

**BEFORE THE
LOUISIANA PUBLIC SERVICE COMMISSION**

**EX PARTE: APPLICATION OF)
ENTERGY LOUISIANA, LLC)
FOR APPROVAL OF THE MONDU)
SOLAR POWER PURCHASE)
AGREEMENT, EXPANSION OF THE)
GEAUX GREEN OPTION, COST)
RECOVERY AND RELATED RELIEF)**

DOCKET NO. U-_____

DIRECT TESTIMONY

OF

DANIEL C. BORATKO

ON BEHALF OF

ENTERGY LOUISIANA, LLC

PUBLIC REDACTED VERSION

DECEMBER 2023

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EXHIBIT LIST

Exhibit DCB-1	2022 Renewables RFP with Appendices
Exhibit DCB-2	Economic Evaluation Team Final Report (HSPM)
Exhibit DCB-3	Report of the Independent Monitor (HSPM)
Exhibit DCB-4	Updated Net Benefit Analysis (HSPM)
Exhibit DCB-5	Viability Assessment for 2022 Renewables RFP (HSPM)

I. INTRODUCTION

Q1. PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.

A. My name is Daniel C. Boratko. I am employed by Entergy Services, LLC (“ESL” or “Entergy Services”)¹ as Manager, Supply Planning and Analysis, for the System Planning & Operations (“SPO”) organization. My business address is 2107 Research Forest Drive, The Woodlands, Texas, 77380.

Q2. ON WHOSE BEHALF ARE YOU FILING THIS DIRECT TESTIMONY?

A. I am filing this Direct Testimony on behalf of Entergy Louisiana, LLC (“ELL” or the “Company”).

Q3. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

A. I earned a Bachelor of Science in Nuclear Engineering from Texas A&M University in 2014 and began my employment with ESL thereafter in June 2014. My responsibilities within ESL since 2014 have included monitoring and documenting technology cost and performance inputs for the Entergy Operating Companies (“EOCs”), participating in the Midcontinent Independent System Operator, Inc. (“MISO”) stakeholder committees related to reliability analyses and resource adequacy, and participating in or leading the evaluation of numerous generating resources solicited through Requests

¹ ESL is a service company that provides engineering, planning, accounting, legal, technical, regulatory, and other administrative support services to each of the Entergy Operating Companies (“EOCs”). The EOCs are ELL; Entergy Mississippi, LLC; Entergy Louisiana, LLC; Entergy Arkansas, LLC; Entergy New Orleans, LLC; and Entergy Texas, Inc.

1 for Proposals (“RFPs”) by the EOCs from 2019 to 2021. Within ESL, I have worked
2 in senior staff positions and as Manager, Advanced Economic Planning prior to
3 assuming my current position in 2022.
4

5 Q4. PLEASE DESCRIBE YOUR CURRENT RESPONSIBILITIES AS MANAGER,
6 SUPPLY PLANNING AND ANALYSIS FOR ESL.

7 A. I am responsible for providing analytical support for and recommendations to the
8 EOCs, including ELL, regarding their long-term generation resource plans. In that
9 function, I manage a staff that leads integrated resource planning efforts, follows and
10 provides input into the MISO resource adequacy process, performs reliability analyses,
11 and evaluates the economics of bids received in RFPs. I have been involved in several
12 economic analyses for generation resources on behalf of the various EOCs since 2014.
13

14 Q5. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY BEFORE THE
15 COMMISSION?

16 A. Yes. I have submitted testimony in Docket No. U-36697 before the Louisiana Public
17 Service Commission (“LPSC” or “the Commission”).²
18

² See Docket No. U-36697 (March 13, 2023), *Ex Parte: Application of Entergy Louisiana, LLC for Approval of Alternative Process to Secure Up to 3,000 MW of Solar Resources, Certification of Those Resources, Expansion of the Geaux Green Option, Approval of a New Renewable Tarif, and Related Relief*.

1 Q6. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS DOCKET?

2 A. My testimony supports the Company's application requesting approval and
3 certification of the power purchase agreement ("PPA") for the Mondu Facility³ that
4 was selected from ELL's 2022 Request for Proposals for Renewable Resources ("2022
5 Renewables RFP"), which is included as Exhibit DCB-1 to my Direct Testimony.
6 Specifically, I describe the economic assessment of proposals received in the 2022
7 Renewables RFP, from which the Mondu Facility was selected. I also discuss the
8 viability, accounting, and deliverability assessments that were considered as part of the
9 overall evaluation of the proposals. In addition, I describe the updated net benefits
10 analysis associated with the Mondu PPA and additional benefit analyses and cost
11 comparisons presented below.

12

13 **II. THE 2022 RENEWABLES RFP**

14 **A. Economic Assessment of Proposals – RFP Evaluation Teams and Safeguards**

15 Q7. WHAT EXPERIENCE HAVE YOU HAD WITH THE RFP PROCESSES UTILIZED
16 BY ELL AND THE OTHER ENTERGY OPERATING COMPANIES?

17 A. In my previous roles within ESL, I led and supervised the Economic Evaluation Team
18 ("EET") for previous RFPs that included evaluations similar to those conducted for the
19 2022 Renewables RFP. In those roles I was directly responsible for the development
20 and review of substantially similar models, assumptions, methodology, and results as

³ The Mondu Facility is the subject of a PPA executed between ELL and Mondu Solar, LLC, which is an indirect wholly owned subsidiary of NextEra Energy Capital Holdings. The PPA is included as HSPM Exhibit LKB-3 to the Direct Testimony of Laura K. Beauchamp.

1 those used and presented in the 2022 Renewables RFP. I have reviewed and, thus, am
2 familiar with the models, methodology, and assumptions used by the EET in the 2022
3 Renewables RFP evaluation. I note, as well, that one member of my team participated
4 in the Viability Assessment Team (“VAT”) that assessed the reasonableness of the
5 energy estimates provided for the proposals offered into the 2022 Renewables RFP.
6 The economic and viability evaluations identified the Mondu Facility as one of the
7 most economic resources for ELL customers arising out of the 2022 Renewables RFP,
8 which informed and supported ELL’s decision to negotiate and ultimately execute the
9 Mondu PPA.

10
11 Q8. WHAT TYPES OF RESOURCES WERE SOLICITED IN THE 2022
12 RENEWABLES RFP?

13 A. As reflected in the initial Notice of Intent, ELL sought to procure the following types
14 of resources with in-service dates no later than October 31, 2025:

- 15 • Up to 1,500 MW of new-build solar photovoltaic (“Solar PV”) resources capable
16 of providing cost-effective energy supply, fuel diversity, and other benefits to
17 ELL’s customers.
- 18 • PPAs for wind resources (located in either MISO South or SPP).
- 19 • In furtherance of ELL’s ongoing efforts to evaluate the economics of battery
20 storage technologies, the RFP also allowed for the submission of commercially
21 proven lithium-ion battery energy storage systems (“BESS”) as a separately priced
22 option to accompany proposals for Solar PV facilities.

1 Q9. PLEASE PROVIDE AN OVERVIEW OF THE FRP EVALUATION PROCESS
2 USED IN THE 2022 RENEWABLES RFP.

3 A. Based upon my review and consistent with past practices, the evaluation of proposals
4 received in response to the 2022 Renewables RFP was carried out by various RFP
5 Evaluation Teams, with each team having a defined focus. The EET was responsible
6 for evaluating the economics of the proposals and the economic ranking of the
7 proposals, considering among other things, assessments conducted by the VAT,
8 Accounting Evaluation Team ("AET"), and the Transmission Evaluation Team
9 ("TET").

10 In addition, the RFP Administration Team was responsible for (1) ensuring that
11 each RFP Evaluation Team had the information needed to perform its analysis in a
12 manner that was fair and impartial and would result in the selection of the most viable
13 and economic resources, and (2) facilitating the evaluation of proposals by all RFP
14 Evaluation Teams so that the evaluation process resulted in the proper assessment of
15 the economics and other relevant elements of the proposals. The RFP Administration
16 Team also ensured that bidder questions received concerning the RFP were addressed,
17 with questions and answers being posted on the RFP website.

18

19 Q10. PLEASE DESCRIBE HOW THE ECONOMICS OF THE PROPOSALS WERE
20 EVALUATED.

21 A. The EET performed a customer net benefit analysis to identify the most economic
22 proposals submitted into the 2022 Renewables RFP. The economic evaluation
23 estimated a proposal's net benefit or cost to ELL's customers by subtracting the total

1 cost of each proposal, as determined by the EET, from the associated benefits. As part
2 of the evaluation, the EET utilized a production cost model (Aurora)⁴ to estimate the
3 variable supply cost effects produced by each proposal when added to ELL's resource
4 portfolio. These variable supply cost effects were included in the assessment along
5 with capacity benefits, terminal value benefits (if applicable), renewable energy
6 certificate ("REC") value, production tax credits (if applicable), and an assessment of
7 each proposal's fixed costs to determine a customer net benefit (or cost) for each
8 proposal. The components of the economic evaluation are presented in section 5.1.2 of
9 the RFP (Exhibit DCB-1). The economic evaluation performed by the EET is
10 described in section II.B below and presented in Exhibit DCB-2, which contains Highly
11 Sensitive Protected Materials ("HSPM"), to my testimony, and an updated net benefits
12 analysis for the Mondu proposal is included as Exhibit DCB-4 (HSPM) to my
13 testimony, which I describe in section III below.

14
15 Q11. PLEASE DESCRIBE THE VIABILITY ASSESSMENTS OF THE PROPOSALS.

16 A. The viability assessment performed by the VAT is described in section 5.1.3 of the
17 RFP (Exhibit DCB-1). The VAT reviewed and assessed the non-price attributes of the
18 resources and corresponding proposals. Specifically, the VAT's risk and viability
19 evaluations were carried out by subject matter experts with expertise in the areas of
20 resource capabilities, project development risks, environmental compliance risks,

⁴ Aurora is software licensed from Energy Exemplar that is used to simulate operation of the MISO energy market to forecast wholesale power market prices. ESL has used the software for several years to assess the variable supply cost effects of adding a particular resource or set of resources to an EOC's portfolio.

1 construction risks, completion risks, proposed commercial terms, resource
2 deliverability, regulatory considerations, and other factors. The VAT performed a
3 qualitative viability assessment of various criteria to score and compare the relative
4 risks of proposals. Criteria and weightings were defined prior to receipt of proposals.
5 The final viability assessment was factored into the summary of proposals by the
6 Administration team. The result of the VAT assessment for the Mondu resource
7 (resource 101) is summarized on pages 13-14 of HSPM Exhibit DCB-5 to my Direct
8 Testimony. The Mondu resource was rated medium-low risk overall.
9

10 Q12. PLEASE DESCRIBE THE ACCOUNTING ASSESSMENTS CONDUCTED BY
11 THE ACCOUNTING EVALUATION TEAM.

12 A. The accounting assessment performed by the AET is described in section 5.1.4 of the
13 RFP (Exhibit DCB-1). The AET reviewed each proposal to determine the accounting
14 treatment required for each resource and its effects. In performing the accounting
15 assessment, the AET evaluated each proposal based on both the accounting standards
16 in effect at the time of proposal submission as well as based on the accounting standards
17 expected to be in effect during the delivery term of the proposal. The Mondu resource
18 was evaluated as a conforming proposal that, under the current accounting rules, would
19 not result in a long-term liability on ELL's Financial Statements.⁵
20

⁵ As discussed by Ms. Ingram, this could change should the accounting rules change and require the Mondu PPA to be recognized as a lease, and thus, be counted as a liability on ELL's balance sheet or if its costs are imputed as debt, affecting ELL's financial metrics and potentially its credit rating.

1 Q13. PLEASE DESCRIBE THE TRANSMISSION ASSESSMENTS CONDUCTED BY
2 THE TRANSMISSION EVALUATION TEAM.

3 A. The transmission assessment performed by the TET is described in section 5.1.5 of the
4 RFP (Exhibit DCB-1). The TET was responsible for assessing the interconnection,
5 deliverability, and transmission costs and risks associated with each proposal and
6 comparing this assessment to bidder-provided estimates for the same cost categories.
7 The TET identified and estimated the timing, scope, and costs of transmission upgrades
8 required to interconnect and deliver the energy output of the proposed resources to the
9 point of interconnection. The TET also estimated costs associated with
10 interconnection, deliverability, and, if applicable, for transmission upgrades not
11 identified and included in a bidder's proposal that would be expected to be determined
12 through the MISO Definitive Planning Phase ("DPP") System Impact Study and
13 Facility Study processes. The TET assessment for the Mondu proposal cites the costs
14 identified by MISO in the executed GIA for Mondu (MISO identification J1465)⁶.
15 MISO interconnection and transmission costs are therefore known and do not threaten
16 project viability or economics.
17

⁶ Entergy Louisiana-Mondu Solar GIA, *Generator Interconnection Agreement*, MISO (September 16, 2022), available at <https://cdn.misoenergy.org/Entergy%20Louisiana-Mondu%20Solar%20GIA%20J1465%20SA%203907626476.pdf>.

1 Q14. IN ADDITION TO THE USE OF SEPARATE RFP EVALUATION TEAMS, WHAT
2 SAFEGUARDS WERE ESTABLISHED TO ENSURE THAT THE 2022
3 RENEWABLES RFP ECONOMIC EVALUATION WAS CONDUCTED IN AN
4 OBJECTIVE AND IMPARTIAL MANNER?

5 A. A number of process safeguards and procedures were established to ensure that
6 information provided by bidders in the 2022 Renewables RFP was kept confidential
7 and was not improperly disclosed to, or used by, any employee, consultant, or other
8 ESL representative or any Entergy competitive affiliate. Each of these procedures is
9 summarized below and described in more detail in Appendix G of the main body to the
10 2022 Renewables RFP, which is included with my Direct Testimony as Exhibit
11 DCB-1.

- 12 • All employees of ESL or any EOC were required to adhere to the
13 Entergy Affiliate Rules and Codes of Conduct, which, among other
14 things, prohibit actions that provide an unfair competitive advantage or
15 preferential treatment to competitive affiliates and prohibit the
16 inappropriate transfer of confidential information to competitive
17 affiliates.
- 18 • Each person participating in the evaluation of proposals received in
19 response to the 2022 Renewables RFP was required to adhere to an
20 Evaluation Confidentiality Acknowledgement, which limits and
21 restricts the use of information.
- 22 • ESL utilized a Bid Event Coordinator (who was assisted by the RFP
23 Administration Team) to perform several duties, which included acting

1 as an intermediary between ESL and bidders to address issues relating
2 to the 2022 Renewables RFP and to ensure that each evaluation team
3 had the relevant information needed to perform its respective analysis
4 and that all information was evaluated on a coordinated basis to ensure
5 that the most viable and economic resources were selected.

- 6 • The Company has developed a detailed process for reviewing,
7 segregating, and evaluating proposals in order to ensure the objective
8 and impartial treatment of all bidders and appropriately preserve the
9 confidentiality of confidential information provided by bidders under
10 the RFP. This process is described in both the Main Body and Appendix
11 G of the RFP.

- 12 • During the RFP proposal evaluation, proposal information was
13 segregated into confidential reports, which were then made available to
14 the appropriate RFP Evaluation Teams. The different teams were
15 permitted to see only those reports that included information they
16 needed in order to carry out their defined part of the proposal evaluation.

- 17 • Because the RFP did not preclude self-build options from being
18 submitted on behalf of ELL or any of its affiliates, an Independent
19 Monitor ("IM") was retained to oversee all aspects of the RFP to provide
20 independent assurance that its design, implementation, evaluation, and
21 selection processes were impartial and objective. The IM provided an
22 objective, third-party perspective on ELL's efforts to ensure that all
23 proposals were treated consistently and without undue preference to any

1 Bidder. I discuss the role of the IM in more detail later in my Direct
2 Testimony.

- 3 • Self-build proposals were required to be finalized with oversight from
4 the IM and submitted to the Bid Event Coordinator prior to receipt of
5 third-party bids.
6

7 **B. Economic Assessment of Proposals – Components, Analyses, and Results**

8 Q15: WHAT COSTS AND BENEFITS WERE TAKEN INTO CONSIDERATION IN THE
9 ECONOMIC EVALUATION PROCESS?

10 A. The economic evaluation process considered, for each proposal as applicable, the
11 following costs and expenses:

- 12 • Acquisition costs;
13 • Transmission and interconnection costs;
14 • Land acquisition costs or land lease costs;
15 • Ongoing fixed operations and maintenance expenses;
16 • Imputed debt cost;
17 • All-in PPA energy pricing; and
18 • Property tax and insurance expense.

19 The economic evaluation process considers, for each proposal as applicable, the
20 following benefits:

- 21 • Long-term avoided capacity value;
22 • ELL variable supply cost savings;

- REC value;
- Terminal value benefits; and
- Production tax credits (if applicable).

Q16. WERE ANY SENSITIVITY ANALYSES PERFORMED BY THE EET?

A. Yes. The EET assessed proposals based on several sensitivities related to key drivers that could impact the economic ranking of the proposals. For PPA proposals that were evaluated, sensitivity analyses were performed: (1) for P90 capacity factors provided by bidders – *i.e.*, capacity factors with a 90 percent probability of being achieved or exceeded in actual operations; (2) variable pricing (if applicable); (3) exclusion of imputed debt cost; and (4) and capacity credit for Energy Resource Interconnection Service proposals (if applicable). For build-own-transfer (“BOT”) proposals that were evaluated, sensitivity analyses were performed: (1) to assume TET-estimated costs if those costs were higher than those included in the bidder’s proposal; (2) to omit on balance sheet lease treatment for proposals offered with a land lease; (3) to treat property tax as both a cost and benefit to reflect community tax benefits provided to ELL customers; and (4) to use a generic capacity factor for certain proposals with high capacity factors relative to comparable resources. Sensitivities excluding imputed debt cost for PPAs and on balance sheet lease treatment for ownership proposals are conducted to recognize that despite ELL’s view that these costs are appropriate to consider when evaluating customer economics, they are not direct costs outlined in the BOT or PPA agreements but rather costs associated with

1 incremental balance sheet risk. This risk is important to consider because it can affect
2 ELL's credit rating, as discussed by Ms. Ingram.

3
4 Q17. PLEASE DESCRIBE THE RESULTS OF THE ECONOMIC EVALUATION.

5 A. Initial participation in the RFP was robust with 45 proposals (including 33 PPA
6 proposals and 12 BOT proposals) from 9 bidders registered and 36 proposals from 7
7 bidders evaluated. The proposals included five battery (BESS) options. Under
8 reference assumptions, each proposal showed some potential for positive net benefits.
9 Based on net benefits with reference assumptions expressed in \$/kW-year and \$/MWh
10 levelized real 2022 dollars, the Mondu Facility proposal (Proposal 5285) was one of
11 the highest ranked PPA proposals and was selected in the RFP for continued
12 negotiation and execution. HSPM Exhibit DCB-2 to my Direct Testimony summarizes
13 the results of the economic evaluation leading to the selection of the Mondu Facility.

14
15 Q18. WERE THESE ANALYSES AND RESULTS SUBJECT TO INDEPENDENT
16 OVERSIGHT?

17 A. Yes, ELL retained Mr. Wayne Oliver of Merrimack Energy Group to serve as the IM
18 for the 2022 Renewables RFP. The IM's role was (1) to monitor the design and
19 implementation of the solicitation, evaluation, and selection processes; (2) to be kept
20 apprised of the contract negotiation process to ensure impartiality and objectivity; and
21 (3) to provide an objective, third-party perspective on ELL's efforts to ensure that all
22 proposals were treated consistently and without undue preference to any bidder. The
23 IM also reviewed the proposal evaluation results and rankings before they were

1 finalized. It is important to note that the IM selected for the 2022 Renewables RFP
2 process functioned independently and will not be providing testimony on behalf of
3 ELL.⁷ The IM's conclusions were provided in a report, which is attached to my Direct
4 Testimony as HSPM Exhibit DCB-3.

5
6 Q19. PLEASE SUMMARIZE WHY THE MONDU FACILITY WAS ULTIMATELY
7 SELECTED.

8 A. The Mondu Facility was selected based on its economic ranking and viability rating
9 relative to the proposals submitted in response to the 2022 Renewables RFP.

10
11 **III. ECONOMIC ANALYSIS**

12 Q20. IS THE MONDU PPA EXPECTED TO BENEFIT CUSTOMERS?

13 A. Yes. In addition to the resource's ability to meet the growing demand for renewable
14 resource options as discussed by Company witnesses Ms. Laura Beauchamp and Ms.
15 Elizabeth Ingram in their Direct Testimonies, the Mondu PPA also is expected to
16 provide variable supply cost, capacity, fuel price stability, and REC benefits to
17 customers, as summarized on page 2 of HSPM Exhibit DCB-4, which presents the
18 updated economic analysis. I discuss the analyses and assumptions used to derive the
19 calculations of these net benefits below.

20

⁷ In prior proceedings, the IM has filed testimony in the record when requested by the LPSC Staff.

1 Q21. HAVE ANY ADDITIONAL ANALYSES BEEN PERFORMED ON THE MONDU
2 PROPOSAL SELECTED IN THE 2022 RENEWABLES RFP SINCE THE RFP
3 EVALUATION WAS COMPLETED?

4 A. Yes. The customer economic analysis that was conducted for the 2022 Renewables
5 RFP, which I referred to above, has been updated with final transaction terms for the
6 Mondu Facility selected in the 2022 Renewables RFP.

7
8 Q22. WHAT TERMS AND ATTRIBUTES SPECIFIC TO THE MONDU FACILITY
9 WERE UPDATED IN THE ECONOMIC ANALYSIS?

10 A. The negotiation of definitive agreements post-RFP selection resulted in changes to
11 some transaction terms, including the estimated commercial operation date and updated
12 pricing that can be subject to a [REDACTED]
13 [REDACTED]. Mondu's estimated commercial operation date changed from [REDACTED]
14 [REDACTED], to [REDACTED]. Also, Mondu's Base PPA Price
15 changed from [REDACTED]/MWh to [REDACTED]/MWh and is subject a contractual adjustment
16 (fixed, across all years) of [REDACTED]
17 [REDACTED]
18 [REDACTED]
19 [REDACTED]
20 [REDACTED]
21 [REDACTED]; however, it was taken into consideration when
22 updating the net benefit analysis. The agreed-upon pricing, which was provided in
23 conjunction with the opportunity for bidders to submit refreshed bids (as discussed by

1 Ms. Beauchamp in her Direct Testimony), was used to update the economic analysis
2 for the Mondu Facility.⁸

3
4 Q23. WERE ADDITIONAL UPDATES MADE TO THE ECONOMIC ANALYSIS FOR
5 THE MONDU FACILITY?

6 A. Yes. There have been additional changes to reflect changes to the cost of capital as
7 well as to reflect value in real 2023 dollars. Additionally, the analysis was updated to
8 include an estimate of the value to customers of the price stability provided by the
9 Mondu PPA. In general, this fuel price stability analysis recognizes that resources such
10 as the Mondu Facility, which produce energy at a stable cost independent of volatile
11 fuel commodity prices, have a value to customers because of the stabilizing effect they
12 have on electricity bills during times of fuel price spikes – and the analysis seeks to
13 quantify the value of that stability. This fuel price stability update relies on a 2022
14 study⁹ that compares the cost of fixed rate and adjustable-rate mortgages issued over
15 the January 2005 to January 2010 timeframe, finding that mortgage borrowers
16 preferred the more stable, fixed rate mortgages and paid a premium for that stability
17 ranging from 12% to 23%. Given that the electric bill can be a significant cost for
18 many households and businesses, it is reasonable to assume that ELL's customers may
19 similarly value stability in their electric bills, another monthly cost that, similar to
20 adjustable-rate mortgages, is subject to volatility due to factors outside the customers'

⁸ See HSPM Exhibit DCB-4 *Id.* at page 1.

⁹ Kwangwon Ahn, Joetta Forsyth, Hanwool Jang, Dongshin Kim, *Fixed Rate Mortgages: The Cost of Interest Rate Risk Aversion*, ScienceDirect (January 2022), available at <https://www.sciencedirect.com/science/article/abs/pii/S1544612321002373?via%3Dihub>.

1 control. The energy from solar resources such as the Mondu Facility acts as a long-
2 term hedge against energy price volatility driven by natural gas prices. For example, in
3 2022, increases in natural gas and wholesale electricity prices drove significant
4 volatility in the fuel adjustment clause rates paid by ELL customers, ranging from the
5 low intra-year rate of \$0.03047 per kWh for customers served at secondary voltage in
6 March 2022 to a high intra-year rate four months later of \$0.06297 per kWh for
7 customers served at secondary voltage in July 2022.¹⁰ In other words, ELL residential
8 customers saw their fuel adjustment clause rate more than double in the span of four
9 months to a level not seen in over a decade. Solar facilities, for which "fuel" from the
10 sun comes at no cost, will provide greater stability in fuel adjustment clause rates for
11 customers in the event of a future spike in natural gas prices like that seen in 2022.
12 Accordingly, the updated analysis adds an [REDACTED]
13 premium to the estimated variable supply cost savings for the Mondu PPA to account
14 for the avoided long-term exposure to natural gas price volatility (such as the volatility
15 that led to elevated gas prices for much of 2022) provided by this resource to ELL
16 customers.

17 Additionally, as further explained below, the updated benefits analysis includes
18 cases based upon the level of capacity credit the solar resources may be granted under
19 MISO's capacity accreditation methodology (*i.e.*, the current generic annual average
20 capacity credit of 38.75% or capacity credits of [REDACTED] or [REDACTED] based upon proposed
21 changes to MISO's capacity accreditation methodology).

¹⁰ Entergy Louisiana, LLC, *Residential Energy Price*, Entergy, available at https://www.entergy-louisiana.com/your_home/price/.

Q24. WHAT WERE THE RESULTS OF THIS UPDATED ECONOMIC ANALYSIS FOR THE MONDU FACILITY?

A. The Mondu Facility is projected to result in a range between a net benefit and an net cost in 2023 dollars (including the price stability benefit) over the 20-year PPA term, as detailed in HSPM Exhibit DCB-4 (page 2) and Table 1 (HSPM) below. The results of the analysis are shown with and without the price stability benefit; all subsequent sensitivities include the price stability benefit.

Table 1

Proposal Name	Capacity Credit	Net Benefit w/o Price Stability (\$M)	Net Benefit w/ Price Stability (\$M)	(\$M)	(\$M)	Low Gas, No CO2 Net Benefit (\$M)	High Gas, High CO2 Net Benefit (\$M)
Mondu							
	38.75%						

Q25. PLEASE EXPLAIN WHY THE UPDATED ECONOMIC ANALYSIS INCLUDES CASES BASED UPON THE LEVEL OF CAPACITY CREDIT THE SOLAR RESOURCES MAY BE GRANTED UNDER MISO'S CAPACITY ACCREDITATION METHODOLOGY.

A. A significant factor affecting the economic analysis of renewable resources is MISO's transition to a seasonal Planning Resource Auction ("PRA"). MISO currently grants new solar resources a 50% capacity credit in the summer, fall, and spring seasons, but

1 only a 5% capacity credit in the winter season (for an annual average of 38.75%).
2 MISO has proposed changes to its methodology for non-thermal generation
3 accreditation, which poses a risk to the amount of capacity credit that will be attributed
4 by MISO to solar resources such as the Mondu PPA, especially given increased solar
5 penetration in MISO South. MISO measures the output of each individual resource
6 over pre-defined hours in each season to accredit such resource after it has attained
7 sufficient operational history. Given how a unit operates over those pre-defined hours
8 and the fact that the selected hours are intended to reflect periods of high risk in each
9 season, a solar resource may receive a lower average annual capacity credit under
10 MISO's proposed revised capacity accreditation methodology than it would under
11 MISO's current methodology.

12 As such, the Company has assessed a range of future possible accreditation
13 levels. HSPM Exhibit DCB-4 and Table 1 (HSPM) above present the range of
14 estimated benefits that might result from the Mondu PPA based upon both the current
15 38.75% capacity credit for solar resources and the range of capacity credits that might
16 result from MISO's proposed changed accreditation methodology (*i.e.*, [REDACTED] and [REDACTED]).
17

1 Q26. SHOULD THE COMMISSION FIND THE MONDU PPA TO BE IN THE PUBLIC
2 INTEREST EVEN THOUGH THE ECONOMIC ANALYSIS DETERMINED
3 THAT, UNDER A SCENARIO WHERE THE MONDU RESOURCE IS GRANTED
4 ONLY A [REDACTED] CAPACITY CREDIT BY MISO, THE MONDU PPA MIGHT HAVE
5 NEGATIVE NET BENEFITS OVER ITS TERM BY COMPARISON TO GAS-
6 FIRED RESOURCES?

7 A. Yes. Solar resources are an important component of a balanced resource portfolio. This
8 is supported by ELL's 2023 Integrated Resource Plan ("IRP"), which identified solar
9 as a key component of the optimal resource mix across a range of potential future
10 market conditions. The Mondu PPA would serve to help meet ELL's long-term energy
11 and capacity needs and fill customer demand for sustainable and renewable resources.
12 The PPA also would provide several benefits not captured in the net benefit analysis,
13 including:

- 14 • Serving Peak Load - The reliability contribution of solar resources is highest
15 in the summer, which is when ELL's native customer load peak occurs.
16 Thus, the Mondu PPA would provide critical energy when the customer
17 demand is highest.
- 18 • Customer Interest – The PPA will help meet the needs of existing customers
19 that, as discussed by Ms. Beauchamp, have expressed an increased interest
20 in renewable options in order to achieve their own sustainability objectives,
21 and the PPA will help attract new customers with similar objectives,
22 enhancing Louisiana's economic competitiveness, as Ms. Beauchamp also
23 describes.

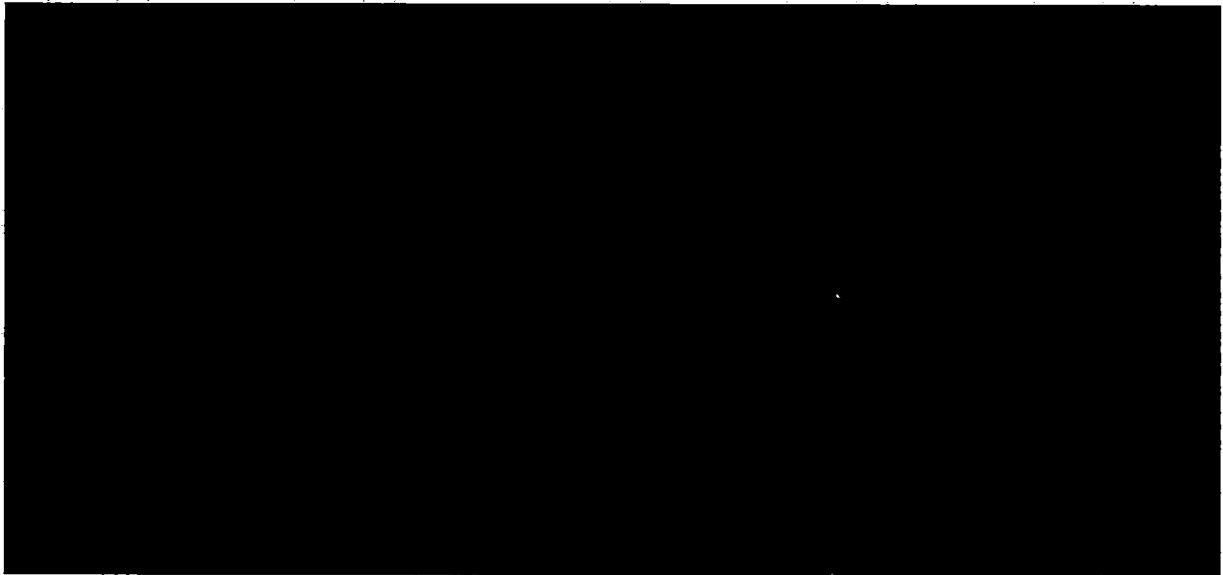
- 1 • Supply Diversity & Environmental Regulation -- The PPA will add
2 renewable capacity and energy to ELL's generation portfolio mix,
3 increasing fuel diversity and helping to protect customers from the risk, and
4 associated costs, of future greenhouse gas regulation, such as the recent
5 proposed revisions to Clean Air Act Section 111.
- 6 • Community Development -- The construction of the facility that is the
7 subject of the PPA will provide direct spend and economic development
8 into the local community.

9 Moreover, the Mondu proposal was selected because it was identified as one of
10 the most beneficial resources offered in the 2022 Renewables RFP. It is important to
11 recognize that the economic analyses presented in HSPM Exhibit DCB-4 and Table 1
12 (HSPM) are based upon comparing the solar resources to a gas-fired combustion
13 turbine ("CT"). However, by comparison to the renewable resources submitted in the
14 2022 Renewables RFP, and further by comparison to other solar resources within
15 MISO South, the Mondu PPA is an economic resource to provide these benefits to
16 ELL's customers. SPO has compared the costs associated with the Mondu PPA to
17 market benchmarks provided by Boston Consulting Group ("BCG") and LevelTen
18 Energy Marketplace for Virtual Power Purchase Agreement ("VPPA") transactions
19 within MISO South. VPPA transactions represent the market rate that customers are
20 willing to pay to receive the energy and sustainability attributes of renewable resources.
21 Therefore, VPPA prices are an appropriate basis of comparison for the Mondu PPA,
22 which, as discussed above, is a resource with the sustainability attributes increasingly
23 demanded by ELL's existing customers and prospective customers. Based on BCG's

1 and LevelTen's second quarter 2023 reports for 25th to 75th percentile prices, BCG
2 reports a range of [REDACTED], while LevelTen reports
3 a range of [REDACTED] as shown in Figure 1 (HSPM).

4 **Figure 1**

5 **HIGHLY SENSITIVE PROTECTED MATERIALS**



6
7 The Mondu PPA cost of approximately [REDACTED]
8 [REDACTED] presents a competitively priced
9 resource to meet ELL's sustainability goals and customer demand for renewable
10 energy. This analysis demonstrates that the Mondu PPA will provide a reasonably
11 priced resource for ELL to serve its customers who desire to take service under ELL's
12 renewable energy tariffs.

13
14 Q27. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

15 A. Yes, at this time.

AFFIDAVIT

STATE OF TEXAS

COUNTY OF MONTGOMERY

NOW BEFORE ME, the undersigned authority, personally came and appeared, **Daniel C. Boratko**, who after being duly sworn by me, did depose and say:

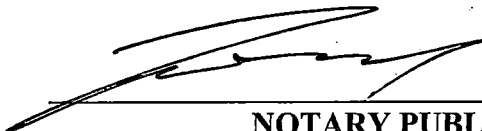
That the above and foregoing is sworn testimony in this proceeding and that knows the contents thereof, that the same are true as stated, except as to matters and things, if any, stated on information and belief, and that as to those matters and things, verily believes them to be true.



Daniel C. Boratko

SWORN TO AND SUBSCRIBED BEFORE ME

THIS 5 DAY OF DECEMBER 2023



NOTARY PUBLIC

My commission expires: 9-18-24

