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BURR • CO

June 10, 2021

Ms. Jocelyn Boyd  
Chief Clerk and Administrator  
South Carolina Public Service Commission  
Synergy Business Park, The Saluda Building  
101 Executive Center Drive  
Columbia SC 29210

**Re: South Carolina Energy Freedom Act (House Bill 3659) Proceeding Related to S.C. Code Ann. Section 58-37-40 Integrated Resource Plans for Lockhart Power Company  
Docket No. 2019-227-E**

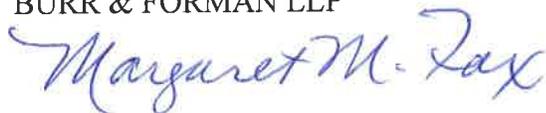
Dear Ms. Boyd:

Attached for filing please find Lockhart Power Company's Integrated Resource Plan. The Plan has been modified as directed by the Commission in Order No. 2021-246 in the above-referenced docket.

Thank you for your assistance.

Sincerely,

BURR & FORMAN LLP



Margaret M. Fox

MMF:khh

Enclosure: as stated

cc: Jeffrey M. Nelson, Esq. ([jnelson@ors.sc.gov](mailto:jnelson@ors.sc.gov))  
Andrew Bateman ([abateman@ors.sc.gov](mailto:abateman@ors.sc.gov))

**LOCKHART POWER COMPANY**

**INTEGRATED RESOURCE PLAN**

**Modified in June 2021 per SC PSC Order 2021-246**

**1. STATEMENT OF OBJECTIVE**

Lockhart Power Company's (LPC) objective in developing an Integrated Resource Plan (IRP) is to minimize our long run total costs and produce the least cost to our customers consistent with the availability of an adequate and reliable supply of electric energy while maintaining system flexibility and considering environmental impacts. We intend for the plan to also improve customer service, offer additional customer options, and improve efficiencies of energy usage.

**2. RELEVANT SUPPORTING DOCUMENTATION**

a. See ATTACHMENTS

- 1 --- SUPPLY RESOURCES
- 2 --- DEMAND FORECAST
- 3 --- SUPPLY AND SALES FORECAST
- 4 --- ENERGY PRODUCED FROM ALL ENERGY RESOURCES
- 5--- PLANNED ELETRICAL TRANSMISSION INVESTMENTS

**3. SUPPLY RESOURCES**

LPC presently utilizes ten sources of supply, including nine generation stations and purchases from Duke Energy (See Attachment 1). More than 99% of the power LPC self-generates is renewable energy. LPC utilizes a firm wholesale PPA with Duke Energy to

1 provide its generation needs beyond the amount it self-generates. LPC generates  
2 approximately one-quarter of its own load with renewable energy with the remainder  
3 purchased from Duke Energy (See Attachment 4). Duke Energy’s rates to LPC are  
4 presumptively just and reasonable, having been permitted by the FERC. We plan to  
5 continue to use Duke Energy to provide a firm load-following supply for the foreseeable  
6 future. However, LPC intends to investigate other sources to determine if the costs and  
7 benefits, both short run and long run, meet the objectives of our IRP. The sources we  
8 intend to investigate include, but are not limited to the following:

9 **GENERATION** --- Additional cost effective renewable energy generation resources;  
10 cost effective natural gas generation resources.

11  
12 **4. VARIOUS ENERGY AND DEMAND ALTERNATIVES, EFFICIENT ENERGY**  
13 **CHOICES AND PROPER PRICING SIGNALS**

14 LPC has done and continues to do the following:

- 15 A. Designed its rates to economically encourage improved load factors and  
16 to reduce monthly demands by:
  - 17 1. Incorporating a demand penalty by use of a demand ratchet  
18 in its residential rates. This encourages peak shaving.
  - 19 2. Dividing its commercial and industrial rates into a first 200  
20 hours use of billing demand rate and an over 200 hours use of  
21 billing demand rate with the rates in the latter considerably less  
22 expensive than the first 200 hours use block. This encourages peak  
23 shaving.
  - 24 3. Incorporating conservation requirements in its  
25 Residential - All Electric and General Service - All Electric rates.  
26 This encourages conservation.

- 1 4. Designing its Residential and Residential - All Electric
- 2 rates such that they are identical during the summer months, the
- 3 season of LPC's system peak. This encourages peak shaving and
- 4 conservation.
- 5 5. Designing its General Service Commercial and General
- 6 Service - All Electric rates such that they are identical during the
- 7 summer months, the season of LPC's system peak. This
- 8 encourages peak shaving and conservation.
- 9 6. Converting its Residential rate and
- 10 Residential - All -Electric rate (summer months) from a declining
- 11 block rate to an inverted rate. This encourages conservation.
- 12 7. Designing a Solar rider for its residential customers

13  
14 **5. EVALUATING PROSPECTIVE NEW GENERATON RESOURCES**

15 Due to the full requirements nature of the Duke PPA, there is limited ability to add  
 16 renewable energy resources, so the company chooses its generation projects carefully.  
 17 Lockhart considers the following key areas when evaluating new generation resources:  
 18 generation type, investment size, timing of implementation, expected life, and technology  
 19 risk. Lockhart’s modest size and limited resources in relation to larger IOU’s means  
 20 that even relatively small investments in new technology could have a disproportionate  
 21 cost impact on customers, and the company tends to be a technology follower, (with  
 22 limited but targeted exceptions). One example is solar, which has been on the  
 23 company’s radar for some time but not yet incorporated as a resource due to continued  
 24 price reductions. Because of its small customer base, the company has waited for price  
 25 stabilization to get the best long term “deal” to minimize total long run costs.  
 26

1       **6.     EVALUATING THE COST EFFECTIVENESS OF SUPPLY-SIDE AND**  
2       **DEMAND SIDE OPTIONS**

3       LPC has adopted an interruptible service demand-side management program offered by  
4       Duke Energy. Currently approximately one-fourth of LPC’s industrial customers are  
5       enrolled in the program. This program encourages peak shaving.

6  
7       **7.     MEASURE OF NET BENEFITS**

8       LPC will provide the net benefits resulting from the options chosen for use, keeping  
9       within the objective stated in Section 1. Benefits are considered to be, but are not limited  
10      to, cost savings, peak load shaving, conservation, load shifting, valley filling,  
11      environmental concerns, improvement of customer service, offering of additional  
12      customer options, improved efficiencies of energy usage, and improved outage times and  
13      reliability, and economic development impact on the community.

14  
15      **8.     FUEL COST AND ENVIRONMENTAL RISK**

16      A distinguishing feature of Lockhart’s generation is that 100% of the energy produced is  
17      derived from renewable resources.. This renewable portfolio has negligible fuel cost and  
18      environmental risk. The only semblance of a fuel cost is the landfill gas royalty, which is  
19      relatively low with long-term price stability. There is also a small quantity of diesel fuel  
20      associated with periodically operating emergency backup generators to ensure they  
21      remain operable for reliability purposes, but this is a minor expense without material  
22      associated fuel cost (or environmental) risk. Typically, the primary environmental risk  
23      associated with generation iportfolios in today’s world is related to fossil fuel or nuclear  
24      resources, and not having enough renewables, . This is not the case with the company’s  
25      portfolio, given the 100% renewable generation mentioned above. Any sensitivity  
26      related to fuel costs and environmental risk would be associated with the power  
27      purchased under the Duke PPA, and would be reflected in the rates charged to Lockhart

1 by Duke Energy under the PPA. Examples would include liabilities associated with  
2 Duke's legacy coal ash and spent nuclear fuel. Duke's fuel costs and environmental risks  
3 as they relate to Lockhart will be evaluated in the context of the next Duke PPA renewal,  
4 and the then-current Duke IRP.

5  
6 **9. DEMAND AND ENERGY FORECAST**

7 See Attachments 2 and 3

8  
9 **10. EVALUATION AND REVIEW OF EXISTING DEMAND-SIDE OPTIONS**

10 See Section 4 Above

11  
12 **11. FUTURE STUDIES**

13 LPC continues to evaluate potential renewable energy initiatives and other potential  
14 supply-side opportunities. In particular, as the cost of solar generation equipment  
15 continues to drop, potential opportunities to cost-effectively provide smaller utility-scale  
16 solar power for our customers will continue to be studied.

17  
18 **12. FLEXIBILITY AND QUICK RESPONSE**

19 LPC intends to remain flexible enough to react quickly to changes in a manner consistent  
20 with minimizing costs while maintaining reliability.

21  
22 **13. PLANNED ELECTRICAL TRANSMISSION INVESTMENTS**

23 LPC is committed to maintenance and improvement of the transmission system by making  
24 investments in short and long term capital budgeted projects as seen in ATTACHMENT  
25 5.

26  
27 **14. THIRD PARTY POWER PURCHASES**

1 LPC will investigate other purchase sources if the occasion arises and is willing to pursue  
2 any other purchase sources to determine if the costs and benefits, both short run and long  
3 run, provide our customers with the options consistent with our IRP objective.  
4

5 **15. NEW TECHNOLOGIES**

6 LPC will continuously evaluate, pursuant to its IRP objective, new technology for both  
7 demand-side and supply-side options. In addition to advances in solar generation  
8 technology, Lockhart Power Company keeps up-to-date on advances in hydrokinetic and  
9 similar technologies that could one day be cost effectively deployed in existing water  
10 conveyances.  
11

12 **16. FUTURE SUPPLY-SIDE OPTIONS**

13 LPC presently has no certain scheduled supply side options other than those described in  
14 Section 3. LPC is monitoring development of the solar generation market in South  
15 Carolina, including proposed legislative changes, and will respond to any changes in a  
16 manner that is cost effective and appropriate for its customers.  
17

18 **17. CAPTURING LOST OPPORTUNITY RESOURCES**

19 LPC gives attention to capturing lost-opportunity resources which include cost-effective  
20 energy efficiency savings such as in new construction, renovation, and in routine  
21 replacement of existing equipment. In routine replacement of any and all equipment,  
22 LPC includes energy and efficiency savings as a component of evaluation.  
23

24 **18. DYNAMICS OF IRP PROCESS**

25 LPC realizes that the IRP process is dynamic and that modifications may be necessary  
26 over time. As new issues arise, existing issues or components of the plan change in  
27 significance and improved analysis techniques developed; LPC intends to file revisions to

1 its IRP with The Public Service Commission of South Carolina and request that the  
2 Commission incorporate the revision into LPC's IRP or approve it as a separate  
3 consideration.

## Supply Resources

Facility Name	Location	Age	License/ Permit Expiration	Nameplate Capacity	MWH/Year	Fuel Source
Lockhart Hydro	Lockhart, SC	1920	2039	18 MW	70,000	Water (Non-Consumptive)
Lower Pacolet Hydro <sup>1</sup>	Pacolet, SC	1938	2051	0.8 MW	4,000	Water (Non-Consumptive)
Pacolet Diesel <sup>3,4</sup>	Pacolet, SC	2006	N/A	6 MW	N/A	Diesel
Union Diesel <sup>3,4</sup>	Union, SC	2005	N/A	8 MW	N/A	Diesel
Wellford Renewable Energy Facility <sup>4,6</sup>	Wellford, SC	2011	N/A	1.6 MW	10,000	Landfill Gas
Upper Pacolet Hydro <sup>1</sup>	Pacolet, SC	2013	2052	1.1 MW	5,000	Water (Non-Consumptive)
Lockhart Minimum Flow Hydro <sup>1</sup>	Lockhart, SC	2012	2039	0.8 MW	5,000	Water (Non-Consumptive)
Purchases from Duke Energy (Firm)	N/A	N/A	N/A	Load Following	Load Following	Various
Lockhart Bio-Energy, LLC Union Renewable Energy Facility <sup>1,4,5</sup>	Union, SC	2015	N/A	3.2 MW	18,000	Landfill Gas
Buzzard Roost Hydro (As of 6-1-20) <sup>5</sup>	Greenwood, SC	1935	2035	15 MW	30,000	Water (Non-Consumptive)

**Note 1:** Power generated from these facilities is currently sold off-system under contracts. Revenues from the facilities in rate base flow to Lockhart Power's customers. As those contracts expire, Lockhart Power will determine whether to seek renewal or replacement of the contracts or use the output for its own generation needs.

**Note 2:** Expected life of all generation facilities exceeds the IRP forecast horizon.

**Note 3:** Diesel facilities do not normally operate. They are available at Duke Energy's request only during NERC Level II emergency conditions.

**Note 4:** Diesel and Landfill Gas facilities have operating permits that do not have a pre-determined expiration date.

**Note 5:** Facility is not in rate base, as it was added since last rate case.

**Note 6:** Lockhart terminated its PPA with Duke for the Wellford Landfill Gas facility on 12-31-20 and will use that power to directly serve Lockhart's customers going forward.

**LOCKHART POWER COMPANY**  
Base Load Case

DOCKET NO. 2019-227-E & 2020-11-E  
ORDER NO. 94-348 & 98-502

**SUMMER DEMAND FORECAST**

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
<b>SYSTEM SUMMER PEAK DEMAND IN MW'S</b>	67.4	73.4	74.1	74.9	75.6	76.4	77.1	77.9	78.7	79.5	80.3	81.1	81.9	82.7	83.5
<b>DEMAND SOURCES</b>															
LOCKHART HYDRO GENERATION	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5
PACOLET DIESEL GENERATION	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
UNION DIESEL GENERATION	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
PURCHASES FROM DUKE ENERGY	37.6	43.6	44.3	45.1	45.8	46.6	47.3	48.1	48.9	49.7	50.5	51.3	52.1	52.9	53.7
TOTAL DEMAND SOURCES	67.4	73.4	74.1	74.9	75.6	76.4	77.1	77.9	78.7	79.5	80.3	81.1	81.9	82.7	83.5

**WINTER DEMAND FORECAST**

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
<b>SYSTEM WINTER PEAK DEMAND IN MW'S</b>	62.6	68.6	69.3	70.0	70.7	71.4	72.1	72.8	73.5	74.3	75.0	75.8	76.5	77.3	78.1
<b>DEMAND SOURCES</b>															
LOCKHART HYDRO GENERATION	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5
PACOLET DIESEL GENERATION	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
UNION DIESEL GENERATION	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
PURCHASES FROM DUKE ENERGY	32.8	38.8	39.5	40.2	40.9	41.6	42.3	43.0	43.7	44.5	45.2	46.0	46.7	47.5	48.3
TOTAL DEMAND SOURCES	62.6	68.6	69.3	70.0	70.7	71.4	72.1	72.8	73.5	74.3	75.0	75.8	76.5	77.3	78.1

Note: LPC generation resources that provide off-system sales per long-term contracts are excluded.

**LOCKHART POWER COMPANY**  
High Load Case

DOCKET NO. 2019-227-E & 2020-11-E  
ORDER NO. 94-348 & 98-502

**SUMMER DEMAND FORECAST**

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
<b>SYSTEM SUMMER PEAK DEMAND IN MW'S</b>															
SYSTEM PEAK DEMAND	67.4	73.4	77.1	80.9	85.0	89.2	93.7	98.4	103.3	108.4	113.9	119.6	125.5	131.8	138.4
<b>DEMAND SOURCES</b>															
LOCKHART HYDRO GENERATION	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5
PACOLET DIESEL GENERATION	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
UNION DIESEL GENERATION	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
PURCHASES FROM DUKE ENERGY	37.6	43.6	47.3	51.1	55.2	59.4	63.9	68.6	73.5	78.6	84.1	89.8	95.7	102.0	108.6
TOTAL DEMAND SOURCES	67.4	73.4	77.1	80.9	85.0	89.2	93.7	98.4	103.3	108.4	113.9	119.6	125.5	131.8	138.4

**WINTER DEMAND FORECAST**

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
<b>SYSTEM WINTER PEAK DEMAND IN MW'S</b>															
SYSTEM PEAK DEMAND	62.6	68.6	72.0	75.6	79.4	83.4	87.6	91.9	96.5	101.4	106.4	111.7	117.3	123.2	129.4
<b>DEMAND SOURCES</b>															
LOCKHART HYDRO GENERATION	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5
PACOLET DIESEL GENERATION	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
UNION DIESEL GENERATION	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
PURCHASES FROM DUKE ENERGY	32.8	38.8	42.2	45.8	49.6	53.6	57.8	62.1	66.7	71.6	76.6	81.9	87.5	93.4	99.6
TOTAL DEMAND SOURCES	62.6	68.6	72.0	75.6	79.4	83.4	87.6	91.9	96.5	101.4	106.4	111.7	117.3	123.2	129.4

Note: LPC generation resources that provide off-system sales per long-term contracts are excluded.

**LOCKHART POWER COMPANY**  
Light Load Case

DOCKET NO. 2019-227-E & 2020-11-E  
ORDER NO. 94-348 & 98-502

**SUMMER DEMAND FORECAST**

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
<b>SYSTEM SUMMER PEAK DEMAND IN MW'S</b>	67.4	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2
<b>SYSTEM PEAK DEMAND</b>	67.4	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2
<b>DEMAND SOURCES</b>															
LOCKHART HYDRO GENERATION	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5
PACOLET DIESEL GENERATION	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
UNION DIESEL GENERATION	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
PURCHASES FROM DUKE ENERGY	37.6	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4
TOTAL DEMAND SOURCES	67.4	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2

**WINTER DEMAND FORECAST**

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
<b>SYSTEM WINTER PEAK DEMAND IN MW'S</b>	62.6	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4
<b>SYSTEM PEAK DEMAND</b>	62.6	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4
<b>DEMAND SOURCES</b>															
LOCKHART HYDRO GENERATION	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5
PACOLET DIESEL GENERATION	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
UNION DIESEL GENERATION	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
PURCHASES FROM DUKE ENERGY	32.8	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6
TOTAL DEMAND SOURCES	62.6	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4

Note: LPC generation resources that provide off-system sales per long-term contracts are excluded.

**LOCKHART POWER COMPANY**  
Base Load Case

Docket NO. 2019-227-E & 2020-11-E  
Order NO. 94-348 & 98-502

**SUPPLY AND SALES FORECAST (MWH)**

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
<b>System Requirements</b>															
Metered Sales	339,277	370,813	374,521	378,266	382,049	385,869	389,728	393,625	397,562	401,537	405,553	409,608	413,704	417,841	422,020
Company Use	852	852	852	852	852	852	852	852	852	852	852	852	852	852	852
Losses	19,165	20,947	20,947	20,947	20,947	20,947	20,947	20,947	20,947	20,947	20,947	20,947	20,947	20,947	20,947
Required System Input	359,294	392,612	396,320	400,066	403,848	407,669	411,528	415,425	419,361	423,337	427,352	431,408	435,504	439,641	443,819
<b>Supply Sources</b>															
Lockhart Hydro Generation	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121
Pacolet Diesel Generation	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
Union Diesel Generation	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
Purchases from Duke	283,118	316,436	320,144	323,890	327,672	331,493	335,352	339,249	343,185	347,161	351,176	355,232	359,328	363,465	367,643
Total Supply	359,294	392,612	396,320	400,066	403,848	407,669	411,528	415,425	419,361	423,337	427,352	431,408	435,504	439,641	443,819

**Note: Under the current Duke Energy PPA, the Pacolet and Union Diesel Generation stations are only operated in emergency situations.**

**LOCKHART POWER COMPANY**  
**High Load Case**

Docket NO. 2019-227-E & 2020-11-E  
Order NO. 94-348 & 98-502

**SUPPLY AND SALES FORECAST (MWH)**

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
<b>System Requirements</b>															
Metered Sales	339,277	370,813	389,354	408,821	429,262	450,726	473,262	496,925	521,771	547,860	575,253	604,015	634,216	665,927	699,223
Company Use	852	852	852	852	852	852	852	852	852	852	852	852	852	852	852
Losses	19,165	20,947	21,995	23,094	24,249	25,462	26,735	28,071	29,475	30,949	32,496	34,121	35,827	37,618	39,499
Required System Input	359,294	392,612	412,200	432,768	454,364	477,039	500,849	525,848	552,098	579,660	608,601	638,988	670,895	704,397	739,575
<b>Supply Sources</b>															
Lockhart Hydro Generation	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121
Pacolet Diesel Generation	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
Union Diesel Generation	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
Purchases from Duke	283,118	316,436	336,024	356,592	378,188	400,863	424,673	449,672	475,922	503,484	532,425	562,812	594,719	628,221	663,399
Total Supply	359,294	392,612	412,200	432,768	454,364	477,039	500,849	525,848	552,098	579,660	608,601	638,988	670,895	704,397	739,575

**Note: Under the current Duke Energy PPA, the Pacolet and Union Diesel Generation stations are only operated in emergency situations.**

**LOCKHART POWER COMPANY**  
Light Load Case

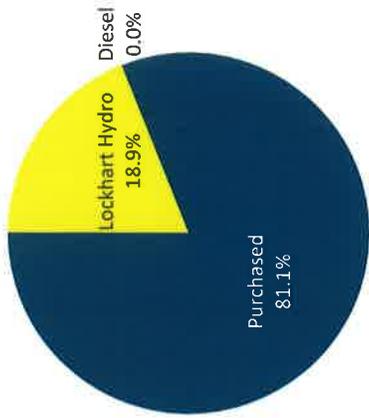
Docket NO. 2019-227-E & 2020-11-E  
Order NO. 94-348 & 98-502

**SUPPLY AND SALES FORECAST (MWH)**

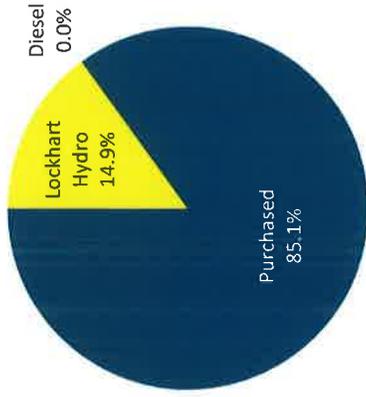
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
<b>System Requirements</b>															
Metered Sales	339,277	364,506	364,506	364,506	364,506	364,506	364,506	364,506	364,506	364,506	364,506	364,506	364,506	364,506	364,506
Company Use	852	852	852	852	852	852	852	852	852	852	852	852	852	852	852
Losses	19,165	20,583	20,583	20,583	20,583	20,583	20,583	20,583	20,583	20,583	20,583	20,583	20,583	20,583	20,583
Required System Input	359,294	385,941	385,941	385,941	385,941	385,941	385,941	385,941	385,941	385,941	385,941	385,941	385,941	385,941	385,941
<b>Supply Sources</b>															
Lockhart Hydro Generation	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121
Pacolet Diesel Generation	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
Union Diesel Generation	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
Purchases from Duke	283,118	309,765	309,765	309,765	309,765	309,765	309,765	309,765	309,765	309,765	309,765	309,765	309,765	309,765	309,765
Total Supply	359,294	385,941	385,941	385,941	385,941	385,941	385,941	385,941	385,941	385,941	385,941	385,941	385,941	385,941	385,941

**Note: Under the current Duke Energy PPA, the Pacolet and Union Diesel Generation stations are only operated in emergency situations.**

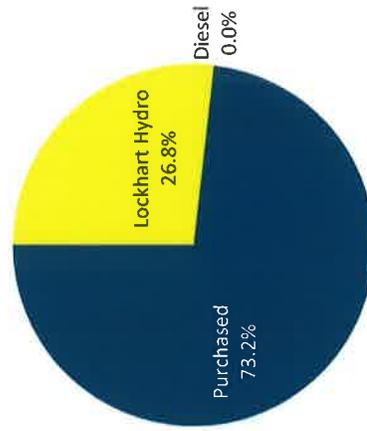
# LOCKHART POWER COMPANY ENERGY SOURCES IN PERCENT OF MWH'S INPUT



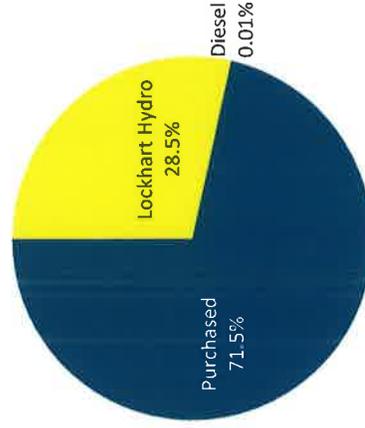
2016



2017



2018



2019

Note: Purchased Power obtained from Duke Energy

## Electrical Transmission Investments Planned

- Replace 34 kV Transmission Line Fault Indicator System
- Replace 34 kV Transmission Breaker at Duke–Lockhart Tie Station
- Replace 100 kV Transformer at Duke-Lockhart Tie Station