Entergy New Orleans - 2015 Integrated Resource Plan

Response to Public Comments Pertaining to Milestone 3

Introduction

Entergy New Orleans, Inc. ("ENO" or "Company") is committed to providing its customers with safe and reliable service at the lowest reasonable cost, now and in the future. Integrated resource planning is an important part of the process utilized to help achieve that goal. Integrated resource planning involves estimating customers' future energy needs, evaluating the potential resources available to serve those needs, and considering various sensitivities around input assumptions in order to develop a long-range Integrated Resource Plan ("IRP") to inform future planning activities. Because customers' needs and the world around us change over time, ENO periodically reviews and updates its IRP in order to ensure that long-term planning takes into account, as appropriate, changes that are occurring today and changes that may occur in the future. The Council currently requires ENO to file an updated IRP every 3 years.

ENO conducts its IRP process consistent with all applicable regulatory requirements. Beginning in 2008, the Council for the City of New Orleans established comprehensive guidelines for development and periodic review of ENO's IRP. On October 30, 2012 Entergy New Orleans filed the Company's 2012 IRP with the City Council. At the conclusion of an extensive review, on October 10, 2013 the City Council approved the ENO 2012 IRP as a balanced and reasonable plan for meeting customers' future needs. More information on the 2012 IRP, and the 2015 IRP currently under development, can be found on the ENO IRP website: www.entergy-neworleans.com/IRP/.

In response to the City Council's requirement that ENO seek public input on each IRP, on June 5, 2014 ENO received the Council's approval of the process to ensure transparency and public input during development of the 2015 IRP. The 2015 IRP process consists of 4 distinct milestones that require the Company to file relevant data and information with the Council, and present and solicit feedback on those materials at public meetings and through stakeholder engagement. The 2015 IRP milestones include:

- 1. DSM Potential Study Inputs (including Avoided Costs) public meeting held June 27, 2014
- 2. IRP Inputs (including DSM Potential Study Results) public meeting held October 30, 2014
- 3. IRP Modeling Results public meeting held February 26, 2015
- 4. Draft IRP Report June 2015 (public meeting to be scheduled in June)

To date, ENO has completed three of the four milestones identified above for the development of the 2015 IRP. At each milestone, ENO hosted a public meeting to solicit questions and comments on the materials presented. The meetings were held at the University of New Orleans Lakefront Campus in order to provide a central, accessible, consistent and neutral meeting location. Generally speaking, attendance by the public has varied at each meeting.

In addition to the four milestones above, on September 4, 2014 the City Council directed ENO to host an interim technical conference devoted to utility-scale renewable resources and their evaluation in the 2015 IRP. The Renewables Technical Conference was open to the public and sought input and data from renewable technology vendors, suppliers, experts, and other interested parties on the availability, capital and operating costs, performance, and feasibility of utility-scale renewable technologies that could be utilized to serve ENO's customers; and further to solicit and consider comments regarding the incorporation of utility-scale renewable technologies in integrated resource planning. Participation in the Renewables Technical Conference was robust. Several presentations were made regarding utility-scale renewable resources currently under development in the state of Louisiana including a conventional hydro project being considered on the Red River in central Louisiana and a possible land-based wind farm in St. Mary Parish. In addition, members of the public also participated in the meeting and offered comments.

On February 26, 2015, ENO hosted a public meeting to present Milestone 3 in the development of the 2015 IRP. Consistent with guidance provided at prior public meetings, ENO outlined the process available for the public to submit questions and comments regarding the 2015 IRP. For a seven-day period following the February 26th meeting¹, interested parties could submit questions or comments through the ENO IRP website. The comments received through the website, along with the Company's responses, are provided below.² ENO appreciates the comments provided both at the various technical conferences and via the IRP website and will take them into consideration in the development of the 2015 IRP. The fourth and final milestone in the Council's process leading up to the October 2015 IRP filing requires that ENO file a draft report and host a public meeting to present the report, both of which would occur in June 2015.

Public Comment 1 - Subpart 1

I am writing to express my dissatisfaction with the way Entergy has developed their Integrated Resource Plan for the City of New Orleans. First and foremost, I am dismayed by the fact that Entergy has done almost nothing to include the public in the development of this plan. I have seen little to no information about this plan or how I can learn more and engage in the process. The few public hearings that were held for the IRP were scheduled during work hours on a week day. I think Entergy should try harder to cater to the public it is servicing.

Response

As an initial matter, it should be noted that the ENO 2015 IRP has not yet been finalized and is still very much under development. The comment incorrectly presumes that a "Plan" has been finalized and

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¹ During a seven (7) day window following each public meeting associated with the 4 original milestones in the Council's 2015 IRP process, the public is invited to submit questions and comments.

² The first public comment listed herein, including the Company's response, is provided in three (3) subparts. During the seven-day public comment window that followed the February 26th public meeting, ENO received this same comment (i.e. all three sub-parts as one) verbatim from thirteen (13) different respondents, and thus is listing and responding once recognizing that the Company's response is the same for all thirteen receipts.

presented when in fact only the components necessary to develop the plan have been developed and presented at each of the three (3) milestones completed to date. The final 2015 IRP is due to the Council in October 2015 and will be preceded by a draft report and a public meeting to present the report both of which are scheduled to occur in June 2015.

Pursuant to the Council's process, ENO is required to seek input from the public at each of 4 milestones in the process to develop the 2015 IRP. As a part of that process, the Council requires ENO to provide public notice no later than 30 days before any public IRP meeting. While the requirements do not explicitly state how the notice should be provided, ENO has consistently provided notice in two ways. First, notice is made in the print edition of the Times-Picayune and separately in the New Orleans Advocate. Second, notice is contemporaneously posted to ENO's public IRP website. Both actions are taken no later than 30 days prior to the public meeting as required by the Council. Further, ENO is aware that various stakeholders normally take separate actions to further "spread the word" in order to make the public aware that ENO is holding a meeting.

Each meeting is open to the public and does not require participants to register in advance in order to attend or even participate. By providing public notice in 2 major news outlets and on the public IRP website, ENO has consistently sought to encourage participation by members of the public interested in learning about the IRP process and providing input to the development of the 2015 IRP. Moreover, ENO invites any questions or concerns to be voiced during the 7-day public comment period following the technical conferences, and for those members of the public who cannot attend a meeting, all of the meeting materials are posted to the IRP website for review.

Public Comment 1 - Subpart 2

Upon looking over the IRP, I find that it doesn't represent an accurate, realistic portrayal of our energy future. The plan doesn't account for any changes in fossil fuel prices, which is unrealistic because, just in the past few months, the price of oil has fluctuated drastically. This plan also doesn't take into account any carbon taxes that are very likely in the near future. This plan has not outlined the inclusion of any renewable energy, even though the solar industry in New Orleans is more prominent than most US cities and renewable energy is necessary for a healthier, more sustainable city. If we are to create a comprehensive, realistic energy future, we must include renewables.

Response

As previously stated, it should be noted that the ENO 2015 IRP has not yet been finalized and is still under development. The comment incorrectly presumes that a "Plan" has been presented when in fact only the components necessary to develop the plan have been developed and presented at each of the three (3) milestones completed to date. The final 2015 IRP is due to the Council in October 2015 and will be preceded by a draft report due in June 2015.

With respect to accounting for the future uncertainty of fossil fuel prices, the comment incorrectly suggests that the IRP does not take this uncertainty into account. In fact, at the Milestone 2 public meeting ENO presented all of the key input assumptions, including the low, reference and high fuel price

forecasts that would be used to develop the IRP along with other key input assumptions. Through the information presented publicly at the Milestone 2 public meeting, ENO made it clear that it would account for a host of different uncertainties, including uncertainty in future fuel prices (e.g., natural gas, coal), customer load, capital cost for new generation alternatives including renewables, cost-effective demand-side management programs, inflation rates and resulting cost of capital, as well as the potential for regulation of CO_2 in some fashion.

Similarly, the comment suggests that the process to develop the IRP has not evaluated renewable resources. In fact, ENO included and evaluated a variety of utility-scale renewable resources and presented the relevant assumptions at the Milestone 2 public meeting.³ The utility-scale renewable technologies that were evaluated as part of the Technology Assessment were: Biomass, Solar PV, Solar Thermal, Wind Power, Municipal Solid Waste, Landfill Gas, Geothermal, and Ocean and Tidal. In addition, ENO hosted an interim public technical conference between Milestone 1 and 2 that was entirely devoted to exploring utility-scale renewable resources as discussed above. Moreover, and in contrast to the comment, at the Milestone 3 public meeting held February 26th (in response to which the public comments addressed herein were provided) ENO presented six (6) potential supply-side resource portfolios for further evaluation and modeling, of which four (4) or 67%, included varying amounts of renewable resources for further evaluation.

Public Comment 1 - Subpart 3

This plan also doesn't take into account the environmental and health impacts this dirty energy will have on our communities. While Entergy will profit off of these energy sources, it is our communities that will have to pay for the health and environmental impacts, along with our monthly bill. We need a plan that realistically takes into account all of these factors. We are facing a future with a rapidly changing climate and all of the catastrophic affects that will follow. It is the plans we make today that will decide how our future looks. We need a better plan.

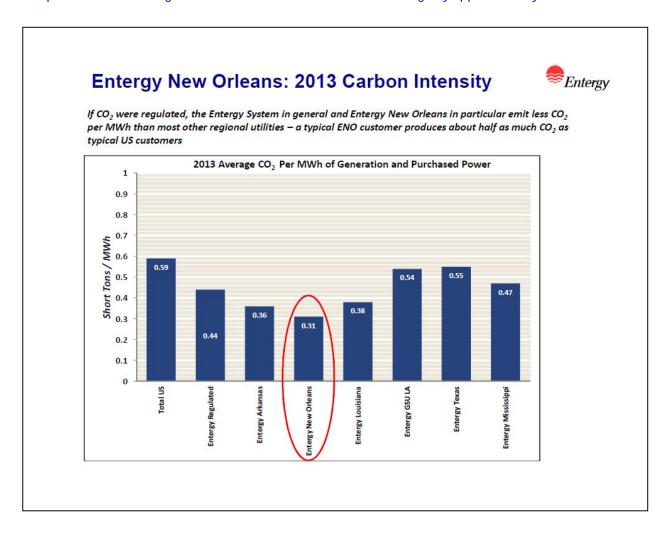
Response

As previously stated, it should be noted that the ENO 2015 IRP has not yet been finalized and is still under development. The comment incorrectly presumes that a "Plan" has been presented when in fact only the components necessary to develop the plan have been developed and presented at each of the three (3) milestones completed to date. The final 2015 IRP is due to the Council in October 2015 and will be preceded by a draft report due in June 2015.

With respect to the Company accounting for the environmental effects of its business, Entergy has a clear vision for protecting our environment. Please see the following link for further information: http://www.entergy-neworleans.com/irp/2015_IRP_answers.aspx

³ All of the materials presented at the public meetings, including Milestone 2, are available on ENO's 2015 IRP website: www.entergy-neworleans.com/IRP/

Moreover, as presented at the Milestone 1 public meeting on June 27th, 2014 and as indicated in the chart below, ENO has the lowest average CO₂ emissions per unit of power generated among its affiliate companies and its average emissions are lower than the U.S. average by approximately 50%.



Public Comment 2

YOU NEED RENEWABLES IN YOUR PLAN! SOLAR, WIND, WATER must be integrated even at additional cost. To just continue your business as usual strategy is immoral and out of touch with the real environmental problems now undeniable in Louisiana. If no one in your organization agrees, I suggest you fire some folks and start over with more enlightened and ethical persons.

Response

Public Comment 2, as do other comments received in response to Milestone 3, grossly oversimplify the planning issues to be addressed specifically in the development of the 2015 IRP (and integrated resource planning in general), and mistakenly suggests that ENO is proposing "business as usual" in the development of the 2015 IRP. As presented at the Milestone 2 public meeting, a range of

macroeconomic scenarios were developed to account for a variety of potential future outcomes with respect to key input assumptions that determine the eventual costs to serve ENO's customers. As a result, at the February 26th, 2015 Milestone 3 public meeting ENO presented six (6) alternative portfolios for further consideration and evaluation in the 2015 IRP, four (4) of which included significant renewable resource additions. Approaching the development of the 2015 IRP in this way is consistent with the Council's IRP requirements and allows for informed and transparent decisions regarding the costs, benefits, and potential risks associated with different combinations of supply- and demand-side resources capable of meeting ENO's customers' future needs.

Please also see the Company's response to Public Comment 1 - Subparts 1 - 3.

Public Comment 3

RENEWABLES!! Fossil fuels are the way of the past and we know they are contributing to accelerated climate change. We must increase the pace of the switch to renewable energy sources! START NOW!! TODAY!!

Response

Integrated resource planning is designed to account for and take into consideration a range of factors and potential future scenarios that can affect the cost to serve ENO's customers, including production costs associated with conventional and renewable generation technologies. However, it is important to recognize that many renewable resources produce energy intermittently and thus require a dispatchable resource (i.e. whose output can move as customer demand increases and decreases throughout the day) such as conventional generation resources, or large-scale battery storage mechanisms, to back renewables up when the sun is not shining, the wind is not blowing, and/or river levels reduce/restrict hydro output. Battery storage on a very large MW-scale is not currently costeffective, but even if it becomes cost-competitive with generation technologies, it would not be prudent to design a portfolio consisting entirely of intermittent resources combined with large-scale battery storage on a scale necessary to eliminate reliance on conventional forms of generation technology. Prudent portfolio design goes beyond the ability to theoretically achieve an outcome on paper for a single objective as suggested by the comment. As indicated at the June 27th Milestone 1 public meeting, the ENO IRP process seeks to identify a portfolio of resources that balances three key objectives: 1) Cost; 2) Reliability; and 3) Risk. Arbitrarily increasing the amount of intermittent resources included in longrange plans such as the IRP before they are shown to be cost-competitive with conventional forms of generation technology would likely lead to a significant, if not exorbitant, increase in cost to ENO's customers.

Please also see the Company's response to Public Comment 1, in particular Subparts 2 and 3.

Public Comment 4

Please explore wind, solar and hydro (Mighty Mississippi) in your future plans!!!

Response

See the Company's response to Public Comment 1, in particular Subparts 2 and 3, and the Company's response to Public Comments 2 and 3.

Public Comment 5

Hi! Thanks for putting the IRP together. My question is: where are the renewables? How is Entergy planning for the future effects of climate change? As a New Orleanian, this affects me personally and I would love to know how Entergy is planning for these contingencies. Thanks.

Response

See the Company's response to Public Comment 1, in particular Subparts 2 and 3, and the Company's response to Public Comments 2 and 3.

Public Comment 6

Entergy's Integrated Resources Plan does not include any renewables for most scenarios for the next 20 years. That has to change! Renewable energy is actually a fait accompli. The only question is will our State be on the front or back end of it? When oil prices are high people and other nations cannot afford to buy. When prices are low, O&G companies cannot afford to produce. Even just last week, Indian Prime Minister Narendra Modi declared the "Megawatts to Gigawatts" challenge to meet his goal of 100 gigawatts (GW) of solar and 60 GW wind in just eight years from 33 GW today. Energy Minister Piyush Goyal went even further, saying they could well exceed even that outsized goal. "The government stands committed to making renewable energy India's gift to the world" he told the audience. http://thehill.com/blogs/pundits-blog/energy-environment/234186-a-change-to-renewable-energy-can-happen-quickly

Response

See the Company's response to Public Comment 1, Subparts 1 - 3, and the Company's response to Public Comments 2 and 3.

Public Comment 7

It is so important to include renewable energy in the IRP. As a young person, my future is at stake. Continuing the use and development of fossil fuels commits us to a future of climate chaos. We need to begin the transition to renewable energy now.

Response

See the Company's response to Public Comment 1, in particular Subparts 2 and 3, and the Company's response to Public Comments 2 and 3.

Public Comment 8

I demand that renewables are part of the integrated resource plan!

Response

See the Company's response to Public Comment 1, in particular Subparts 2 and 3, and the Company's response to Public Comments 2 and 3.

Public Comment 9

Please include renewable energy in your Integrated Resource Plan. This is not only the future of energy, but it will also help protect our natural resources and contribute less to global climate change.

Response

See the Company's response to Public Comment 1, in particular Subparts 2 and 3, and the Company's response to Public Comments 2 and 3.

Public Comment 10

In Sacramento, CA, a county of over a million people, the general utilities company (SMUD) has been providing a significant proportion of energy sustainably and has incentivized solar capture of energy, allowing its customers to actually sell them extra produced energy. It has made Sacramento, a generally fairly conservative place, a leader in sustainability and energy conservation.

Response

See the Company's response to Public Comment 1, in particular Subparts 2 and 3, and the Company's response to Public Comments 2 and 3. Please also see the Company's March 3rd, 2015 filing with the City Council in docket UD-13-02 that addresses issues attendant the growth in adoption of rooftop solar in New Orleans and Algiers.

Public Comment 11

Please include renewable energy in your integrated resource plan!

Response

See the Company's response to Public Comment 1, in particular Subparts 2 and 3, and the Company's response to Public Comments 2 and 3.

Public Comment 12

I want renewable energy. It's cheaper in the long run and isn't going to harm Earth the same way fossil fuels are currently doing so. Thanks for hearing me.

Response

See the Company's response to Public Comment 1, in particular Subparts 2 and 3, and the Company's response to Public Comments 2 and 3.

Public Comment 13

Please include renewable energy initiatives on your IRP. I recognize that Louisiana is already the nationwide leader for residential PV, etc., but we need to take action towards utility scale

renewables. Coal and gas power plants will become unprofitable eventually due to their environmental impacts. Let's make the shift now!

Response

See the Company's response to Public Comment 1, in particular Subparts 2 and 3, and the Company's response to Public Comments 2 and 3.

Public Comment 14

Include renewable energy in your integrated resource plan, our future is at stake!

Response

See the Company's response to Public Comment 1, in particular Subparts 2 and 3, and the Company's response to Public Comments 2 and 3.

Public Comment 15 – Subpart 1

Stakeholder participation issues:

- 1. Please provide the questions and responses to public comment on your website.
- 2. Please expand the outreach to the public for the public meetings beyond the legal minimum required. This may include bill insert, social media announcement, or text alert. Do not fear public involvement!
- 3. The time of meeting was listed as a hardship for the public please consider moving the public meeting to an evening time.
- 4. As people submit questions or comments via this web portal, please add them to the email invite list for the public meetings.

Response

- 1. The questions and comments received were posted to the ENO IRP website by March 4th, the conclusion of the Council-prescribed 7-day window for public comment. The Company's responses contained herein were circulated to the parties in the IRP docket on March 30th and contemporaneously posted to the IRP website.
- 2. ENO appreciates the comment and is considering the costs and benefits of additional outreach. Rather than fear public involvement as the comment suggests, ENO welcomes it, as evidenced by the transparency with which it has approached the development of the 2015 IRP. Nevertheless, it is worth noting that ENO provides electricity to some 170,000 customers and it is of course physically and administratively impossible to have each and every customer (or even 5% or 10% of all customers) attend these public technical conferences. Ultimately, ENO's goal is to design and submit to the Council for its consideration a long-term resource plan that meets the needs of all customers and balances costs, benefits, and risks. Please see also the Company's response to Public Comment 1 Subpart 1.
- 3. ENO recognizes that meeting during normal business hours may not allow for every interested individual to participate, which is why the 2015 IRP process includes posting of all materials online as well as a means to provide input and feedback thru the website. Additionally, it is

- important to note that many individuals who are responsible for hosting and/or presenting at the meeting are business professionals, some of whom travel from out of town in order to participate directly and support the Council's IRP process.
- 4. ENO agrees that adding those who have submitted comments to the email invite list for future meetings is a reasonable suggestion and it will adopt this approach going forward.

Public Comment 15 – Subpart 2

For the Industrial Renaissance scenario:

- 1. Please provide more information about the planned 2020 Amite South CCGT. This is the first mention of this gas plant. Where did this come from? Is this planned for Entergy Louisiana?
- 2. The industrial demand growth is occurring in the southwest of Louisiana, not in New Orleans. Why should New Orleans ratepayers be on the hook for new generation to meet demand outside of our territory?

Response

- 1. Please see the Company's 2012 IRP, which included a planning assumption for a CCGT resource addition in Amite South in the 2020 timeframe. Please also see the Request for Proposals issued by Entergy Services on behalf of Entergy Gulf States, Entergy Louisiana and Entergy New Orleans to solicit proposals for a new CCGT to be located in Amite South in the 2020 timeframe at the following link: https://spofossil.entergy.com/ENTRFP/SEND/AmiteSouthRFP/Index.htm.
- 2. The generation resource additions under evaluation in the 2015 IRP are designed to meet the needs of ENO's customers and are predicated on the industrial renaissance, which is occurring predominantly outside of Orleans Parish.

Public Comment 15 – Subpart 3

Distributed Disruption:

- 1. The name of this scenario belies an ideological bias against solar PV Clearly, Entergy sees rooftop solar as an unwelcome competitor.
- 2. According to the MISO modeling, this scenario only calls for 39MW additional capacity required by the utility, 20 MW less than the reference case. We assume that the 20MW of additional capacity is being supplied by the solar PV. Is this accurate?

Response

1. The comment mistakenly suggests that the title of the macroeconomic scenario "Distributed Disruption" somehow translates into a bias on the part of the Company against distributed generation technologies such as rooftop solar. "Disruptive" is a term that is commonly used to describe new technologies that compete with or "disrupt" existing technology. The use of the term in ENO's presentation is not intended to suggest either a positive or negative value judgment to the disruption. As stated in the Company's March 3rd, 2015 filling in Council docket UD-13-02:

"Consistent with federal and state law, the Companies fundamentally support an individual customer's choice, as well as legal right, to install self-generation equipment

(regardless of generation technology) and to be treated on a non-discriminatory basis with respect to grid interconnection. Since the late 1970s, federal, state, and local policymakers have developed and implemented a number of different rules, initiatives, and incentive mechanisms to foster greater adoption of certain generation technologies, particularly ones that use renewable resources like the sun, wind, and other natural forces to produce electricity."

2. In the Modeling Results presentation from Milestone 3, slide 3 shows the MISO Market Modeling results. The table provides the amount of capacity added in the entire MISO market, excluding New Orleans, over the IRP evaluation period 2015 – 2034. In the Distributed Disruption Scenario, 39 GW or 39,000 MW were added of which 98% of the capacity additions are CCGT and 3% of the capacity additions are CT. No Wind or Solar capacity was added because these resource alternatives are not economic relative to the other resource types based on the assumptions that underlie the Distributed Disruption Scenario. Please note that this step of the analysis is used to develop a model of the market outside of New Orleans and forms the basis from which to assess resource alternatives for ENO.

Public Comment 15 – Subpart 4

DSM

- 1. Slide 6 please provide % of load from DSM for each scenario. The graph is nice thank you. It would be helpful to see the % reduction of total peak load attributed to DSM by year.
- 2. Please show what programs are included in the Portfolio Design Mix chart. For example, in the IR portfolio, 14 programs are recommended. Which 14 out of the 24 were chosen?

Response

- 1. The percent varies by year; however, the maximum percent of DSM relative to peak load by scenario over the evaluation period 2015 2034 is 4.15% in the Generation Shift Scenario, 3.92% in the Industrial Renaissance Scenario, 2.4% in the Business Boom Scenario, and 3.91% in the Distributed Disruption Scenario. It should be noted that additional evaluations are being performed and the amount of DSM in each scenario may change.
- 2. The DSM programs vary for each scenario. The programs selected for each scenario are displayed in the tables below. It should be noted that additional evaluations are being performed and the amount of DSM in each scenario may change.

Table 1: Industrial Renaissance DSM Programs

Program Name	Sector
Commercial Prescriptive &	Commercial
Custom	
Retro Commissioning	Commercial
Commercial New Construction	Commercial
Data Center	Commercial
Machine Drive	Industrial
Process Heating	Industrial

Process Cooling and	Industrial
Refrigeration	
Facility HVAC	Industrial
Facility Lighting	Industrial
Other Process/Non-Process Use	Industrial
Residential Lighting & Appliances	Residential
Energy STAR Air Conditioning	Residential
Efficient New Homes	Residential
Multifamily	Residential

Table 2: Business Boom DSM Programs

Program Name	Sector
Retro Commissioning	Commercial
Commercial New Construction	Commercial
Data Center	Commercial
Machine Drive	Industrial
Process Heating	Industrial
Process Cooling and	Industrial
Refrigeration	
Facility HVAC	Industrial
Facility Lighting	Industrial
Other Process/Non-Process Use	Industrial
Residential Lighting & Appliances	Residential
Energy STAR Air Conditioning	Residential
Multifamily	Residential

Table 3: Distributed Disruption DSM Programs

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Program Name	Sector
Commercial Prescriptive &	Commercial
Custom	
Retro Commissioning	Commercial
Commercial New Construction	Commercial
Data Center	Commercial
Machine Drive	Industrial
Process Heating	Industrial
Process Cooling and	Industrial
Refrigeration	
Facility HVAC	Industrial
Facility Lighting	Industrial
Other Process/Non-Process Use	Industrial
Residential Lighting & Appliances	Residential
Energy STAR Air Conditioning	Residential
Efficient New Homes	Residential
Multifamily	Residential

Water Heating	Residential
Pool Pump	Residential

Table 4: Generation Shift DSM Programs

Program Name	Sector
Commercial Prescriptive &	Commercial
Custom	
Retro Commissioning	Commercial
Commercial New Construction	Commercial
Data Center	Commercial
Machine Drive	Industrial
Process Heating	Industrial
Process Cooling and	Industrial
Refrigeration	
Facility HVAC	Industrial
Facility Lighting	Industrial
Other Process/Non-Process Use	Industrial
Residential Lighting & Appliances	Residential
Energy STAR Air Conditioning	Residential
Efficient New Homes	Residential
Multifamily	Residential
Water Heating	Residential
Pool Pump	Residential
Home Energy Use Benchmarking	Residential

Public Comment 15 – Subpart 5

- 1. Chart on slide 3 each scenario includes a power plant type and its percentage. 3 of the 4 scenarios have %s that add up to 101%. This is confusing.
- 2. Slide 3, chart. The IR and BB case differ significantly by type of natural gas plant. Why does the industrial driven increase differ from large commercial driven growth?
- 3. When will the data for slide? be available?
- 4. Slide 8 graph is very interesting. We are short on power until 2020. How is this gap going to be filled? The 2019 CCGT plant is for 382 MW which seems too big the following year when the Amite South plant comes online. We will be long on power again.
- 5. CT and CCGT are treated as different but they use the same fuel source. Please provide a similar graph to slide 14 by fuel source per year of the planning horizon.
- 6. Entergy is already over-invested in a single fuel source, natural gas, it is critical to diversify fuel sources.
- 7. Natural gas price forecasts used in the modeling are bullish. Please see reports by University of Texas department of petroleum and geosystems engineering. According to the journal Science, reports, If natural-gas prices were to follow the scenario that the EIA used in its 2014 annual report, the Texas team forecasts that production from the big four plays would peak in

2020, and decline from then on. By 2030, these plays would be producing only about half as much as in the EIA's reference case.

Response

1. The reason that the percentages added to more than 100% is due to rounding. The following table shows an additional decimal place so that the sum equals 100%.

Table 5: Results of MISO Market Modeling (MISO North and South, excluding New Orleans	Table 5: Resu	ults of MISO Marke	t Modeling (MISO North and Sou	th, excluding New Orleans)
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	Industrial Renaissance (Ref. Case)	Business Boom	Distributed Disruption	Generation Shift
CCGT	45.5%	81.2%	97.5%	61.5%
CT	54.5%	18.8%	2.5%	2.5%
Wind	0%	0%	0%	12.3%
Solar	0%	0%	0%	23.7%

- 2. Gas-fueled generation technologies are economic across all four scenarios. The Industrial Renaissance Scenario assumes no CO2 regulation or cost, which allows existing coal units to economically satisfy a greater amount of the energy needs. Since CTs have lower capacity cost, but higher energy cost relative to CCGTs, the remaining capacity and energy needs are more economically met by a larger percentage of CT generation relative to CCGT generation.
- 3. Please specify which slide.
- 4. For purposes of evaluating resource alternatives in the IRP, any capacity and energy shortfall is assumed to be met through short-term capacity and energy purchases. Likewise, any capacity or energy in excess of ENO needs is assumed to be sold into the market. This approach is used to balance each portfolio so that valid and meaningful comparisons can be made across portfolios and scenarios. Moreover, certain assumptions are made with respect to the size of the available CCGT and CT technologies that reflect the limitations associated with the ability to size a resource relative to the resource need.

5. Please see the charts below.

Figure 1: Installed Capacity Mix of AURORA Capacity Expansion IR, BB, and DD Portfolios

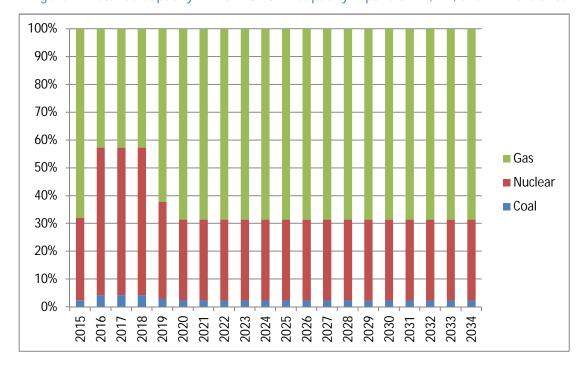


Figure 2: Installed Capacity Mix AURORA Capacity Expansion Generation Shift Scenario

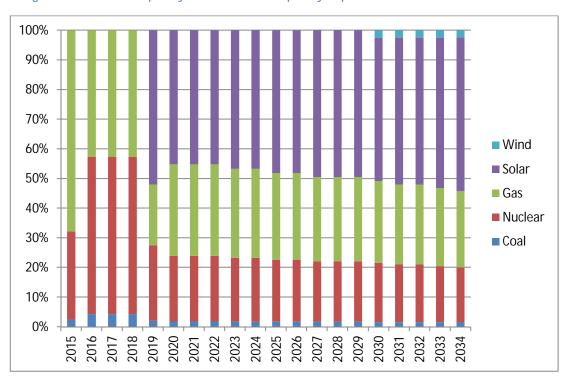


Figure 3: Installed Capacity Mix CT Portfolio

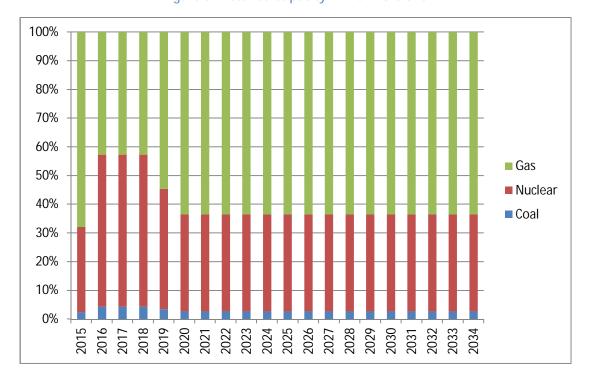


Figure 4: Installed Capacity Mix CT/Wind Portfolio

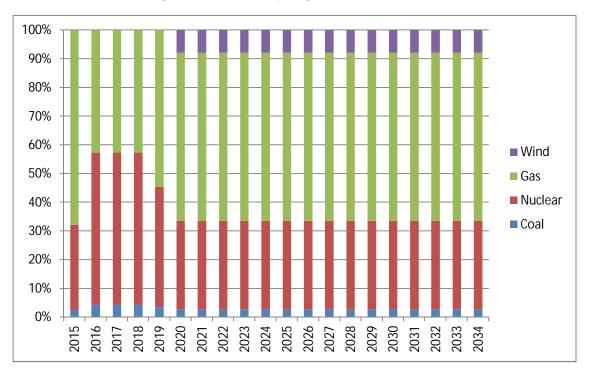


Figure 5: Installed Capacity Mix CT/Solar Portfolio

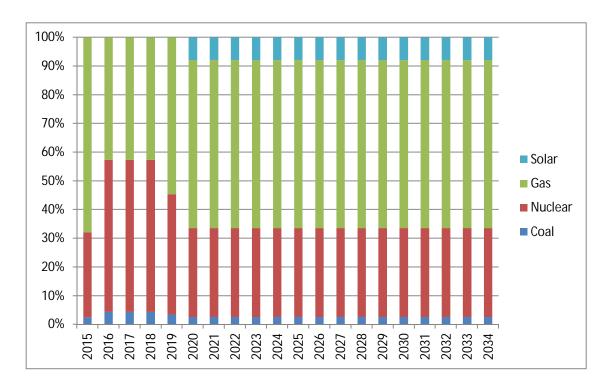
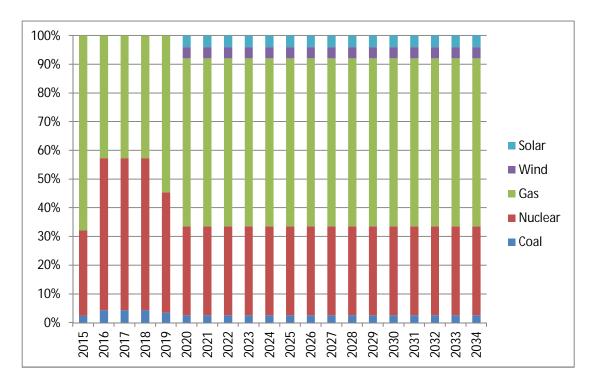


Figure 6: Installed Capacity Mix CT/Wind and Solar Portfolio



6. The comment does not clarify which Entergy utility (or utilities) is being referred to with respect to over-reliance on natural gas-fired generation resources. Notwithstanding, ENO's existing

generation portfolio includes a diverse mix of generating technologies across nuclear, natural gas and coal-fired resources as well as purchases. Moreover, more than half of ENO's current energy needs are met with virtually emissions free, stable-priced baseload nuclear resources. While ENO's existing generating capacity includes natural gas-fired resources, the 2015 IRP will take into account the uncertainty associated with future natural gas prices in order to consider the cost and benefits of continuing to meet a portion of ENO's long-term resource needs with gas-fired generation resources.

7. The ENO 2015 IRP will evaluate a range of natural gas prices (low, reference, and high) to capture the risk related to fluctuating natural gas prices. The Company agrees that the current outlook for natural gas prices is lower than when the gas price forecasts were developed for the ENO 2015 IRP; however, the Low Gas Price Forecast currently being used in the IRP is in line with the current outlook.

Public Comment 16

350 Louisiana and its individual and organizational partners are providing feedback to the Entergy IRP Technical Conference. Below are our questions and comments in response to the modeling presented at the Technical Meeting held February 26 as part of the Integrated Resource Plan process:

Subpart 1

Members of the public, ratepayers and other stakeholders need the greatest possible level of participation, especially as the climate crisis impacts us all. To facilitate this we suggest:

- 1. More widespread and efficient public notification, perhaps a line on monthly statements
- 2. Continued contact with people who have provided e-mail addresses, so that they are notified about subsequent developments and meetings
- 3. More accessible meeting venues and times
- 4. Access to public comments available via the website, with Entergy's response

Response

- 1. Please see Company's response to Public Comment 15 Subpart 1.
- 2. Please see Company's response to Public Comment 15 Subpart 1.
- 3. Please see Company's response to Public Comment 15 Subpart 1.
- 4. Please see Company's response to Public Comment 15 Subpart 1.

Subpart 2

Because energy planning is vitally connected to the need to address climate change, we support changes reflecting the following realities:

- 1. Planning scenarios must include the acknowledged and unacknowledged costs of carbon, including climate change, air pollution, water usage, and health impacts.
- Renewables need to be a factor in more than the Generative Shift scenario.

- Renewables whether distributed (rooftop and community solar) or utility scale (wind, solar)
 need to be factored into the IRP process and the impact of distributed solar in reducing
 transmission costs.
- 4. Continued build-up of fossil fuel infrastructure is not planning for the necessary energy transition. It is negligent to largely depend on energy from gas. Future price spikes will hurt customers. Rather than more gas-fired power plants we need to consider hybrid plants with a solar/wind component. We should include life-cycle costs (including the cost of decommissioning) in infrastructure planning.

Response

- 1. This is the subject of ongoing discussions with the City Council, the Advisors to the Council and interveners in the proceeding. At the October 30th, 2014 Milestone 2 public meeting, ENO made a proposal to develop a list of reasonably quantifiable non-energy impacts (e.g. air, water, health, etc.) as well as the estimated cost and time required to conduct the requisite research and analysis. On January 28th, 2014 the Council's Advisors filed responsive comments to the proposal raising concerns with both the estimated cost and time required to conduct the analysis.
- 2. See the Company's response to Public Comment 1, in particular Subparts 2 and 3, and the Company's response to Public Comments 2 and 3.
- 3. See the Company's response to Public Comment 1, in particular Subparts 2 and 3, and the Company's response to Public Comments 2 and 3.
- 4. The total supply costs presented at the Milestone 2 public meeting on October 30th, 2014 were levelized over the assumed useful life of each generating resource and were inputs into the development of the alternative portfolios presented on February 26th, 2015.

Public Comment 17

Does your plan include renewable energy sources? If not, why? Solar and wind energy are a much better option for the future in terms of efficacy and jobs.

Response

As previously stated, it should be noted that the ENO 2015 IRP has not yet been finalized and is still under development. The comment incorrectly presumes that a "Plan" has been presented when in fact only the components necessary to develop the plan have been developed and presented at each of the three (3) milestones completed to date. The final 2015 IRP is due to the Council in October 2015 and will be preceded by a draft report due in June 2015.

Please also see the Company's response to Public Comment 1 – Subparts 1 – 3, and the Company's response to Public Comments 2 and 3.

Public Comment 18

Please include and prioritize renewable energy in your integrated resource plan. Fossil fuels such as coal produce greenhouse gasses that dangerously warm our planet. As the climate heats up in the

coming century, New Orleans will be affected by rising sea levels and more intense, less predictable hurricanes. As long as Entergy sources energy from fossil fuels, it is contributing to climate change that threatens New Orleans. Our future is literally at stake. Please do what is best for the residents of this city and transition to renewable energy.

Response

See the Company's response to Public Comment 1, in particular Subparts 2 and 3, and also the Company's response to Public Comments 2 and 3.