February 2, 2023

VIA FEDEX

Ms. Terri Bordelon
Louisiana Public Service Commission
Records Division
602 N. Fifth St.
Galvez Bldg, 12th Floor
Baton Rouge, LA 70802
Fax: 225-342-0877

Re: LPSC Docket No. U-36923, *Ex Parte: Application of Cleco Power LLC for: (1) Implementation of Changes in Rates to Be Effective July 1, 2024; and (2) Extension of Existing Formula Rate Plan*

Dear Ms. Bordelon:

Enclosed please find, for filing in the above-captioned proceeding, one original and three copies of each of the following documents:

(1) Highly Sensitive Version of the Direct Testimony of Devi Glick and Exhibits on Behalf of Sierra Club, which contains HIGHLY SENSITIVE PROTECTED MATERIALS PURSUANT TO THE CONFIDENTIALITY AGREEMENT IN DOCKET NO. U-36923;
(2) Confidential Version of the Direct Testimony of Devi Glick and Exhibits on Behalf of Sierra Club, which contains PROTECTED MATERIALS PURSUANT TO THE CONFIDENTIALITY AGREEMENT IN DOCKET NO. U-36923; and
(3) Public Version of the Direct Testimony of Devi Glick and Exhibits on Behalf of Sierra Club Sierra

If you have any questions or require any additional information, please to not hesitate to contact me.

Respectfully submitted,

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BEFORE THE

LOUISIANA PUBLIC SERVICE COMMISSION

APPLICATION OF CLECO POWER LLC FOR: (1) IMPLEMENTATION OF CHANGES IN RATES TO BE EFFECTIVE JULY 1, 2024; AND (2) EXTENSION OF EXISTING FORMULA RATE PLAN	)))))))	**DOCKET NO. U-36923**

PUBLIC VERSION

DIRECT TESTIMONY OF

DEVI GLICK

ON BEHALF OF SIERRA CLUB

FEBRUARY 5, 2024

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1. INTRODUCTION AND PURPOSE OF TESTIMONY

Q Please state your name and occupation.

A My name is Devi Glick. I am a Senior Principal at Synapse Energy Economics, Inc. ("Synapse"). My business address is 485 Massachusetts Avenue, Suite 3, Cambridge, Massachusetts 02139.

Q Please describe Synapse Energy Economics.

A Synapse is a research and consulting firm specializing in energy and environmental issues, including electric generation, transmission and distribution system reliability, ratemaking and rate design, electric industry restructuring and market power, electricity market prices, stranded costs, efficiency, renewable energy, environmental quality, and nuclear power.

Synapse's clients include state consumer advocates, public utilities commission staff, attorneys general, environmental organizations, federal government agencies, and utilities.

Q Please summarize your work experience and educational background.

A At Synapse, I conduct economic analysis and write testimony and publications that focus on a variety of issues related to electric utilities. These issues include power plant economics, electric system dispatch, integrated resource planning, environmental compliance technologies and strategies, and valuation of distributed energy resources. I have submitted expert testimony before state utility regulators in more than a dozen states.

In the course of my work, I develop in-house models and perform analysis using industry-standard electricity power system models. I am proficient in the use of spreadsheet analysis tools, as well as optimization and electric dispatch models. I have directly run EnCompass and PLEXOS and have reviewed inputs and outputs for several other models.

Before joining Synapse, I worked at Rocky Mountain Institute, focusing on a wide range of energy and electricity issues. I have a master's degree in public policy and a master's degree in environmental science from the University of Michigan, as well as a bachelor's degree in environmental studies from Middlebury College. I have more than 11 years of professional experience as a consultant, researcher, and analyst. A copy of my current resume is attached as Exhibit DG-1.

Q On whose behalf are you testifying in this case?

A I am testifying on behalf of Sierra Club.

Q Have you testified before the Louisiana Public Service Commission ("Commission" or "LPSC")?

A No. But I have been involved in Cleco Power's ("Cleco" or "Company") most recent integrated resource plan ("IRP") docket. I assisted Sierra Club with its filed comments on Cleco's 2021 IRP (comments filed January 31, 2023) and with its supplemental comments on Cleco IRP Addendum (comments filed November 30, 2023).

Q What is the purpose of your testimony in this proceeding?

A The purpose of my testimony is to review the reasonableness of Cleco's rate case requests regarding its coal plants at Rodemacher 2 and Madison 3 based on the units' economics and the Company's capacity needs. I evaluate the analysis that Cleco submitted in support of its requests and present the result of my own independent analysis. I also highlight my concerns with the risks of Cleco's future plans for Madison 3.

Q How is your testimony structured?

A In Section 2, I summarize my findings and recommendations for the Commission.

In Section 3, I introduce Cleco's coal plants at Rodemacher 2 and Madison 3. I also summarize Cleco's capacity position and future needs.

In Section 4, I summarize Cleco's rate case asks for Rodemacher 2 and the Company's current retirement plans for the Unit. I highlight my concerns with the Company's planned spending between now and retirement. I discuss my and the Company's own analysis on the recent and projected economic performance of the plant and present my recommendations that Cleco retire the plant earlier than currently planned.

In Section 5, I summarize Cleco's rate case asks for Madison 3. I discuss the Company's current plan to convert the unit to install a carbon capture and sequestration ("CCS") system at the plant and highlight my concerns with this plan. I highlight the replacement resources that Cleco should be evaluating for Madison 3 to meet any future capacity needs.

Q What documents do you rely upon for your analysis, findings, and observations?

A My analysis relies primarily upon the workpapers, exhibits, and discovery responses of Cleco.

2. FINDINGS AND RECOMMENDATIONS

Q Please summarize your findings.

A My primary findings are:

1. Rodemacher 2 has been uneconomic to operate in recent years and is projected to continue to be uneconomic between now and its retirement date. It is in ratepayers' best interest to retire and replace the plant as soon as possible.

2. Cleco is asking for an additional $5.4 million in capital spending at Rodemacher 2 between now and when the unit retires but has not properly justified this request.

3. Madison 3 has been uneconomic and is projected to continue to be uneconomic to operate in the near future.

4. Investment in CCS is risky and speculative, and Cleco should not subject ratepayers to associated risks by investing in the technology at Madison 3.

5. With the expiration of the Dixie Electric Membership Corporation ("DEMCO") wholesale contract, and Cleco's failure to secure another wholesale customer, Cleco is long on capacity. The Company is now

asking to shift the costs that were being paid by DEMCO customers, particularly those associated with Madison 3, back to Cleco ratepayers.

6. Cleco ratepayers do not need the capacity from Madison 3 that was previously allocated to the wholesale customers.

Q Please summarize your recommendations.

A Based on my findings, I offer the following recommendations:

1. Cleco should retire Rodemacher 2 as soon as possible, no later than 2026, and not wait until 2028.

2. Cleco should not be allowed to recover the requested $5.4 million in future spending at Rodemacher 2 without adequately justifying its intended use.

3. Cleco should remove from rate base the portion of Madison 3 that was previously allocated to the wholesale customer and sell to another entity or transfer the capacity to its unregulated arm.

4. The Commission should disallow recovery of the net costs associated with the excess energy and capacity that was previously paid by wholesale customers.

5. Cleco should not use ratepayer funds or have any ratepayer backing for its proposed Project Diamond Vault.

3. INTRODUCTION TO CLECO'S COAL ASSETS AND CURRENT CAPACITY POSITION

Q What is Cleco proposing in this docket related to its coal capacity?

A Cleco is seeking to include in rates the costs to operate and maintain Rodemacher Unit 2 and Madison Unit 3. This includes capital expenditures ("capex") and operations and maintenance ("O&M") costs incurred during the test year.

At Rodemacher Unit 2, Cleco is seeking approval to recover: deferred accelerated depreciation, accelerated future depreciation, and an additional $5.4 million of capital spending through June 2028.

Q What is the application test year?

A The application is based on the twelve months ending ("TME") June 30, 2022.[1] As I will discuss below, Cleco is proposing adjustments to apply to the historical test year data.

Q Please provide an overview of Rodemacher 2 and Madison 3.

A Rodemacher 2 is a coal unit of 493 MW located in Louisiana, of which Cleco's share is 147 MW. Rodemacher 2 was constructed in 1982.[2] The unit is fueled by coal from the Powder River Basin in Wyoming.[3]

[1] Direct Testimony of Christina McDowell at 32.

[2] Cleco Power LLC Final Integrated Resource Plan at 33, 36, LPSC Docket No. I-36175, filed May 31, 2023 ["Cleco Power Final IRP Report"].

[3] *Id.* at 47.

Madison 3 is a 628 MW generator located in Louisiana which was constructed in 2010.[4] The unit predominately burns petroleum coke, but also burns biomass and coal.[5]

Q What is the undepreciated balance at each plant?

A As of 2023, the plant balance for Rodemacher 2 is about $62 million and the plant balance for Madison 3 is about $767 million.[6]

Q What is the Company's plan for each of these coal units?

A Cleco plans to retire Rodemacher Unit 2 by 2028.[7]

The Company plans to develop a CCS project called Project Diamond Vault at Madison 3[8] and keep the unit online for the next several decades. Cleco asserts that none of costs for Project Diamond Vault are directly at issue in this rate case.[9] But as I will discuss in Section 5, the timeline for Project Diamond Vault is relatively near-term (within the next five years). And derating Madison 3 affects the Company's capacity position, which in turn impacts the economics of continuing to operate each of the Company's existing resources. Excess capacity can and should be retired, and with that, capital spending and O&M should be

[4] *Id.* at 33.
[5] Cleco generating assets. Available at https://www.cleco.com/about/generation-assets/regulated-facilities/brame-energy-center.
[6] Cleco's Response to Sierra Club Request 1-3.
[7] Direct Testimony of J. Robert Cleghorn at 11.
[8] Direct Testimony of William Fontenot at 11-12.
[9] Cleco's Response to LPSC Request 2-62.

ramped down in advance of retirement. It would reflect imprudent planning if Cleco totally separated the Company's test year spending request from its 2028 plans for Project Diamond Vault.

Q What is Cleco's capacity position?

A Based on Cleco's own Load and Resource table,[10] the Company is projected to have substantial excess capacity when the DEMCO wholesale contract expires at the end of March 2024.[11] Specifically, Cleco will have at least 350 MW of surplus capacity through 2028 (both summer and winter). The Company's capacity need only arises when CCS installation at Madison 3 results in a 200 MW down-rate.[12] The Company should retire some of its fossil capacity early, or otherwise remove it from rate base.

[10] Direct Testimony of J. Robert Cleghorn, Table JRC-1.
[11] *Id.* at 6.
[12] Cleco Final IRP Report at 37; Direct Testimony of J. Robert Cleghorn, Table JRC-1.

4. CLECO'S REQUEST FOR COST RECOVERY FOR RODEMACHER 2 AND ITS OPERATIONAL PLANS FOR THE PLANT ARE NOT JUSTIFIED BY THE UNIT'S RECENT HISTORICAL AND PROJECTED ECONOMIC PERFORMANCE

i. Cleco's has not adequately justified its proposal to wait until 2028 to retire Rodemacher and to recover substantial additional capital expenditures over the plant's remaining life

Q Why does Cleco choose 2028 as a retirement date?

A The Company explains that the U.S. Environmental Protection Agency's ("EPA") Coal Combustion Residuals ("CCR") Rule "renders the existing onsite fly ash and bottom ash impoundments for Rodemacher Unit 2 unusable."[13] Cleco therefore needs to either invest in substantial capital investments at the plant to comply—or else retire it by 2028.[14] Investment in compliance with CCR does not appear to be an economic option, as Cleco states in testimony that its ability to comply with the CCR rule has effectively determined that the plant's useful life will end in 2028.[15]

[13] Direct Testimony of Christina C. McDowell at 30.
[14] Cleco Power Final IRP Report at 36.
[15] Direct Testimony of Christina C. McDowell at 30.

Q What costs is Cleco asking to recover for Rodemacher between now and its retirement date?

A Cleco includes a new, additional $5.4 million in capital expenditure at Rodemacher within its request for accelerated depreciation.[16] Cleco rolls the unexplained $5.4 million into the $12.8 million increase in Rodemacher 2 accelerated depreciation expense that the Company requested. This in turn is part of Cleco's the total system-wide requested $36.9 million increase in depreciation expense.[17,18,19]

Q How does the $5.4 million show up in the rate case request?

A The $5.4 million is included as what Cleco calls an attrition adjustment[20] to the historical test year. It can be seen as item 9 in Exhibit CCM-7 and is one component of the revenue requirement. The total attrition adjustment is currently $12.8 million. It would drop to [redacted] without the proposed capex for Rodemacher 2.[21,22]

[16] Direct Testimony of Christina C. McDowell at 31.
[17] *Id*.
[18] Direct Testimony of J. Robert Cleghorn at 17.
[19] *Id.* at 16.
[20] An attrition adjustment is intended to maintain the Company's return at a reasonable level given changes since the test year.
[21] Direct Testimony of Christina C. McDowell, Exhibit CCM-7.
[22] Cleco Response to LPSC Request 1-1, Attachment I (HSPM).

Q What justification has the Company provided for spending an additional $5.4 million at Rodemacher 2 between now and its retirement date?

A The Company provides no explanation for this $5.4 million in increased capital spending at the unit and does not state what the spending is for, and what benefit the expenditure will provide to ratepayers. The lack of justification is concerning enough, but there are other problems with this request as well. This $5.4 million is added as an attrition adjustment and appears to be additional to the level of capital expenditure at Rodemacher 2 in the test year.[23] The unit is retiring soon, therefore the Company's investment in Rodemacher 2 should be decreasing significantly, not increasing. Additionally, this projected spending level is also higher than the level of projected capital expenditures that Cleco provided to Sierra Club in discovery, which is $5.1 Million.[24] The Commission should not approve this unexplained additional expense without adequate justification from the Company.

ii. The Company does not need the capacity from Rodemacher 2 beyond 2024

Q Please provide more information about the Company's capacity position.

A Cleco currently has about 18 MW of excess summer capacity and 232 MW of excess winter capacity, as shown in Table 1 and Table 2 below.[25] After the expiration of DEMCO's contract on March 31, 2024, the Company will have 383 MW of excess summer capacity. This excess capacity is expected to last until

[23] It is not clear whether this spending is incremental to the test year, or why it is separated from ongoing capex spending at other units.

[24] Cleco Response to Sierra Club Request 1-4, Attachment A.

[25] Direct Testimony of J. Robert Cleghorn at 13, Table JRC-1.

2028, when the Company's summer surplus is reduced to 87 MW and to 76 MW in 2029.[26] This declining capacity surplus is associated with the conversion of Madison 3 to CCS, which results in a substantial capacity derating of the plant.

Table 1. Summer firm capacity

Existing Resources	6/1/23 5/31/24	6/1/24 5/31/25	6/1/25 5/31/26	6/1/26 5/31/27	6/1/27 5/31/28	6/1/28 5/31/29	6/1/29 5/31/30
Nesbitt 1	388	388	388	388	388	388	388
Rodemacher 2	132	132	132	132	132	-	-
Madison 3	437	437	437	437	437	237	237
Acadia	529	529	529	529	529	529	529
Coughlin 6	241	241	241	241	241	241	241
Coughlin 7	476	476	476	476	476	476	476
Teche 3	195	-	-	-	-	-	-
Teche 4	34	34	34	34	34	34	34
St. Mary Energy Center	27	27	27	27	27	27	27
Dolet Hills Solar PPA	-	-	79	79	79	79	79
Total Existing	2,459	2,264	2,343	2,343	2,343	2,011	2,011
Load	2,273	1,751	1,766	1,772	1,782	1,792	1,802
Reserve Margin	7.4%	7.4%	7.4%	7.4%	7.4%	7.4%	7.4%
Summer Load Requirement	2,441	1,881	1,897	1,903	1,914	1,925	1,935
Surplus / Deficit	18	383	447	440	429	87	76

Source: Direct Testimony of J. Robert Cleghorn at 13, Table JRC-1; Cleco Power 2021 Final IRP Report at 98.

[26] Table JRC-1 in the direct testimony of Company witness Cleghorn states that the Company has an 8 MW surplus in 2028 follower by a 3 MW deficit in 2029. The difference between Table JRC-1 and the capacity position I display in Tables 1 and 2 is the Dolet Hills Solar PPA project, which Table JRC-1 does not include.

Table 2. Winter firm capacity

Existing Resources	6/1/23 5/31/24	6/1/24 5/31/25	6/1/25 5/31/26	6/1/26 5/31/27	6/1/27 5/31/28	6/1/28 5/31/29	6/1/29 5/31/30
Nesbitt 1	443	443	443	443	443	443	443
Rodemacher 2	127	127	127	127	127	-	-
Madison 3	307	307	307	307	307	307	307
Acadia	529	529	529	529	529	529	529
Coughlin 6	237	237	237	237	237	237	237
Coughlin 7	306	306	306	306	306	306	306
Teche 3	238	-	-	-	-	-	-
Teche 4	36	36	36	36	36	36	36
St. Mary Energy Center	28	28	28	28	28	28	28
Dolet Hills Solar PPA	-	-	11	11	11	11	11
Total Existing	2,251	2,013	2,024	2,024	2,024	1,897	1,897
Load	1,609	1,280	1,289	1,297	1,305	1,313	1,320
Reserve Margin	25.5%	25.5%	25.5%	25.5%	25.5%	25.5%	25.5%
Summer Load Requirement	2,019	1,606	1,618	1,628	1,638	1,648	1,657
Surplus / Deficit	232	407	406	396	386	249	240

Source: Direct Testimony of J. Robert Cleghorn at 13, Table JRC-1; Cleco Power 2021 Final IRP Report at 98.

Q What would the effect on the Company's capacity surplus be if Rodemacher 2 was retired in 2026 instead of 2028?

A Retiring Rodemacher 2 in 2026 would reduce the Company's 2026 capacity surplus from 361 MW to 229 MW.

Q What retirement dates has Cleco considered for Rodemacher 2 in recent Company documents?

A [redacted][27] [redacted][28] [redacted][29] [redacted][30] [redacted]

In its most recent public IRP filing, Cleco again provides a retirement date of 2028 for Rodemacher 2.[31] But it is not clear why Cleco is waiting that long, given its current capacity surplus and the substantial capital and O&M spending it could avoid through earlier retirement, as shown in Table 3 below.

[27] Cleco Response to LPSC Request 1-29, HSPM Attachment B at 19, 20.
[28] Cleco Response to LPSC Request 1-29, HSPM Attachment C at 38, 40.
[29] Cleco Response to LPSC Request 1-29, HSPM Attachment C at 38, 40.
[30] Cleco Response to LPSC Request 1-29, HSPM Attachment D at 34.
[31] Cleco Power Final IRP Report at 98.

Table 3. Forecasted capex and O&M spending at Rodemacher 2

($Million)	2024	2025	2026	2027	2028	Total
Capex	$ 1.44	$1.02	$ 1.14	$ 0.53	$ 0.95	$ 5.09
O&M	$ 5.57	$ 5.97	$ 6.16	$ 6.07	$ 5.65	$ 29.42

Source: Cleco response to Sierra Club Request 1.4, Attachment A.

Q What justification has the Company provided for waiting until 2028 to retire the plant?

A In this rate case, although the Company's own analysis indicates that Rodemacher 2 is not economical to continue operating, the Company offers several reasons for waiting until 2028 to retire the plant.[32] None are sufficient to justify this decision.

First, Cleco states that its capacity position supports reliability and fuel diversity in Miso Zone 9 and the State of Louisiana and supports MISO's transition to clean energy. But it is not Cleco's customers' responsibility to keep enough capacity online to ensure reliability in MISO Zone 9. Unless there is an imminent reliability risk to Cleco's customers, or MISO requires or adequately incentivizes the Company to keep its generators online, Cleco ratepayers should not be required to incur the additional expense of keeping excess capacity online to support MISO Zone 9. Additionally, it is nonsensical to use MISO's clean energy transition as support for the Company's plan to keep a fossil coal unit online uneconomically, in the absence of any specific capacity need.

Second, Cleco cites the impact on employees and their families. While job impacts should be considered and planned for, they should not be used as an excuse to saddle ratepayers with unnecessary costs. There are other ways to support displaced workers that are much less costly and impactful than keeping an

[32] Direct Testimony of J. Robert Cleghorn at 14.

uneconomic plant online. And to the extent that there are undepreciated plant costs or other expenses associated with early retirement, Louisiana's securitization statute explicitly allows the Commission to wrap job and community benefit costs into a depreciation order.[33] Addressing community impacts such as jobs and job transition is precisely why the legislature passed the law.

Third, Cleco cites the impact on Cleco's electrification. Cleco does not need its coal plants to meet its electrification goals.

Finally, Cleco cites capital intensity of a capacity investment and long lead time to build new generation assets. But this argument is confusing because Cleco can retire Rodemacher without adding replacement resources. Regardless of when Rodemacher retires, Cleco does not need new capacity until at least 2028. Even then, it only needs the capacity if it derates Madison 3 by installing CCS (or if it retires Nesbitt).

Q Overall, has Cleco provided adequate justification for delaying Rodemacher's retirement until 2028?

A No. While Cleco has a clear justification for retiring the plant *no later* than 2028, the Company has not justified *waiting until* 2028. A Cleco discovery response shows that Rodemacher 2 [redacted] [34] The Company also will have surplus capacity through at least 2028 because of the expiration of

[33] Louisiana Electric Utility Energy Transition Securitization Act, La. R.S. 45:1271 *et seq*.

[34] Cleco Response to Sierra Club Request 1-2, Attachment A (HSPM).

the DEMCO contract.[35] Therefore, it would benefit Cleco ratepayers to [redacted][36]

iii. <u>The economic performance of Rodemacher 2 has been poor in recent years, and Cleco's own data show this trend is projected to continue if the plant stays online</u>

Q Please summarize Rodemacher's recent historical and projected utilization.

A As shown in Figure 1 below, the capacity factors at Rodemacher 2 over the past five years has ranged between a low of 24 percent in 2020 and a high of 55 percent in 2023.[37] Over the next few years, [redacted]

[35] Direct Testimony of J. Robert Cleghorn at 13, Table JRC-1.

[36] Cleco Response to Sierra Club Request 2-2, Attachment B (HSPM).

[37] Cleco Response to LPSC 1-31, Attachment J - (Confidential) Appendix 5.2 - Reference Portfolio FCA and CO2.

Figure 1. Confidential Historical and projected capacity factors for Rodemacher 2

Source: 2018-2022 data from FERC Form 1; 2023 data from U.S. EPA Clean Air Markets Database; 2024-2030 data from Cleco Response to LPSC 1-31, Attachment J - (Confidential) Appendix 5.2 - Reference Portfolio FCA and CO2.

Q Has Cleco justified its assumptions around the unit's projected utilization levels leading up to retirement?

A No. When asked in discovery about its projection, Cleco did not explain this [redacted] between the present and 2028. These projections are concerning and unlikely to materialize. In 2023, Cleco projected the unit would operate at an [redacted] capacity factor.[38] In reality, the unit operated at just above a 40 percent capacity factor in 2023.[39]

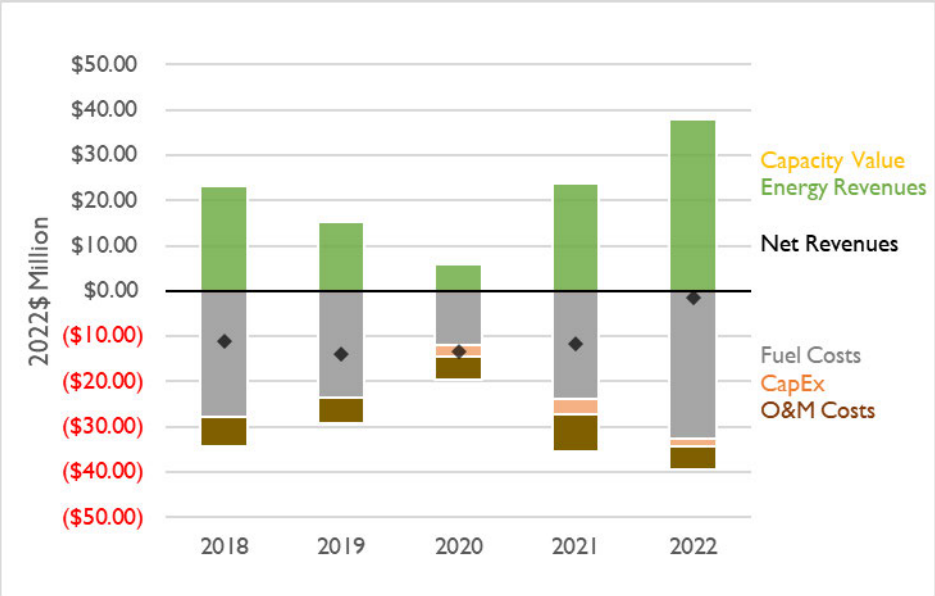
[38] Cleco Response to LPSC 1-31, Attachment J - (Confidential) Appendix 5.2 - Reference Portfolio FCA and CO2.

[39] EPA CAMPD data.

Q Describe the unit's financial performance in recent historical years.

A Based on the Company's own data, I find that Rodemacher 2 incurred costs in excess of its revenues during each year over the past five years (2018–2022). As shown in Figure 2 below, the only year when Cleco came close to breaking even at Rodemacher was in 2022 when market prices reached record high levels.

Figure 2. Historical performance of Rodemacher 2: 2018–2022



Source: See text below.

Q Explain the methodology you used to develop this historical analysis.

A I relied on Company data from Cleco and public data to calculate the cost and revenues Cleco incurred at Rodemacher 2 between 2018 and 2022.[40] I summed energy and capacity market value to find total revenues. I calculated energy

[40] I do not include 2023 because a complete dataset for the entire year is not available yet.

revenues based on day-ahead hourly market locational marginal pricing ("LMP") data from MISO[41] and hourly generation data from the EPA Clean Air Markets Program Data.[42] I calculated capacity revenues based on historical MISO capacity prices.[43]

I add the fuel costs, non-fuel O&M costs, and sustaining capital expenditures to get total unit costs. I used public fuel costs from FERC Form 1.[44] For historical O&M (fixed and variable combined) I relied on FERC Form 1 for 2018–2019[45] and Cleco data for 2020–2022.[46] For capex, I relied on Cleco data for 2020–2022.[47] I netted the unit costs and value to find each unit's historical net value (or cost) for each year.

Q Does this analysis reflect system costs as they are allocated to ratepayers through the Company's revenue requirement?

A No. This analysis is not intended to reflect the way costs are passed on to ratepayers—but rather to provide a comparison of real-time expenses and revenues. Revenue requirements inherently require assumptions around the

[41] MISO Day-ahead LMPs. Available at https://www.misoenergy.org/markets-and-operations/real-time--market-data/market-reports/#nt=%2FMarketReportType%3AHistorical%20LMP%2FMarketReportName%3AHistorical%20Annual%20Day-Ahead%20LMPs%20(zip)&t=10&p=0&s=MarketReportPublished&sd=desc.

[42] US EPA Clean Air Markets Program Data. Available at https://campd.epa.gov/data/custom-data-download.

[43] MISO 2022/2023 Planning Resource Auction (PRA) Results. April 14, 2022. Available at https://cdn.misoenergy.org/2022%20PRA%20Results624053.pdf.

[44] FERC Form 1.

[45] *Id.*

[46] Cleco Response to Sierra Club Request 1-4, Attachment A.

[47] *Id*.

project lifetime. Additionally, and a substantial portion of resource cost are deferred until the future. Therefore, poor near-term unit economics can be diluted or obscured by spreading out the losses over a longer period of time.

My analysis, on the other hand, is intended to provide a clear snapshot of how input revenues match output costs. It may be reasonable for expenses to exceed revenues in a single year (for example when a large capital investment is made). But over a period of multiple years, expenses should not regularly exceed revenues. If they do, that is a strong indication that the unit is not operating economically.

Q How is Rodemacher 2 projected to perform going forward?

A Cleco's own internal analysis showed that it would cost less to retire and replace the plant than to invest in the CCR upgrades required to keep the plant online.[48] Specifically, Cleco presented the results of a Competitive Screening analysis in a Meeting of the Boards of Managers on November 18, 2021, which found that [redacted][49]

Q Do you have any concerns about the Company's historical or projected operational plans for Rodemacher 2?

A Yes. I am concerned that the Company has and will continue to utilize uneconomic self-commitment practices at this and other power plants (specifically Madison 3). The fact that Rodemacher 2 lost money on a variable

[48] Cleco Response to LPSC Request 1-29, HSPM Attachments A-D; Cleco Response to Sierra Club Request 2-2, HSPM Attachment B.
[49] Cleco Response to LPSC Request 1-29, HSPM Attachment B at 22.

basis in recent years and is projected to continue to moving forward indicates to me that the unit is not being committed economically. Additionally, the Company has a documented history of uneconomic commitment at other power plants it owns, specifically Dolet Hills. In Matter U-35753, the ALJ recommended a disallowance of $128 million for Cleco for extensive uneconomic operation and self-commitment behavior at Dolet Hills. The Commission should scrutinize Cleco's unit commitment practices at its Rodermacher 2 power plants to ensure no avoidable cost are passed on to its ratepayers based on its uneconomic commitment practices.

Q Do Cleco's customers need the capacity or energy from Rodemacher, or otherwise benefit from having Rodemacher online until 2028?

A No. Based on the Company's own internal analysis,[50] Rodemacher 2 [redacted] to customers based on analysis of cost and revenue data. In recent years, the unit has regularly cost ratepayers more than it earns in the market. Retirement by 2026 could allow Cleco to avoid unnecessary capital expenditures at this plant.

Q What do you recommend regarding Rodemacher 2?

A I recommend that Cleco retire the unit as soon as possible, and no later than 2026. The Company does not need the capacity from Rodemacher 2 and has provided zero legitimate justification for continuing to operate the plant through 2028.

[50] Cleco Response to LPSC Request 1-29, HSPM Attachments A-D.

5. CLECO SEEKS TO KEEP ALL OF MADISON 3 IN RATE BASE DESPITE THE UNIT PERFORMING POORLY IN RECENT YEARS AND CLECO RATEPAYERS NOT NEEDING THE CAPACITY

i. Madison 3 has been operating uneconomically and is projected to have [redacted] when operating on petcoke.

Q Please summarize the recent historical and projected utilization of Madison 3.

A As shown in Figure 3, Madison 3's utilization has hovered around 50 percent over the past five years.

Figure 3. Confidential Historical and projected capacity factors for Madison 3

[redacted]

Source: 2018-2022 data from FERC Form 1; 2023 data from U.S. EPA Clean Air Markets Database; 2024-2030 data from Cleco Response to LPSC 1-31, Attachment J - (Confidential) Appendix 5.2 - Reference Portfolio FCA and CO2.

Looking forward, Cleco projects that utilization of the unit will [redacted][51] [redacted][52] [redacted][53]

Q Describe the units' financial performance in recent historical years.

A As shown in Figure 4 below, over the past five years, Madison 3 was consistently uneconomic to operate, with costs exceeding revenues in every year from 2018–2022.[54]

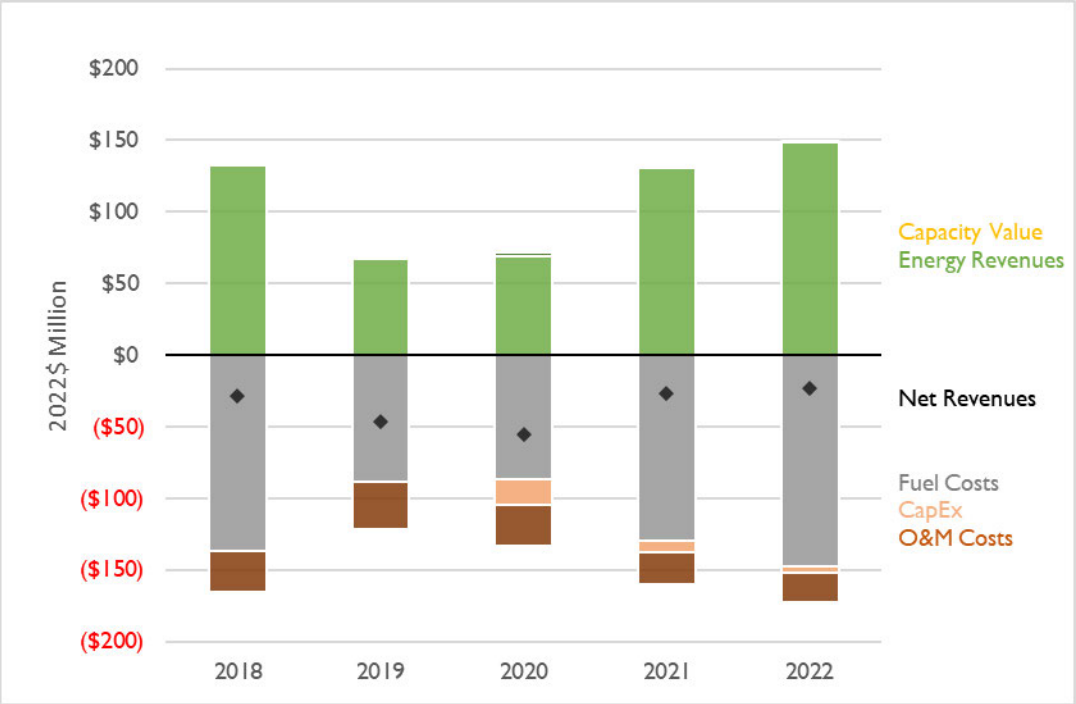
[51] Cleco Response to LPSC 1-31, Attachment J - (Confidential) Appendix 5.2 - Reference Portfolio FCA and CO2.

[52] Cleco HSPM Response to Sierra Club Request 2-1(b).

[53] Cleco HSPM Response to Sierra Club Request 2-1(c).

[54] 2023 was not included because there is not yet complete data available for the year.

Figure 4. Historical economic performance of Madison 3



Source: See Figure 2 above.

Q How has the unit's operational performance been recently?

A Madison 3 had a five-month outage between January 4 and June 15, 2023.[55] During this time, Cleco had to procure energy from other resources, potentially at a net cost during some hours. Although the outage did not occur during the test year, it does illustrate the type of risks that ratepayers will continue to be exposed to through Madison 3's continued operation.

[55] *See* EPA, Clean Air Markets Program Data, https://campd.epa.gov/data/custom-data-download (select daily emissions for 2023); *see also* EIA Form 923, *available at* https://www.eia.gov/electricity/data/eia923/.

Q How is Madison 3 projected to perform going forward?

A Going forward, Cleco's own data suggests that the plant will be [redacted] at least between now and 2030.[56] [redacted], and the large capital investment required to install the CCS retrofit.

Figure 5. Confidential projected economic performance of Madison 3

[redacted]

Source: Cleco Response to LPSC 1-31, Attachment J - (Confidential) Appendix 5.2 - Reference Portfolio FCA and CO2; Cleco Response to Sierra Club 1-4, Attachment A.

[56] Cleco Response to LPSC 1-31, Attachment J - (Confidential) Appendix 5.2 - Reference Portfolio FCA and CO2.

Q Do you have any concerns about the Company's historical or projected operational plants for Madison 3?

A Yes, as I discussed above regarding Rodemacher 2, I am concerned that Cleco is, and will continue to, uneconomically commit Madison 3. The Commission should scrutinize Cleco's unit commitment practices at Madison 3 to ensure no avoidable cost are passed on to its ratepayers based on its uneconomic commitment practices.

Q What explains the dramatic change in utilization and expenses in 2028?

A As discussed above, Cleco is planning to install CCS at Madison 3 in 2028 as part of the project it is calling Diamond Vault.

Q Do you have any concerns with Project Diamond Vault?

A Yes. Although Cleco does not seek recovery of the direct costs for this project in this docket, it is impossible to totally disconnect current spending and operational plans from a major CCS project plan less than five years into the future (the installation of CCS at Madison 3). This would be Louisiana's first-ever CCS project at a power plant. If successful, the project would reduce the capacity of Madison 3 by 200 MW, affecting the Company's capacity position.[57]

[57] Cleco Power IRP Final Report at 37; Direct Testimony of J. Robert Cleghorn, Table JRC-1.

Q What analysis has the Company performed on the economics of Madison 3 and Project Diamond Vault?

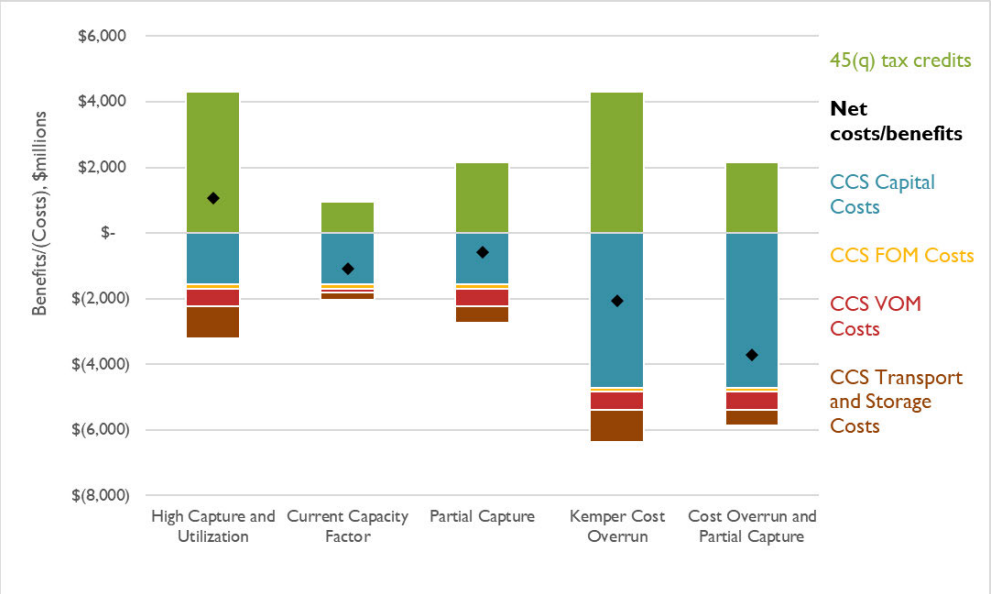
A Notably, the Company has not provided any analysis showing that Project Diamond Vault is in the interest of customers. In Cleco's October 27, 2023, Addendum to its IRP, the Company provided a retirement study comparing continued operation of Madison 3 to retirement in 2032 and replacement with alternatives.[58] No scenario included the CCS costs. Cleco stated in a discovery response that the project is currently in the pre-FEED ("Front End Engineering Design") phase and it plans to evaluate the economics of the Project in a FEED study as part of a separate docket.[59]

Q Have you evaluated the economics of CCS installation at Madison 3?

A Yes. For Sierra Club's comments on Cleco's IRP Addendum, my team conducted analysis evaluating the economics of the CCS project. We found that the costs for the CCS project will likely exceed the benefits.[60] In scenarios where the carbon dioxide capture rate, capacity factor, and/or project cost estimates were unfavorable, the project would be expected to cost billions of dollars more than the value of the 45Q tax credits it would earn, as shown in Figure 6 below.[61]

[58] Cleco IRP Addendum, October 27, 2023.
[59] Cleco Response to LPSC 2-62.
[60] Sierra Club Comments on Cleco Power's Integrated Resource Plan Addendum, filed in LPSC Docket No. I-36175, (Nov. 30, 2023).
[61] *Id.*

Figure 6. Costs and benefits associated with Project Diamond Vault



Source: Sierra Club Comments on Cleco Power's Integrated Resource Plan Addendum at 9.

Q How does Project Diamond Vault impact Cleco's capacity position?

A As discussed in detail in the next section, the expiration of the DEMCO wholesale contract will result in excess capacity at Madison 3 being transferred back to Cleco ratepayers starting in early 2024. This capacity position is expected to remain until 2028, when Cleco plans to derate Madison 3 by around 200 MW to install CCS. The Company's true capacity length beyond 2028 is hidden by the unrealistic assumption that Diamond Vault will come online in 2028 and reduce the capacity of Madison 3 by 200 MW.[62] If Cleco successfully completes the Diamond Vault CCS project on its proposed timeline, it will likely be the first

[62] Cleco Power Final IRP Report at 37.

CCS project of its size in the United States.[63, 64] To assume that the Company can achieve this feat in under five years is extremely optimistic.

If Project Diamond Vault does not meet Cleco's timeline, the Company will have about 200 MW of excess capacity on the System in 2028 and beyond, and more if the Company completes planned near-term procurements of at least 650 MW of new solar PV and BESS by 2028 as well as 400 MW of gas capacity in 2028.[65] As shown by my economic analysis of Rodemacher 2 and Madison 3 above, maintaining a long capacity position is not providing value to ratepayers and the Company should be evaluating the sale, transfer, or retirement of some or all of its excess generating capacity.

Q What should the Company have done in advance of this rate case to ensure the prudence of its rate-case requests for Madison 3?

A As I will discuss in detail in the next section, Cleco should have recognized that its excess capacity position is not in the best interest of ratepayers and evaluated alternative options for Madison 3's capacity. This might have resulted in a plant retirement, sale, or transfer within the next four years, which would have reduced the Company's (and, by extension, customers') net costs in those years.

Instead, Cleco has chosen to wait and see if the LPSC's Minimum Capacity Obligation ("MCO") docket will provide the Company with a revenue stream for

[63] There have been other carbon capture projects in the US, but none have had the large scale of this project and aimed to achieve long-term storage of CO2.

[64] International Energy Agency. CCUS Projects Database 2023. Available at https://www.iea.org/data-and-statistics/data-product/ccus-projects-database.

[65] Cleco Power Final IRP Report at 98.

its excess capacity—revenues the Company may not pass through to ratepayers, depending on the results of its excess earnings mechanism.[66] This plan is not in the interest of ratepayers.

ii. With the expiration of Cleco's wholesale contract with DEMCO, Madison 3 should not be re-allocated to retail customers

Q What is the history of the DEMCO wholesale load contract?

A Cleco was selected to serve DEMCO beginning in 2014 for a 10-year term expiring March 31, 3024. DEMCO load was 600 MW, and Cleco added 730 MW of combined-cycle generation at Coughlin Power Station in 2013 to serve the DEMCO load. DEMCO is one of five wholesale contracts to expire between 2022 and 2025, leaving the Company's generation fleet to be paid for almost entirely by retail customers.[67,68] In Cleco's last rate case, LPSC-jurisdictional customers paid for about 80 percent of Madison 3 costs. After wholesale contract expiration, retail customers may pay up to 99.1 percent of Madison 3.[69]

Q Should retail customers be required to pay for wholesale customers' share of Madison 3 after wholesale contracts expire?

A No. Cleco has sufficient capacity on its system for retail customers without the additional capacity from Madison 3. The economics of Madison 3 are not favorable, as shown above. The Company has not provided justification in this rate case for why customers should take on an added share of Madison 3. Instead

[66] Direct Testimony of J. Robert Cleghorn at 21.
[67] *Id.* at 6.
[68] Cleco Power 2021 Final IRP at 22.
[69] Direct Testimony of J. Robert Cleghorn at 8.

Cleco has simply assumed the wholesale share should transfer back to retail ratepayers without demonstrating any need for the energy or capacity provided by the unit and without showing any benefit to retail customers.

The Company has an unnecessarily long capacity position through 2028. Adding a greater share of Madison 3's costs to retail customers' portfolio provides no benefits or services for customers. It is unclear how the excess capacity at Madison 3 will continue to meet the definition of used and useful without actually providing any value or service to ratepayers.

Q What should happen to the portion of Madison 3 previously assigned to wholesale customers?

A A portion of the plant equivalent to what was previously allocated to the wholesale customers should be removed from rate base and either sold or transferred to the unregulated arm of the Company, Cleco Cajun, or some other entity. The Company's unregulated arm already owns several generators including Big Cajun II, which is co-owned with another utility, so this would not be an unfamiliar arrangement. Transferring a portion of Madison 3 capacity to another entity in the region would unburden Cleco's retail ratepayers without reducing the capacity available in MISO Zone 9. The unit is costly to maintain, and it is not likely—based on recent capacity market performance—that a resource such as Madison 3 will earn significant capacity revenues for ratepayers. If the unit performs well, the Company's unregulated arm can realize those benefits. Regardless, retail ratepayers will be protected from the downside risk associated with owning a resource it doesn't need in the event that the unit doesn't perform well.

Q What is the Company's position in this rate case toward meeting the capacity needs of its customers and the capacity needs of MISO Zone 9?

A Cleco's rate case shows that the Company has a substantial capacity surplus through at least 2028 for meeting the needs of its own customers. Yet Cleco's testimony argues that certain generators should be kept online to support "reliability and fuel diversity in MISO Zone 9." It appears that in this rate case, the Company is arguing that its retail customers should be responsible for maintaining adequate capacity not only for Cleco's system, but also for the benefit of MISO Zone 9.

Q Please discuss the Company's argument that maintaining a large capacity surplus may benefit retail customers after MCO rules are in place.

A Cleco speculates that its capacity will be valuable to the region once capacity requirements are put in place in the Commission's resource adequacy rulemaking in Docket No. R-36263. Regarding the outcome of that process, the Company "assumes that DEMCO (and the other Louisiana electric cooperatives) will need to seek capacity resources from actual, physical generation located in MISO Zone 9…"[70]

However, this assumption is not consistent with Staff's recommendation in the resource adequacy rulemaking. Staff's proposed rules do not include a locational requirement for resources to be located in MISO Zone 9. In fact, Staff recommends that the MCO should not include a locational requirement given the likelihood that transmission projects can provide access to lower cost resources outside the Zone. Staff describes the concerns of some parties that incumbent

[70] Direct Testimony of William Fontenot at 21.

utilities would have undue market power in a bilateral market for capacity. Staff finds that allowing generation outside of MISO Zone 9 to meet MCO capacity requirements would help alleviate concerns of market power by allowing capacity from the entire MISO market to compete.[71,72]

Cleco is speculating that if the Commission forces other regional load-serving entities to buy local capacity, then its capacity will become more valuable. But it is not guaranteed that a locational capacity requirement will be implemented. Given that the value of Cleco's excess capacity under an MCO is uncertain, the risk to retail customers seems unnecessarily high.

Q Do you have any other concerns with Cleco's speculative position on its excess capacity?

A Yes. Cleco argues that if electric cooperatives are required to procure capacity though the MCO, "some portion of Cleco Power's interim capacity length could be used to supply capacity to those electric cooperatives." Cleco explains that if it wins any wholesale capacity contracts, "this could provide additional revenues that would be reflected in determining whether any refunds may be due as provided under the excess earning mechanism…"[73]

This language is reflective of a high level of uncertainty as to whether retail customers will see any benefit from Cleco's long capacity position. Assuming that the MCO is implemented and Cleco wins some bilateral capacity contracts with

[71] Docket No. R-36263, Staff's Recommendation of Proposed Rule and Request for Comments at 44.
[72] *Id.* at 48.
[73] Direct Testimony of J. Robert Cleghorn at 21.

wholesale customers, Cleco will earn revenues that *might* be made available to retail customers under the excess earning mechanism.

Q If Cleco is long on capacity, does that mean it shouldn't consider any new clean energy resources?

A No. Need is not just about having enough physical capacity on a system but also the economics of operating existing generation relative to alternatives. Cleco can and should regularly evaluate as part of its IRP whether it is more economical to get the energy and capacity it needs from its existing fossil resources, or to retire and replace them with clean energy alternatives. Prices of renewable energy resources have fallen substantially in recent years. A combination of low-variable-cost renewables and flexible, dispatchable capacity is being selected as the preferred resource plan for many utilities. Cleco's own internal analysis stated that [redacted][74]

Cleco should study the economics of maintaining an adequate, but not excessive, capacity position to serve its customers. Maintaining an appropriate capacity position for customers may require the sale, transfer, or retirement of some existing resources, as well as procurement of additional resources that are more economical solutions to meeting current system needs. To support its study of resource economics, Cleco should be proactive and test the market with requests for proposals to evaluate replacement resource options.

[74] Cleco Response to LPSC Request 1-29, HSPM Attachment B at 23.

Q What do you recommend at this time to address the issues you have identified?

A The Company should retire Rodemacher 2 as soon as possible, not assign an additional share of Madison 3 to retail customers in this rate case, and work to procure as many economical clean energy replacement resources as possible.

Q Does this conclude your testimony?

A Yes.

CERTIFICATE OF SERVICE

I hereby certify that, subject to the confidentiality agreement in this proceeding, copies of the foregoing testimony have been provided to all other known parties of this proceeding by email.

Joshua Smith
Sierra Club