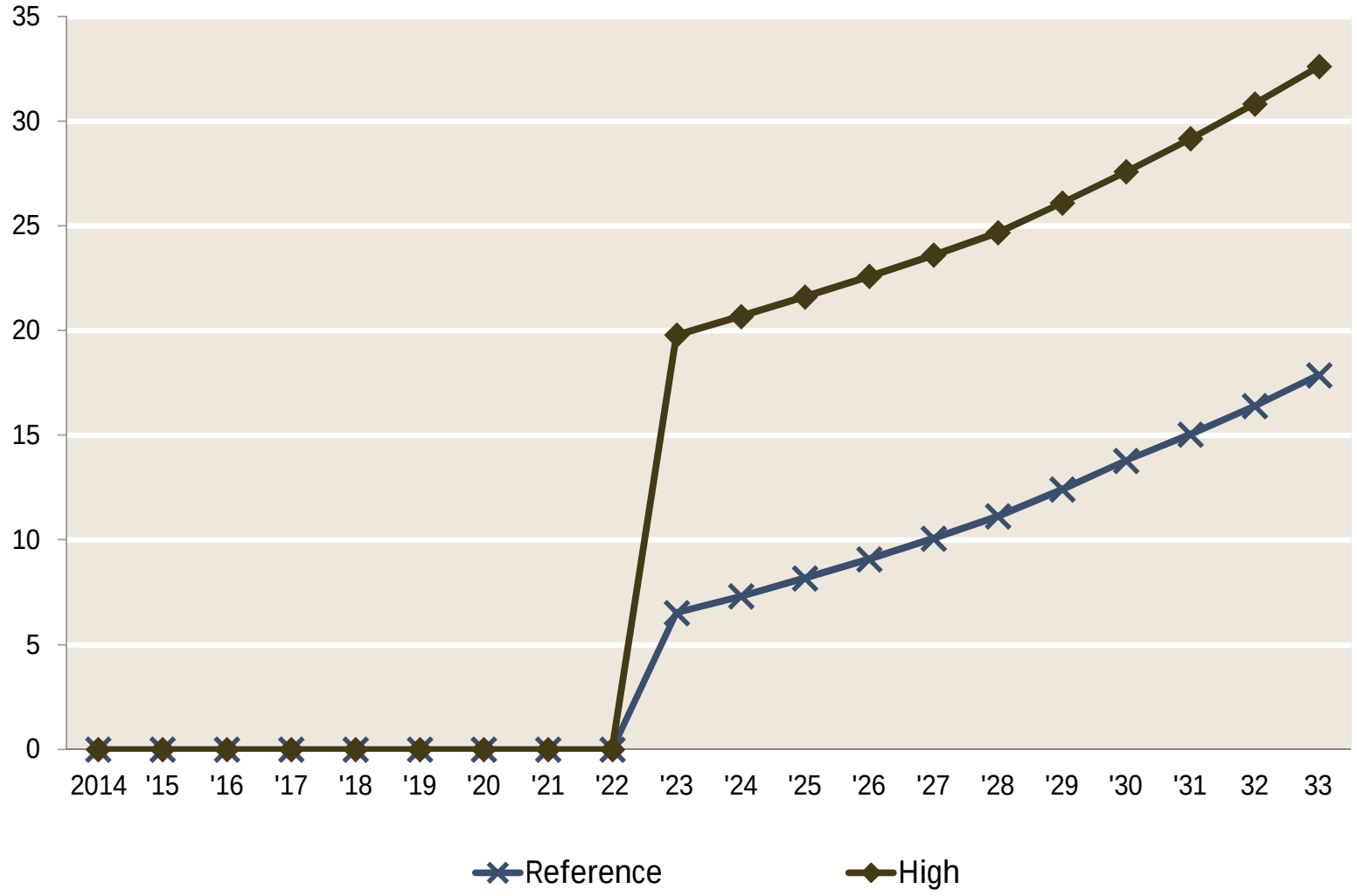
Process

- SPO Planning Analysis relies on a number of leading consultants in preparing the natural gas price forecast.
- The early years of the long-term forecast (~1st 3 years) are based on NYMEX forward prices without modification.
- In the later years, the Reference Case Natural Gas forecast represents a consensus view of the consultants' forecasts.
- The High and Low Cases represent plausible alternative scenarios developed by SPO (informed by consultants and a review of historical fundamentals and prices).



CO_2 PRICE FORECAST

April 2013 Long-Term CO_2 Price Forecast (2013$/U.S. Ton) Reaffirmed in January 2014



AURORA Background and Construct

AURORAXMP ELECTRIC MARKET MODEL

- AURORAxmp Electric Market Model (AURORA) is a production cost model licensed by Entergy in April 2011 from software firm EPIS, Inc. in Sandpoint, ID (www.epis.com). Use of the tool at Entergy has advanced to the point where it is now the primary production cost tool used for MISO market modeling and Entergy long-term planning.

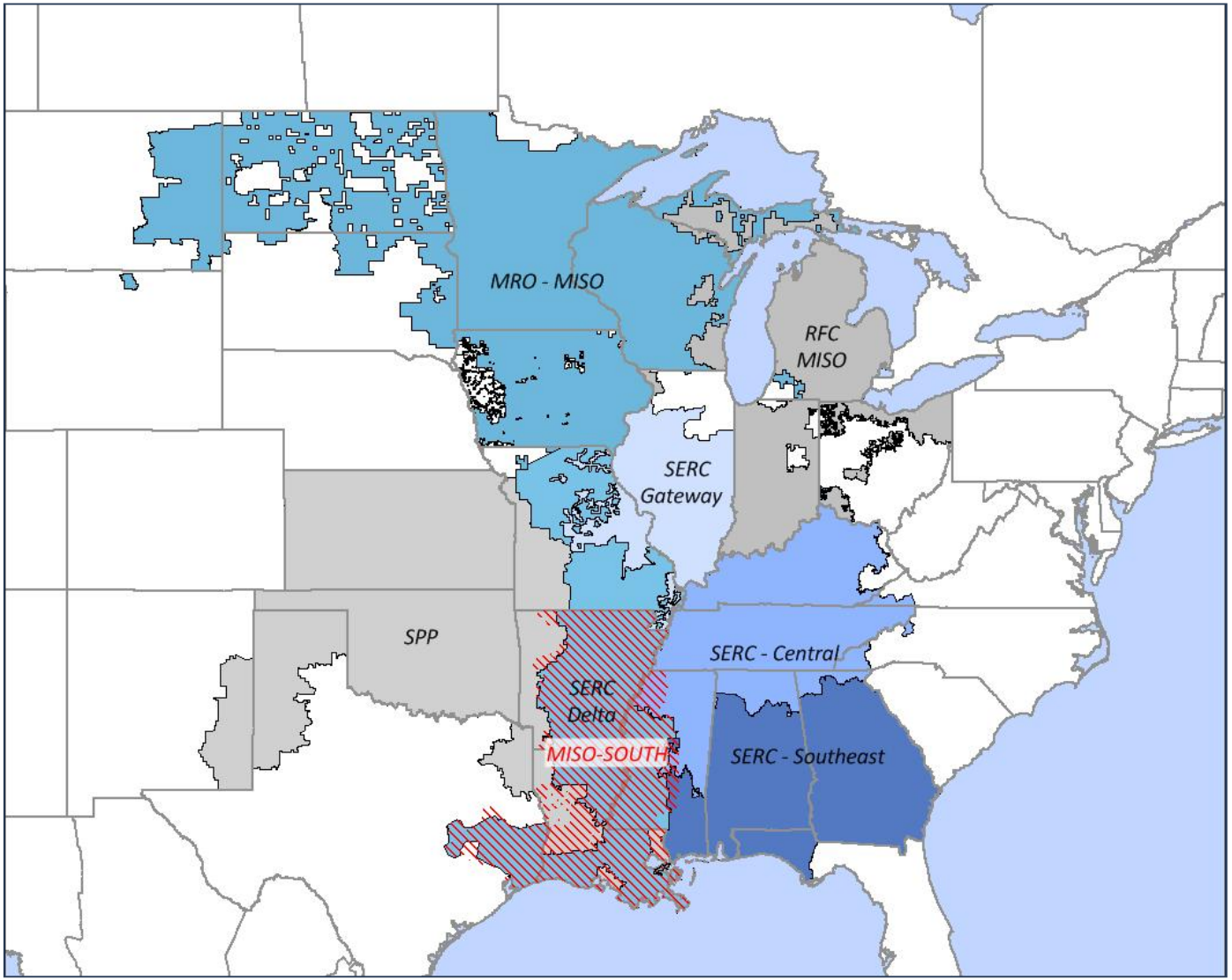
- The 2014 EGSL and ELL IRPs will utilize AURORA in scenario and sensitivity modeling. The 2014 Business Plan (February 2014 Update) AURORA case has been created using the latest planning assumptions . This will serve as the foundation for EGSL and ELL IRP Scenario 1 modeling. Assumptions in the IRP work which materially differ from the 2014 Business Plan (February 2014 Update) case will be noted in the IRP documents. The AURORA model has been calibrated to ensure accuracy of input data and output results. AURORA simulates the hourly operations of a power market over a projected study period. In this case, the model has been populated to allow studies for up to 21 years in length (1/1/2014 to 12/31/2034).

- The EGSL and ELL IRPs consider the years 2015-2034. Modeling, however, will start with 2014 to allow for verification of reasonableness as actual results in 2014 become available.

- The AURORA model as configured for IRP analysis uses a zonal representation of MISO and 1st Tier markets of MISO South. The MISO modeling is broken down into two regions, MISO North and MISO South. The MISO North region represents the MISO RTO as it existed in 2013 prior to Entergy and entities that joined MISO on December 19, 2013. The MISO South region includes Entergy operating companies, Entergy co-owners, IPPs and Qualifying Facilities, and other non-Entergy companies (i.e. CLECO, LAFA, LEPA and LAGN) within the Entergy footprint that participate in the MISO market. The 1st Tier markets consist of SPP, SERC – Central, and SERC – Southeast.

SCOPE OF AURORA MARKET MODELING

Entergy and surrounding regions will be modeled . . .



AURORA CONSTRUCT

The detailed map of the AURORA Construct has been redacted. The non redacted version has been filed with the LPSC as Highly Sensitive Protected Material (HSPM).

AURORA Model Assumptions

RESERVE REQUIREMENT ASSUMPTIONS

- System Reserve Requirements

System Reserve Requirement information has been redacted. The non redacted version has been filed with the LPSC as Highly Sensitive Protected Material (HSPM).

- Area Reserve Requirements

Area Reserve Requirement information has been redacted. The non redacted version has been filed with the LPSC as Highly Sensitive Protected Material (HSPM).

IMPORT AND EXPORT LIMIT ASSUMPTIONS

- The following zonal import and export limits will be used throughout the study period with the last year shown assumed through the end of the study:

The tables have been redacted. The non redacted version has been filed with the LPSC as Highly Sensitive Protected Material (HSPM).

UNIT ASSUMPTIONS

- Unit Capacities
  - The ratings for Entergy owned resources are the GVTC ratings[1] provided to MISO.

- Unit Availability and Inclusion
  - Resources taken from the 2009 Summer RFP, 2010 Renewable RFP, and 2011 EAI RFP are included as Entergy owned acquisitions/contracts.
  - All Entergy legacy units are modeled with the proposed deactivations schedule from the 2014 Business Plan Update (February 2014). There are 1,204 MW (Total ETR Utility capacity) where the deactivation date is to be determined. This is because the year of planned deactivation is currently being studied.
  - At this time Entergy unit deactivations do not vary by scenario, but that assumption could change for some scenarios pending additional review.
  - Non-Entergy resources deactivations:
    - Coal Units[2]
      - Scenario One (Reference) - at Age 60 years
      - Scenario Two (Industrial Renaissance) - at 70 years
      - Scenario Thee (Distributed Disruption) - at 60 years
      - Scenario Four (Generation Shift) – at 50 years
    - Gas, Nuclear & Other (At Age 60 years, modern CT and CCGT at age 30 years)

[1]Generation Verification Test Capacity (this is an annual test required by MISO to determine a resource's maximum capability based on a real power test).

[2]Some coal units are retired in the 2014-2020 period before they reach age 60 due to environmental regulations, primarily the MATS rule.

UNIT ASSUMPTIONS (CONTINUED)

- Maintenance
  - Thirty years of scheduled maintenance data are input for Entergy owned resources. Operations Planning collects data from the plants and co-owners, which includes their assumptions for the first 5 years. The pattern of scheduled maintenance is replicated and carried out through 2034.

- Forced Outage Rates
  - Annual forced outage rates are developed and input into the model for each Entergy owned fossil unit. These rates are based on historical Generation Availability Data Reporting System ("GADRS") data for May 2009 through April 2012.
  - Operations Planning reviews significant outage events to determine if each event is recurring or non-recurring in nature. Based on this review some events are removed from the forced outage rate calculation.
  - For nuclear units, forced outages are modeled as derates to the resource capacity to reflect historical outage experience.

UNIT COMMITMENT REQUIREMENTS

- Unit Commitment Requirements (Also known as RMR[1] Requirements)
  - Certain designated units must be committed in order to meet demand and provide voltage or transmission support within the area. The unit commitment requirements are created by the Energy Delivery organization.
  - The following tables show the requirements modeled in AURORA:

The tables have been redacted. The non redacted version has been filed with the LPSC as Highly Sensitive Protected Material (HSPM).

[1]Reliability Must Run

UNIT COMMITMENT REQUIREMENTS (CONTINUED)

The tables have been redacted. The non redacted version has been filed with the LPSC as Highly Sensitive Protected Material (HSPM).

EXISTING CONTRACTS

- The following table shows the existing Entergy contracts modeled in AURORA

The table has been redacted. The non redacted version has been filed with the LPSC as Highly Sensitive Protected Material (HSPM).

BEFORE THE

LOUISIANA PUBLIC SERVICE COMMISSION

2013 INTEGRATED RESOURCE PLANNING ("IRP") PROCESS FOR ENTERGY LOUISIANA, LLC AND ENTERGY GULF STATES LOUISIANA, L.L.C. PURSUANT TO GENERAL ORDER APRIL 20, 2012.	**)**	**DOCKET NO. I-33014**

2015 ELL AND EGSL IRPS
MACRO INPUTS WORKPAPERS

INTENTIONALLY OMITTED
HIGHLY SENSITIVE PROTECTED MATERIAL

FEBRUARY 2014