LOUISIANA'S ELECTRIC PROFILE LOUISIANA PUBLIC SERVICE COMMISSION

PERFORMANCE AUDIT SERVICES

Informational Report Issued January 15, 2025



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January 15, 2025

The Honorable J. Cameron Henry, Jr., President of the Senate The Honorable Phillip R. DeVillier, Speaker of the House of Representatives

Dear Senator Henry and Representative DeVillier:

This report provides information on Louisiana's generation and consumption of electricity (electric profile), and the challenges facing Louisiana's electric grid and the Louisiana Public Service Commission. This report is intended to provide timely information related to an area of interest to the legislature or based on a legislative request. I hope this report will benefit you in your legislative decision-making process.

We would like to express our appreciation to the Louisiana Public Service Commission for its assistance during this audit.

Respectfully submitted,

Michael J. "Mike" Waguespack, CPA Legislative Auditor

MJW/aa

ELECTRICPROFILE



Louisiana Legislative Auditor Michael J. "Mike" Waguespack, CPA

Louisiana's Electric Profile Louisiana Public Service Commission



January 2025

Audit Control # 40230029

Introduction

This report provides information on Louisiana's generation and consumption of electricity (electric profile), Louisiana Public Service Commission's (LPSC or Commission) role in regulating Louisiana's electric utilities, and the challenges facing Louisiana's electric grid and LPSC. State public service/utility commissions (PUCs) oversee the establishment and maintenance of utility services and ensure that those services are provided at rates and conditions that are fair, just, and reasonable for all consumers. PUCs typically oversee utility services such as electricity, natural gas, telecommunications, and water. In Louisiana, LPSC has regulatory

We compiled this report because electricity is an essential part of modern life and the economy, and the regulation of companies that provide this service is important. In addition, the electricity sector is experiencing complex transformations and challenges, such as aging infrastructure; a changing mix of power generation; increasing use of variable energy sources such as wind and solar; and increased physical and cybersecurity risks.

jurisdiction over public utilities providing electric, water, wastewater, natural gas, and certain telecommunications services in Louisiana.¹ LPSC also has other regulatory authority as granted by the Louisiana Legislature.² This report focuses on LPSC's regulation of electric utilities.

Overview of LPSC's Role. LPSC is an independent regulatory agency created in 1921 by Article IV, Section 21 of the Louisiana Constitution. It is comprised of five elected commissioners, representing five distinct geographic districts, serving six-year terms. According to LPSC, its mission is to impartially, equitably, and efficiently regulate the rates and services of public utilities and common carriers operating in Louisiana in order to ensure safe, reliable, and reasonably-priced services for consumers and a fair rate of return for the regulated utilities.

¹ Municipally-owned and operated utilities are not subject to the jurisdiction of the Commission.

² LPSC also regulates certain common carrier intrastate pipelines and motor carriers providing the following intrastate services: certain passenger carriers, waste haulers, household goods movers, and non-consensual towing and recovery services. LPSC also oversees the "Telephonic Solicitation Relief Act," more commonly known as the "Do Not Call" program.

LPSC's role in regulating electric utilities includes setting electricity rates for most Louisiana residents;³ approving or denying major construction projects proposed by regulated electric utilities, such as new natural gas or solar power plants or transmission lines; monitoring the deactivation of old generation facilities; directing energy efficiency programs; and approving requests from electric utilities to recover storm damage costs from consumers. In addition, LPSC is a primary responder under the state's Emergency Operations Plans and oversees the restoration of utility services following natural disasters.⁴

LPSC Revenues, Expenditures, and Staffing. LPSC does not receive any state general funds, and its revenues are comprised entirely of fees and self-generated revenues. LPSC's revenues increased by 9.6%, from \$9.7 million in fiscal year 2020 to \$10.7 million in fiscal year 2024. In fiscal year 2024, LPSC had 78 employees and 17 vacancies. Exhibit 1 provides additional information on LPSC's revenues, expenditures, and staffing for fiscal years 2020 through 2024.

Exhibit 1 LPSC Revenues, Expenditures and Staffing Enacted Budgets FY2020 - FY2024									
Means of Finance	Enacted FY2020	Enacted FY2021	Enacted FY2022	Enacted FY2023	Enacted FY2024				
Revenues									
State General Fund (Direct)	\$0	\$0	\$0	\$0	\$0				
Fees & Self- Generated Revenues	0	0	0	10,501,315	10,653,943				
Statutory Dedications	9,722,536	10,242,843	10,086,226	0	0				
Federal Funds	0	0	0	0	0				
Total Means of Financing	\$9,722,536	\$10,242,843	\$10,086,226	\$10,501,315	\$10,653,943				
Expenditures									
Administrative	\$3,923,547	\$4,149,198	\$3,837,241	\$4,073,445	\$4,084,030				
Support Services	2,283,955	2,478,208	2,549,808	2,484,919	2,579,964				
Motor Carrier Registration	628,641	648,339	648,589	658,814	745,893				
District Offices	2,886,393	2,967,098	3,050,588	3,284,137	3,244,056				
Total Expenditures	\$9,722,536	\$10,242,843	\$10,086,226	\$10,501,315	\$10,653,943				
Staffing									
Classified	79	79	77	77	77				
Unclassified	18	18	18	18	18				
Authorized T.O.	97	97	95	95	95				
Source : Prepared by legislative auditor's staff using information from Executive Budget Supporting Documents.									

³ As noted previously, municipally-owned and operated utilities are not subject to the jurisdiction of the Commission.

⁴ <u>https://www.lpsc.louisiana.gov/docs/general/Strategic%20Plan%202022_b.pdf</u>

Issues Impacting Louisiana's Electric Grid. The U.S. electric system, including the grid in Louisiana, is facing a significant transition over the next decade. The traditional power grid, which relies on large, centralized power plants, is changing. Old power plants are being replaced by a mix of wind and solar power, smaller natural gas plants, and local distributed energy resources that generate electricity close to where it is used.⁵ While this shift to renewable energy and energy storage is occurring, there are concerns about potential shortages and reliability issues, especially during times of high demand.

The grid also faces multiple risks due to extreme weather and climate change, as well as cyber and physical attacks. More frequent and intense extreme weather can affect electricity generation, transmission, and distribution. According to the National Oceanic and Atmospheric Administration (NOAA), Louisiana experienced 47 weather disaster events where overall costs reached more than \$1 billion between January 2014 and May 2024.⁶ Such events affect the reliability of the state's electric grid and the cost of electricity for consumers in the state. Other weather events, such as heat waves, can cause a surge in energy use, creating greater demand on the grid. The increased demand can lead to blackouts that threaten the grid's reliability and resilience. Exhibit 2 provides information on the type of weather events with overall damages at or exceeding \$1 billion that occurred in Louisiana between January 2014 and May 2024 and their associated costs.

Exhibit 2 Weather Events in Louisiana with Overall Damages at or Exceeding \$1 Billion January 2014 – May 2024							
Type of Event	Number of Occurrences	Total Costs (in Billions)					
Drought	2	\$38.27					
Flooding	6	31.04					
Severe Storm (events producing							
tornadoes, hail, and high wind damage)	29	59.20					
Tropical Cyclone	8	296.25					
Winter Storm	2	35.86					
Total	47	\$460.62					
Source: Prepared by legislative auditor's staff using data from NOAA.							

(https://www.ncei.noaa.gov/access/billions/)

⁵ Distributed Energy Resources encompass a diverse range of small-scale, decentralized energy technologies and systems that can generate, store, and manage electricity near the point of use. These resources provide an agile and flexible approach to energy production and consumption, often situated closer to consumers than traditional centralized power plants. (https://tinyurl.com/5t5w64m3)

⁶ These costs include: physical damage to residential, commercial, and municipal buildings; material assets (content) within buildings; time element losses such as business interruption or loss of living quarters; damage to vehicles and boats; public assets including roads, bridges, levees; electrical infrastructure and offshore energy platforms; agricultural assets including crops, livestock, and commercial timber; and wildfire suppression costs, among others.

These challenges and risks have affected electric utilities and consumers in Louisiana in recent years. For example, in January 2023, LPSC approved Entergy Louisiana's request to charge customers \$1.5 billion over 15 years to cover the costs of repairs the company made after Hurricane Ida. This rate increase came on top of the \$3.2 billion storm fee approved in February 2022 for repairs after five storms in 2020 and 2021.⁷

To conduct this review, we reviewed federal guidance and best practices; analyzed data from federal sources such as the U.S. Energy Information Administration (EIA), the National Oceanic and Atmospheric Administration, and the U.S. Census Bureau; researched PUCs in other states; and reviewed and summarized relevant LPSC dockets.

The objectives for this report were:

Objective 1: To provide an overview of Louisiana's electric profile.

Objective 2: To provide information on challenges facing Louisiana's electric grid and LPSC.

Our results are summarized on the next page and on page 14, and discussed in detail throughout the remainder of the report. Appendix A contains our scope and methodology. Appendix B compares the retail price of electricity in Louisiana, neighboring states, and the U.S. between 2010 and 2023. Appendix C provides information on the residential price of electricity and the average residential monthly bill in each state in the U.S. in 2023.

Informational reports are intended to provide more timely information than standards-based performance audits. While these informational reports do not follow *Governmental Auditing Standards*, we conduct quality assurance activities to ensure the information presented is accurate. We incorporated LPSC's feedback throughout this informational report.

⁷ LPSC Docket Nos. <u>U-36350</u> and <u>U-35991</u>

Objective 1: To provide an overview of Louisiana's electric profile.

Overall, we found the following:

- Louisiana has one of the highest per capita electricity consumption rates in the nation. Natural gas is the primary fuel used to generate electricity in Louisiana, and the industrial sector is the largest consumer of electricity in the state. While the retail price of electricity (in ¢/kWh) in Louisiana was below the average rate nationally, it has recently increased due to extreme weather events and increases in the price of natural gas.
- Grid reliability in Louisiana fell short of the national average and worsened between 2013 and 2023. For example, in 2023, Louisiana had one of the highest numbers and durations of outages in the southern region, even when excluding outages due to major events, such as hurricanes or tornadoes.

This information is discussed in more detail on the pages that follow.

Louisiana has one of the highest per capita electricity consumption rates in the nation. Natural gas is the primary fuel used to generate electricity in Louisiana, and the industrial sector is the largest consumer of electricity in the state. While the retail price of electricity (in ¢/kWh) in Louisiana was below the average rate nationally, it has recently increased due to extreme weather events and increases in the price of natural gas.

According to the federal government,⁸ Louisiana ranks third among the states for total electricity consumption on a per capita basis and has the highest residential sector per capita electricity consumption in the nation. Louisiana receives about one-seventh of its power from other states by way of the regional grid. Louisiana generates most of its power from natural gas. The residential sector

⁸ U.S. Energy Information Administration (EIA)

made up the majority of the customers in the state; however, the largest consumer of electricity was the industrial sector.

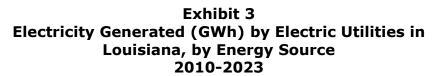
In 2023, natural gas accounted for 43,877 Gigawatthours (GWh) (72.1%) of the net generation by electric utilities in Louisiana in 2023. Natural gas is the primary fuel used to generate electricity in Louisiana and nationally.⁹ Natural gas fuels seven of the 10 largest power plants in Louisiana, based on annual generation. The use of natural gas to generate

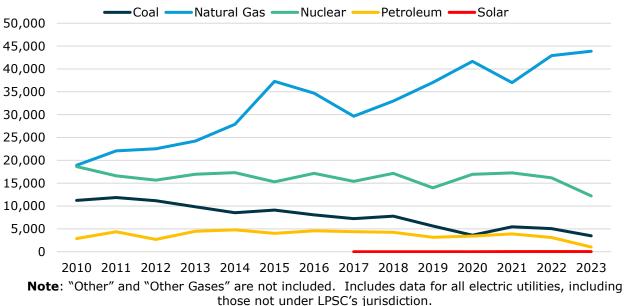
As of June 2024, Louisiana ranked fourteenth in the nation for total net electricity generation.

Source:

https://www.eia.gov/beta/states /states/la/rankings

electricity in Louisiana increased by 132% between 2010 and 2023. Exhibit 3 shows how energy sources used for electricity generation by electric utilities in Louisiana have changed from 2010 to 2023.



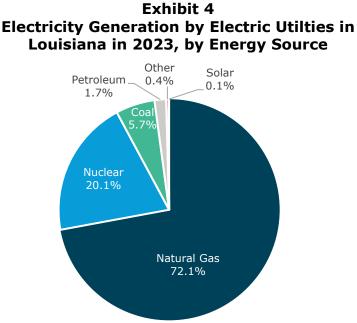


Source: Prepared by legislative auditor's staff using data from EIA.

Other sources of energy used for electricity production by electric utilities in Louisiana included nuclear energy, coal, petroleum, and solar. Nuclear electric power surpassed coal as the state's second-largest source of in-state electricity generation in 2015. Louisiana has two nuclear power plants, which are both located along the Mississippi River, and nuclear energy accounted for 20.1% of the state's net generation by electric utilities in 2023. In 2023, renewable energy sources

⁹ <u>https://www.eia.gov/todayinenergy/detail.php?id=61444</u> and <u>https://www.eia.gov/state/print.php?sid=LA</u>

provided about 4% of Louisiana's total electricity net generation.¹⁰ The use of solar energy for electricity generation increased by 1,568%, from 2.4 GWh in 2017 to 40.4 GWh in 2023. Exhibit 4 shows the total energy generated by electric utilities in Louisiana in 2023, by energy source.



Note: Includes data for all electric utilities, including those not under LPSC's jurisdiction. **Source:** Prepared by legislative auditor's staff using data from EIA.

Although residential customers make up the majority of customers in Louisiana in 2023, the largest consumer of electricity in Louisiana was the industrial sector. In 2023, the industrial sector, comprising only 0.8% of the total number of customers in Louisiana, consumed 41.8% of the total electricity sales in Louisiana. The residential sector, which accounts for 87% of customers in the state, consumed 33.3% of total electricity sales in 2023. Exhibit 5 provides information on the number of customers, electricity sales, and revenues by sector in Louisiana in 2023.

Exhibit 5 Electric Customers, Sales and Electric Utility Revenues by Sector - 2023								
	Customers		Electricity Sales		Revenues			
Sector	Number of Customers	Percent of Total	Sales in Megawatthours	Percent of Total	From Retail Sales			
Residential	2,137,199	87.0%	31,746,570	33.3%	\$3,666,444,000			
Commercial	300,640	12.2%	23,743,181	24.9%	2,481,404,000			
Industrial	18,790	0.8%	39,874,251	41.8%	2,344,558,000			
Transportation	1	0.0%	10,455	0.0%	1,151,000			
Total	2,456,630	100.0%	95,374,457	100.0%	\$8,493,557,000			
Note: Includes data for all electric utilities, including those not under LPSC's jurisdiction. Source : Prepared by legislative auditor's staff using information from EIA.								

¹⁰ <u>https://www.eia.gov/state/print.php?sid=LA</u>

In 2023, the average Louisiana residential consumer used 46.3% more electricity than the average American residential consumer. According to the EIA, Louisiana has the highest residential sector per capita electricity consumption in the nation. This may be because almost 7 in 10 Louisiana households rely on electric heating rather than natural gas,¹¹ and nearly all households have air conditioning due to the state's warm temperatures. Exhibit 6,

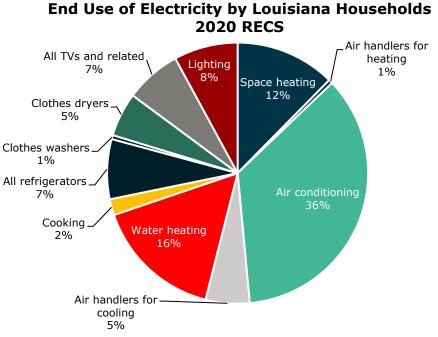
In 2023, Louisiana ranked first for residential sector electricity consumption per capita and third for total electricity consumption per capita.

Source:

https://www.eia.gov/state/print.php Psid=LA

which provides information on the end use of electricity by Louisiana households based on the EIA's 2020 Residential Energy Consumption Survey (RECS), shows that air conditioning was the largest end use of electricity consumption by Louisiana households in 2020.

Exhibit 6



Source: Prepared by legislative auditor's staff using data from EIA.

https://data.census.gov/table/ACSDT1Y2023.B25040?q=B25040:%20House%20Heating%20Fuel&g= 010XX00US&y=2023 The retail price of electricity (in ¢/kWh) in Louisiana was below the average rate nationally and among neighboring states between 2010 and 2023¹² but has recently increased.¹³

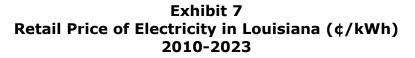
Between 2010 and 2023, the residential price of electricity in Louisiana increased by 28.6%, the commercial price of electricity increased by

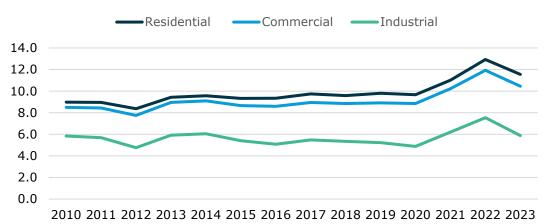
As of June 2024, Louisiana ranked fifty-first for average retail price of electricity to the residential sector.

Source: https://www.eia.gov/bet

s/la/rankings

22.9%, and the industrial price of electricity increased by 0.7%. According to LPSC, the price of electricity in Louisiana has increased recently due to increased demand during severe weather events and increases in the price of natural gas. Exhibit 7 shows the change in the retail price of electricity in all three sectors in Louisiana from 2010 through 2023, and Appendix C compares the retail price of electricity in Louisiana, neighboring states, and the U.S. between 2010 and 2023.





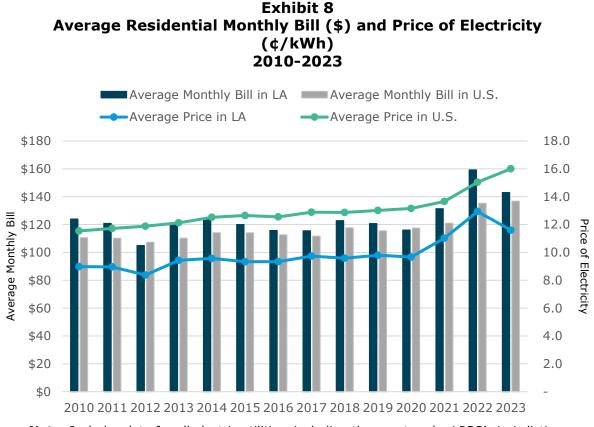
Note: Includes data for all electric utilities, including those not under LPSC's jurisdiction. **Source**: Prepared by legislative auditor's staff using data from the EIA.

Louisiana's average residential monthly electricity bill was sixteenth-highest in the nation in 2023. The average residential price of electricity in Louisiana in 2023 was 32.3% lower than the national average, but the average residential monthly bill was 4.4% higher than the national average. As seen in Exhibit 8, the residential retail rate of electricity in Louisiana increased by 28.6%, and the average monthly bill increased by 15.3%, from \$124 in 2010 to \$143 in 2023. In comparison, the national average residential retail rate of electricity increased by

 12 With the exception of 2022, when the retail rate of electricity in the commercial sector in Louisiana was 11.9¢/kWh and the average rate among neighboring states was 11.7¢/kWh.

¹³ The residential sector includes private households and apartment buildings where energy is consumed primarily for space heating, water heating, air conditioning, lighting, refrigeration, cooking, etc. The commercial sector includes non-manufacturing business establishments such as hotels, restaurants, public street and highway lighting, etc. The industrial sector includes manufacturing, construction, mining, agriculture, etc.

38.6%, and the national average residential monthly bill increased by 23.8%, from \$111 in 2010 to \$137 in 2023. Appendix C provides information on the residential price of electricity and the average residential monthly bill in each state in the U.S. in 2023.



Note: Includes data for all electric utilities, including those not under LPSC's jurisdiction. **Source**: Prepared by legislative auditor's staff using data from the EIA.

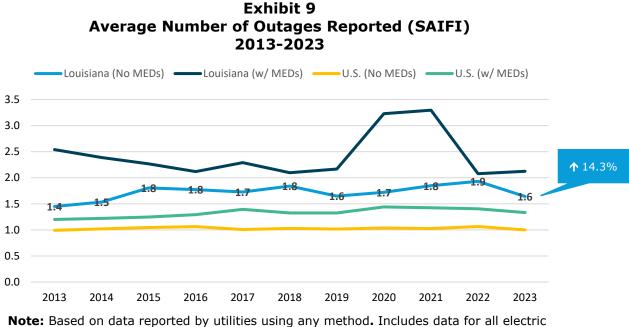
Grid reliability in Louisiana fell short of the national average and worsened between 2013 and 2023. For example, in 2023, Louisiana had one of the highest numbers and durations of outages in the southern region, even when excluding outages due to major events, such as hurricanes or tornadoes.

The electric power industry uses three measures to determine an electric utility's reliability¹⁴ - the average number of minutes of outage per year per

¹⁴ <u>https://www.citizensutilityboard.org/wp-content/uploads/2021/07/Electric-Utility-Performance-A-State-By-State-Data-Review_final.pdf</u>

customer;¹⁵ the number of outages per year per customer;¹⁶ and the average time for the utility to restore power to a customer after an outage starts.¹⁷ These reliability metrics are reported with and without Major Event Days (MEDs). MEDs are high-impact, low frequency events such as earthquakes, storms, and Public Safety Power Shutoffs. MEDs are designated as catastrophic events that exceed reasonable design or operational limits of an electric power system.¹⁸

• The number of outages in Louisiana, not including MEDs, increased by 14.3%, from 1.4 outages in 2013 to 1.6 outages in 2023.¹⁹ This shows that the overall reliability of the state's electric grid has deteriorated. According to best practices, this measure of grid reliability can be improved by reducing the frequency of outages through better preventative maintenance. For example, improved equipment maintenance and tree-trimming can limit the number of service interruptions.²⁰ Exhibit 9 provides information on the average number of outages that the average customer in Louisiana experienced during 2013 through 2023.



utilities, including those not under LPSC's jurisdiction.

Source: Prepared by legislative auditor's staff using data from EIA.

¹⁷ Customer Average Interruption Duration Index or CAIDI

¹⁵ System Average Interruption Duration Index or SAIDI

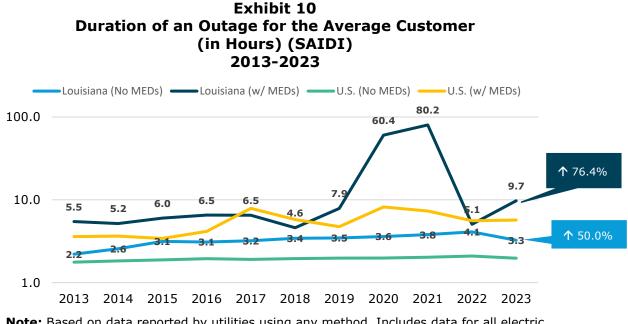
¹⁶ System Average Interruption Frequency Index or SAIFI

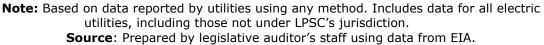
¹⁸ <u>https://www.tdworld.com/overhead-distribution/article/21157348/understanding-distribution-reliability-metrics</u>

¹⁹ MEDs are high-impact, low frequency events such as earthquakes, storms, and Public Safety Power Shutoffs. Reliability data without MEDs allows a utility to focus on how it needs to improve reliability overall. Reliability data with MEDs allows a utility to see how significant events (that might be random in occurrence) can dramatically impact customer experience.

²⁰ <u>https://www.hexstream.com/blogs/guide-to-utility-reliability-metrics</u>

• The duration of an outage for an average customer in Louisiana, not including MEDs, increased by 50.0%, from 2.2 hours in 2013 to 3.3 hours in 2023. In addition, the duration of an outage for an average customer in Louisiana, including MEDs, increased by 76.4%, from 5.5 hours in 2013 to 9.7 hours in 2023. This means that the duration of outages in general and the duration of outages after major events such as natural disasters increased between 2013 and 2023. According to best practices, improved response to outages is the most direct way to improve this metric. Another way to improve this metric is to prevent an outage from occurring. Exhibit 10 provides information on the total duration, in hours, of an outage for an average customer during 2013 through 2023.

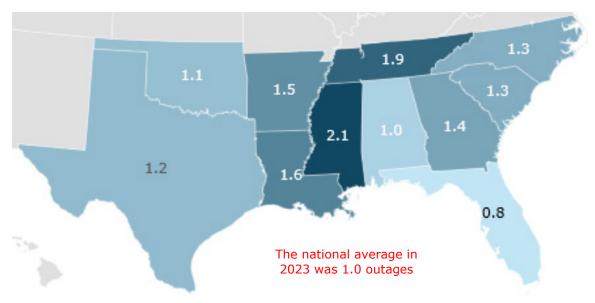




Louisiana faces challenges in grid reliability and resilience,²¹ particularly in the face of hurricanes and extreme weather. The state's grid reliability is worse than most states in the southern region. For example, in 2023, Louisiana had one of the highest numbers and durations of outages in the southern region, excluding MEDs. Exhibit 11 shows the number and duration of outages in 2023 in the southern states.

²¹ Grid reliability is the grid's capacity to avoid power disruptions, grid resilience is its ability to withstand and quickly recover from power outages. (<u>https://www.ncsl.org/state-legislatures-news/details/as-the-electric-grid-evolves-reliability-and-resilience-are-top-priorities</u>)





Durations of Average Outages Reported in Southern States (in Hours) (Excluding MEDs) 2023



Note: Based on data reported by utilities using any method. Includes data for all electric utilities, including those not under LPSC's jurisdiction. Source: Prepared by legislative auditor's staff using data from EIA.

Objective 2: To provide information on challenges facing Louisiana's electric grid and LPSC.

Overall, we found the following:

- Louisiana has high electricity consumption, which results in high electric bills. As a result, residential electric bills may not be affordable, especially for low-income households. LPSC has taken actions to help Louisiana consumers reduce electricity consumption and decrease their utility bills.
- Diversifying the energy sources used for electricity generation is a priority for LPSC, as it believes it will benefit the state. In addition, LPSC has open dockets to evaluate the state's electric infrastructure.
- The U.S. Department of Energy (DOE) identified the Delta Region, which includes Louisiana, as an area that would benefit from transmission expansion to increase grid resilience and reliability, alleviate congestion, and meet future energy needs.
- Louisiana is one of nine states that elects Public Service Commissioners who are not required to have relevant education or work experience. In addition, Louisiana's commissioners work part-time, as their salaries are among the lowest in the nation. These characteristics pose challenges for Louisiana commissioners responsible for regulating essential utility services.
- According to best practices, PUCs must overcome organizational challenges to keep up with the decarbonization and decentralization of the U.S. energy system and ensure affordable, reliable, and clean energy for consumers. However, LPSC faces budget and staffing challenges that may hinder its ability to balance its traditional role with growing demands.

This information is discussed in more detail on the pages that follow.

Louisiana has high electricity consumption, which results in high electric bills. As a result, residential electric bills may not be affordable, especially for low-income households. LPSC has taken actions to help Louisiana consumers reduce electricity consumption and decrease their utility bills.

Research shows that low-income households spend a higher percentage of their income on electricity and gas bills than any other income group. Their energy burden remains persistently high in particular geographies such as the South, rural America, and minority communities.²² The overall poverty rate in Louisiana in 2023 was 18.9%, the highest in the nation, and median household income in 2023 was \$58,229, the third-lowest in the nation. As a high poverty state, energy affordability is a concern for many Louisianans. We analyzed consumer complaints regarding electric utilities and found that, between fiscal years 2020 through 2024, 52% (35,212 of 67,553) of the complaints received by LPSC were regarding billing issues.

Despite the retail price of electricity in Louisiana being below the average rate nationally and among neighboring states between 2010 and 2023,²³ monthly residential electric bills may not be affordable, especially for low-income households in Louisiana. Louisiana's average residential monthly electricity bill was sixteenth-highest in the nation in 2023; increased by 15.3%, from \$124 in 2010 to \$143 in 2023; and peaked at \$159.20 in 2022. This may be because Louisiana has the highest residential sector per capita electricity consumption in the nation, partially due to the state's climate and severe weather events. Best practices show that, although maintaining reasonable rates is a priority for all regulators, affordable energy costs cannot be addressed by low rates alone.²⁴ According to the U.S. Census Household Pulse Survey, approximately 28.5% of adults in Louisiana households reported being unable to pay an energy bill in full during the last 12 months.²⁵

Electric utilities in Louisiana can charge consumers a 5% penalty for late payment of utility bills,²⁶ which may be among the highest in the

²² <u>https://iopscience.iop.org/article/10.1088/2516-1083/abb954/pdf</u>

²³ With the exception of 2022, when the retail rate of electricity in the commercial sector in Louisiana was 11.9¢/kWh and the average rate among neighboring states was 11.7¢/kWh.

²⁴ <u>https://www.aceee.org/toolkit/2021/04/supporting-low-income-energy-efficiency-guide-utility-regulators</u>

²⁵ <u>https://www.census.gov/data-tools/demo/hhp/#/?measures=ENERGYBILL</u> (As of October 23, 2024)

²⁶ According to information provided by LPSC, 11 (78.6%) of 14 electric utilities under LPSC's jurisdiction charge a 5% late payment penalty. Two utilities charge 3% in late payment penalties and the third charges 5% on the first \$50 and 2% on any additional amount over \$50.

country.²⁷ According to the National Energy Assistance Directors Association (NEADA), the level of utility consumer debt – the amount consumers owe their utilities – has increased from \$17.5 billion in January 2023 to \$20.3 billion in December 2023, and NEADA estimates that 16% (21.2 million) of all U.S. households are behind on their energy bills.²⁸ High late payment fees may exacerbate the energy burden on low-income Louisiana residents who are already struggling to pay their electricity bills and result in them falling into utility consumer debt. Falling behind on utility bills also

In August 2024, LPSC reached a settlement with Entergy Louisiana that resulted in a reduction of late fees and the elimination of connection and reconnection fees.

Another provision is the establishment of a Low-Income Affordability Working Group to investigate and consider affordability and arrearage concerns impacting low-income customers.

Source: <u>LPSC</u> and <u>Entergy Louisiana</u>

increases the risk of service disconnections. LPSC allows electric utilities to disconnect service by delivering a five-day written notice to consumers after they are delinquent for 90 days. According to information provided by LPSC, jurisdictional electric utilities disconnected 328,351 (15.3%) of 2,152,485 customers in 2023, with one utility disconnecting 32% of its customers. However, in September 2007, LPSC passed a general order that electric utilities cannot disconnect service for residential customers during certain extreme weather conditions.²⁹

Best practices show that states can leverage key policies to make electricity more affordable for low-income households. ³⁰ For example, in some states, low-income customers can register for percentage of income payment plans (PIPP) and agree to pay a set percentage of their income toward utility bills in exchange for discounts. California initiated a PIPP pilot program in 2021 that allowed utility customers below the federal poverty line to cap energy payments at 4% of household income. This program reduces both energy burden and disconnection risk for extremely low-income households. Also, several states have enacted policies requiring utilities to spend a certain portion of their energy efficiency funding on programs targeting low-income households.³¹

LPSC has taken actions to help Louisiana consumers reduce electricity consumption and decrease their utility bills. LPSC initiated the energy efficiency docket (*Docket No. R-31106*) in 2009. In 2013, LPSC approved a voluntary Quick Start energy efficiency program to encourage utilities and their customers to become more energy efficient and discourage inefficient or wasteful

²⁷ <u>https://lailluminator.com/2022/12/26/regulating-louisiana-utilities-qa-with-new-psc-member-davante-lewis/ and https://www.nola.com/news/business/louisiana-utilities-charge-among-highest-late-fees-in-country-forcing-tough-choices/article_b6c43028-9e59-11ec-b77b-db394da3ab79.html
²⁸ https://neada.org/wp-content/uploads/2024/06/2024summeroutlook.pdf</u>

²⁹ General Order for Docket No. <u>R-29706</u>

³⁰ <u>https://rmi.org/1-in-7-families-live-in-energy-poverty-states-can-ease-that-burden/</u>

³¹ According to the U.S. Department of Energy, energy efficiency is the use of less energy to perform the same task or produce the same result. Energy-efficient homes and buildings use less energy to heat, cool, and run appliances and electronics, and energy-efficient manufacturing facilities use less energy to produce goods. (<u>https://tinyurl.com/yuac65v8</u>)

use of energy. In January 2024, LPSC adopted a general order establishing a statewide energy efficiency program that will be mandatory for utilities under the commission's jurisdiction starting January 1, 2026. The LPSC's new energy efficiency program will require certain statewide energy savings targets. Hitting those targets could

Louisiana ranked forty-sixth in the American Council for an Energy Efficient Economy's (ACEEE) 2022 State Energy Efficiency Scorecard.

Source: https://www.aceee.org/sites/default/file s/pdfs/u2206.pdf

require the administrator to upgrade appliances for large commercial buildings or implement smaller efforts like helping low-income customers insulate their homes.³² The rules require utilities under LPSC's jurisdiction to participate and to contribute up to 1.5% of their revenue to fund the program and meet energy savings targets based on the previous five-year's energy sales data. Of this amount, at least 15% will be allocated to low-income residents and at least 10% will be allocated to rental properties.

According to the LSU Center for Energy Studies, demand response programs incentivize customers to temporarily shift or change their electricity consumption in response to price or other signals, which can reduce consumption and lower electricity bills.

Source: https://www.lsu.edu/ces/publications/20 20/demand-response-potential-inlouisiana-df.pdf In May 2021, the LPSC approved a new rule that emphasizes the importance of demand response in Louisiana. The Commission approved a plan for utilities to implement demand response programs in stages. The first programs will be simpler and cheaper, with more complex programs coming later. Examples of demand response programs in other states include Idaho Power's A/C Cool Credit Program that allows residential customers to earn a \$5 a month credit on their summer energy bills if they allow Idaho Power to turn off and on their

central air conditioning system in late afternoons and evenings on a few specific weekdays when summer demand for energy is high or for other system needs.³³ Similarly, Pacific Power, in several west coast states, has programs for large energy consumers, such as commercial and industrial organizations, to earn payments for making targeted energy reductions during periods of peak demand.³⁴

In January 2020, LPSC directed staff to research customer-centered options for all electric utility customers and to recommend a plan for how to ensure those customers are the focus in Louisiana.³⁵ In August 2024, LPSC adopted a Phase 1 General Order requiring electric utilities to report key operational data annually, including customer numbers, Low Income Home Energy Assistance Program (LIHEAP) assistance recipients, grid reliability, fuel mix, and a 10-year history of residential rates. Utilities must also manage Renewable Energy Credits to benefit

³² <u>https://lailluminator.com/2024/09/19/louisiana-utility-regulators-award-long-awaited-energy-efficiency-contract/</u>

³³ <u>https://www.idahopower.com/energy-environment/ways-to-save/savings-for-your-home/rebates-and-offers/ac-cool-credit/</u>

³⁴ <u>https://www.pacificpower.net/savings-energy-choices/business/CIDR.html</u>

³⁵ Docket No. R-35462

ratepayers and offer Green Tariff Options or justify why they don't. In addition, a new Power Purchase Agreement (PPA) rule was introduced to help large commercial and industrial customers access renewable energy.³⁶

Diversifying the energy sources used for electricity generation is a priority for LPSC, as it believes it will benefit the state. In addition, LPSC has open dockets to evaluate the state's electric infrastructure.

As noted previously, grid reliability in Louisiana fell short of the national average and worsened between 2013 and 2023. In addition, natural gas is the primary fuel used to generate electricity in Louisiana and nationally.³⁷ Best practices have found that gas plants are susceptible to large-scale failures during extreme weather.³⁸ Exhibit 12 shows the percentage of electricity generated using natural gas, by state, in 2023.

³⁷ <u>https://www.eia.gov/todayinenergy/detail.php?id=61444</u> and

³⁶ Renewable energy credits are generated when utilities produce power from renewable energy sources like wind and solar. Green Tariff Options are a rate structure offered by utilities and approved by a state's PUC that enables customers to access renewable energy. PPAs are contracts that guarantee the provision of electricity between buyers and sellers.

https://www.eia.gov/electricity/annual/table.php?t=epa 03 01 a.html

³⁸ https://www.ucsusa.org/sites/default/files/2024-01/Gas%20Malfunction_brief_1.8.pdf

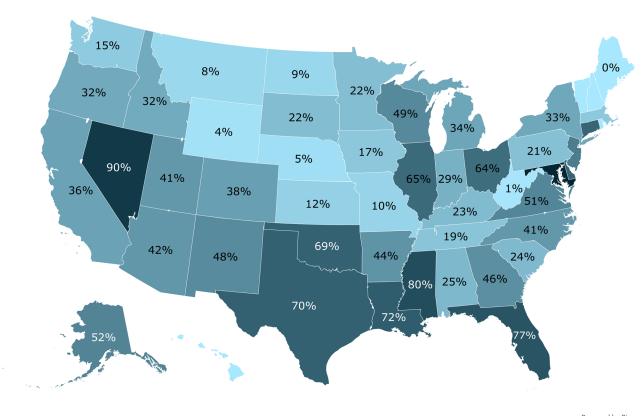


Exhibit 12 Percent of Generation by Electric Utilities Using Natural Gas 2023

Powered by Bing © GeoNames, Microsoft, TomTom

Note: Includes data for all electric utilities, including those not under LPSC's jurisdiction. **Source**: Prepared by legislative auditor's staff using data from EIA.

According to LPSC, diversifying the energy sources used for electricity generation is a priority for the commission and would benefit the state by reducing the risk posed by natural gas power plants failing during extreme weather events. LPSC has approved several solar and wind generation projects in recent years in order to diversify the energy sources used for electricity generation in the state. According to the EIA, Louisiana's utilityscale solar generation was seven times greater in 2023 than in 2020. Solar power from both utility-scale and small-scale, customer-sited solar panel electric generating systems provided 17% of Louisiana's renewable generation in 2023.³⁹ In May 2024, LPSC approved Entergy Louisiana's proposal to add 3

In September 2022, LPSC approved Entergy Louisiana's plan to purchase 475 megawatts (MW) of solar power and add a green tariff option to allow customers to subscribe to renewable energy sources.

In June 2023, LPSC approved SWEPCO's plan to acquire 999 MW of renewable generation resources, including a solar facility in Caddo parish and two wind facilities in Texas and Oklahoma.

In January 2024, LPSC approved the construction of generation facilities for Entergy Louisiana to add approximately 224 MW of solar power.

Source: LPSC Docket Nos. <u>U-36190</u>, <u>U-36385-A</u>, and <u>U-36685</u>

gigawatts (GW) of solar power to its generation portfolio.⁴⁰ According to Entergy Louisiana, this expansion represents the largest renewable power expansion in state history.

According to the EIA, Louisiana has offshore wind potential, and in August 2023 the U.S. Bureau of Ocean Management awarded a development lease for the Gulf of Mexico Wind Auction 1 in the Lake Charles Lease area, which could potentially add 1.2 GW of offshore wind capacity and power nearly 435,400 homes.⁴¹ In addition, in December 2023, the Louisiana Department of Energy and Natural Resources approved two offshore wind developments in Louisiana waters.⁴²

In December 2021, LPSC initiated two rulemaking dockets to evaluate the state's electric infrastructure. *Docket No. R-36226* was initiated to evaluate the status and maintenance of the state's electric grid, as well as to investigative whether certain storm costs could have been avoided with more preemptive maintenance of the grid. LPSC staff is currently gathering comments from stakeholders in this docket on topics such as developing a program for the immediate elimination of "non-usable" distribution poles, transmission towers, and other equipment, the use of drone technology to assist in recovery and restoration efforts, and potential penalties and disincentives for failure of Louisiana electric utilities to meet their reliability requirements.

³⁹ <u>https://www.eia.gov/state/print.php?sid=LA</u>

⁴⁰ Docket No. U-36697

⁴¹ <u>https://www.doi.gov/pressreleases/biden-harris-administration-holds-first-ever-gulf-mexico-offshore-wind-energy-auction</u>

⁴² <u>https://www.ajot.com/news/louisiana-signs-agreements-to-build-first-offshore-wind-farms-in-state-waters</u>

Docket No. R-36227 was initiated to assess the current electric utility infrastructure in Louisiana and to propose a plan of resiliency and hardening that could better prepare Louisiana's electric grid for future storms and interruptions. In August 2023, LPSC staff proposed a final rule directing each electric utility to develop Grid Resilience Plans. However, in December 2023, LPSC staff and stakeholders were asked to work together to determine if four open dockets (R-35394, R-36226, R-36227, and U-36625) were connected and explore ways to advance them together to strengthen Louisiana's grid.

The commission opened *Docket No. R-34758* to review utility actions and costs during Winter Storms Uri and Viola in 2021. The commission's General Order required utilities to report on efforts to winterize systems and assess the costs and benefits of long-term gas contracts and gas storage for fuel stability. The commission also set new communication protocols for timely updates from Regional Transmission Organizations (RTOs) and utilities during emergencies.

Source: LPSC General Order (Docket No. R-34758)

In addition, in August 2024, LPSC initiated *Docket No. R-37369* to review the Commission's current General Order on electric reliability standards and research ways the Commission can both modernize the current level of SAIDI and SAIFI and establish reliability metrics at the distribution level. Staff was directed to also look at ways to achieve uniformity and transparency of such reporting calculations; create explicit definitions of events that can be excluded from score calculations, including justification reporting, and review the suitability of the Commission's current penalty levels and enforcement mechanisms necessary to ensure reliability improvements.

The U.S. Department of Energy (DOE) identified the Delta Region, which includes Louisiana, as an area that would benefit from transmission expansion to increase grid resilience and reliability, alleviate congestion, and meet future energy needs. The DOE's 2023 National Transmission Needs Study found that there is a pressing need for new transmission infrastructure (connecting geographically distant power plants with areas where electric power is consumed).⁴³ Best practices show adding transmission capacity can increase grid reliability, support new generation resources, and lower costs for end users:⁴⁴

> • Transmission capacity improves grid reliability by enlarging the pool of generation resources available to meet demand.

In February 2021, Winter Storm Uri hit Texas and the South-Central United States. Electricity generation failure and high demand during the cold weather conditions required large power transfers from the Eastern Interconnection (eastern grid) into RTOs in which Louisiana is a member. These RTOs' ability to transfer power through their many transmission ties with the eastern grid helped to alleviate electricity generation shortfalls, preventing more severe shutdown of electricity supply by electric utilities. Texas, unlike Louisiana and other states, did not have the ability to import electricity from the eastern grid.

Source: <u>FERC, NERC and Regional Entity Staff</u> <u>Report: The February 2021 Cold Weather Outages</u> <u>in Texas and South Central United States</u>

- Transmission capacity can mitigate impacts of extreme weather events. Extreme weather events tend to be most severe in relatively small areas, so stronger transmission ties to neighboring regions can be a lifeline to keep homes warm and people safe.
- Increased grid connectivity can support resource adequacy.⁴⁵ Interregional transmission has been shown to have significant resource adequacy benefits because it allows regions to export and import electricity during times of need that may occur simultaneously with times of excess in other regions.⁴⁶
- Transmission reduces grid congestion,⁴⁷ allowing the lowest cost generators to meet demand, which leads to lower energy costs for ratepayers.

The 2023 National Transmission Needs Study identified the Delta Region, which includes Louisiana, as an area that would benefit from transmission expansion to increase grid resilience and reliability, alleviate congestion, and meet future energy needs. Likewise, a National Bureau of Economic Research (NBER) working paper found that additional regional

12/National%20Transmission%20Needs%20Study%20-%20Final 2023.12.1.pdf

⁴⁵ According to the National Association of Regulatory Utility Commissioners, resource adequacy is a measure of whether there are sufficient electric resources available to serve customer demand.
⁴⁶ <u>https://energyinnovation.org/2023/12/21/in-with-the-new-then-out-with-the-old-a-managed-transition-is-key-to-maintaining-resource-adequacy/</u>

⁴³ <u>https://www.energy.gov/sites/default/files/2023-</u>

⁴⁴ https://www.csis.org/analysis/power-system-benefits-interregional-transmission

⁴⁷ Congestion occurs when low-cost resources in one region are dispatched to meet system wide demand, but insufficient transmission capacity exists to deliver the energy to a specific zone.

transmission lines would allow Louisiana to access low-cost renewable energy resources from the regional grid and enhance grid reliability.⁴⁸ However, the NBER working paper also found that electric utilities with generation facilities in the RTO MISO South, which Louisiana is a part of,⁴⁹ may have financial incentives to block new transmission lines by limiting competitors' access to transmission networks or delaying the transmission planning process. This is because, as low-cost renewable energy sources, such as wind energy, enter the RTO grid, they have the potential to replace fossil fuel generators and/or lower prices for fossil fuel generators. On the other hand, according to LPSC's consultant on MISO matters, transmission constraints are not limiting wind energy flows from MISO North (mid-western states) to MISO South and electricity prices in MISO South may increase if there were no transmission constraints between these two regions.

In September 2024, the commission approved new rules for certifying and approving the location of major transmission projects.⁵⁰ According to LPSC, these rules ensure that large or costly projects, or those with multiple benefits, go through certification, but still allow for some exceptions when delays could harm the project timeline. The new rules also consider recent changes in federal law.⁵¹ According to LPSC, by increasing control over the certification and siting of transmission facilities, the Commission can better manage Louisiana's electricity rates, protect local control over utilities, and ensure reliable electric service. This added authority allows the Commission to oversee transmission projects in Louisiana that might be part of national interest corridors or regional and federal requirements. It will also help the Commission manage the costs of new transmission lines, even if those lines don't directly serve Louisiana could be made by others, possibly ignoring local needs and impacts.

In addition, in June 2024 LPSC adopted a rule to determine how much generation capacity is needed for the state. ⁵² The order requires all electricity providers in Louisiana to prove each year that they have planned to meet the necessary power capacity for future years. Currently, the rule does not require power sources to be in a specific location. However, if the Commission finds that relying too much on remote power sources is hurting the reliability of electricity for Louisiana customers, or if it affects the public interest, they have the authority to set location rules. This could mean that some of the power sources must be in the MISO grid or a nearby area.

⁴⁸ <u>https://www.nber.org/papers/w32091</u>

⁴⁹ Louisiana's electric grid is part of the Midcontinent Independent System Operator (MISO), which helps manage electricity flow and reliability across multiple states (<u>MISO</u>). In 2013, Entergy Corporation and other southern utilities joined MISO, adding what is now referred to as "MISO South" to MISO's control area. (<u>https://betterenergy.org/wp-content/uploads/2023/06/MISO-101-Part-1-Intro-to-MISO.pdf</u>)

⁵⁰ Docket No. R-36199

 ⁵¹ The Infrastructure Investment and Jobs Act expanded the federal government's authority over transmission siting. (<u>https://www.ferc.gov/explainer-siting-interstate-electric-transmission-facilities</u>)
 ⁵² Docket No. R-36263

Louisiana is one of nine states that elects Public Service Commissioners who are not required to have relevant education or work experience. In addition, Louisiana's commissioners work parttime, as their salaries are among the lowest in the nation. These characteristics pose challenges for Louisiana commissioners responsible for regulating essential utility services.

Every state in the U.S. has a PUC or equivalent authority responsible for regulating utilities such as electricity, water, gas, telecommunications, etc. However, PUCs differ from each other in many ways, including how commissioners are selected, the number of commissioners on the commission, commissioner term lengths, laws regarding bipartisanship requirements, educational qualifications or work experience requirements, and conflict of interest requirements. For example, as shown in Exhibit 13, in the majority of states, commissioners are appointed by the Governor, and Louisiana is one of nine states that elects commissioners.

Other characteristics of state PUCs are that most commissions have three members, but a sizable minority have five commissioners, and some have seven commissioners. The term of service for a commissioner generally varies by state from four to six years. In Louisiana, LPSC has five commissioners; does not have education or work experience requirements for candidates running for election as commissioners; and, although not specified in law, commissioners in Louisiana work part-time.

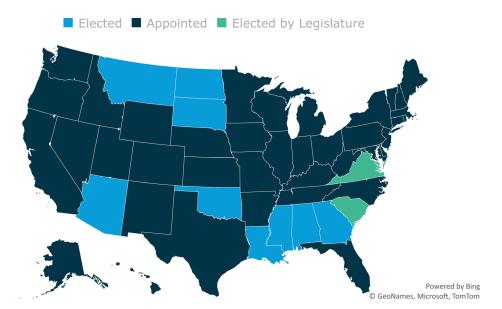


Exhibit 13 State Commissioner Selection Methods

Source: Prepared by legislative auditor's staff using information from state legislature and state commission websites and WestLaw.

According to best practices, commissioners in some states, including Louisiana, may lack the legal or industry specific expertise that enables them to embark on their job duties as soon as they are appointed or elected. ⁵³ We found that none of the nine states with elected commissioners, including Louisiana, require candidates running for election to have educational or

Laws in 22 (44%) of 50 states require potential appointees to have certain experience or qualifications to be considered for the position of Commissioner. Examples of required experience or qualifications include experience in the legal profession, degrees in finance, economics, business administration, engineering, or public administration, and background or experience in utility matters.

Source: Westlaw and state legislature websites

industry experience in the utility industry or the regulation of utilities. According to best practices, even commissioners who do have industry experience may find themselves illequipped to immediately tackle the many and fast-changing issues of the industry. As a result, newly-elected commissioners may face steep learning curves that make it more challenging for them to lead on timely regulatory issues. In addition, Louisiana's commissioners are term-limited to three sixyear terms. As a result, newly-elected commissioners in Louisiana may not have any prior legal or industry specific expertise, and those commissioners who gain

experience in utility regulation on the job are periodically replaced by new commissioners who may not.

According to LPSC, newly-elected commissioners require time to learn on the job and receive training designed for new commissioners from the National Association of Regulatory Utility Commissioners (NARUC). In addition, LPSC district staff have institutional knowledge that carries over, and they assist newly-elected commissioners. Louisiana commissioners' terms are staggered, and this ensures that there are always some commissioners that have experience as new commissioners are elected. Two LPSC Commissioners are term-limited, and both end their final terms on December 31, 2026. In addition, another Commissioner will not seek re-election after his current term ends on December 31, 2024. As three newly-elected commissioners take charge in Louisiana over the next few years, they will need time to learn on the job, and LPSC will need resources to assist them as they consider new electricity policies and their expanding role in the energy transition.

In accordance with state law,⁵⁴ Louisiana's commissioners, who work part-time, receive an annual salary of \$45,000,⁵⁵ which may be the lowest in the nation.⁵⁶ PUCs play a crucial role in shaping energy infrastructure and policy. Louisiana's commissioners currently regulate more than 1,000 public utilities

⁵⁶ <u>https://www.canr.msu.edu/ipu/uploads/migration/2020/02/IPU-MSU-Annual-Commissioner-</u> Demographics-Feb.-2020-1.pdf

⁵³ <u>https://rmi.org/insight/puc-modernization-issue-briefs?submitted=ghttudklel</u>

⁵⁴ Louisiana Revised Statute 45:1162.

⁵⁵ In addition, they receive a vehicle allowance of \$8,400 annually, for a total annual salary \$53,400. Three Commissioners also receive a cell phone allowance of \$900 for a total salary of \$54,300. (<u>https://wwwcfprd.doa.louisiana.gov/boardsandcommissions/viewBoard.cfm?board=512</u>)

and common carriers. Given the scope of public utility commissioners' work and its impact on all citizens of the state, public utility commissioners in neighboring states are paid considerably more than commissioners in Louisiana. For example, annual commissioner salaries were \$225,000 in Texas (as of July 2024)⁵⁷ and were between \$99,488 and \$106,594 in Alabama (in fiscal year 2021).⁵⁸ Mississippi's legislature voted to increase pay for commissioners from \$78,000 to \$95,000, effective 2024.⁵⁹

House Bill 939 of the 2008 Regular Legislative Session proposed increasing the salary of LPSC commissioners to \$75,000 per annum. However, the bill was vetoed by the Governor. Apart from the low annual salary, elected commissioners in Louisiana work part-time. Low salaries could discourage qualified Louisiana citizens from running for the commissioner position, and, if they are elected, it prevents them from devoting their full time and attention to the position of Public Service Commissioner. LPSC should work with the legislature to determine if a salary increase for LPSC commissioners would be appropriate.

According to best practices, PUCs must overcome organizational challenges to keep up with the decarbonization and decentralization of the U.S. energy system and ensure affordable, reliable, and clean energy for consumers. However, LPSC faces budget and staffing challenges that may hinder its ability to balance its traditional role with growing demands.

⁵⁷ <u>https://salaries.texastribune.org/departments/public-utility-commission-of-texas/</u>

⁵⁸ <u>https://www.al.com/news/2022/05/election-2022-challengers-fire-away-at-two-incumbents-in-alabama-public-service-commission-races.html</u>

⁵⁹ <u>https://mississippitoday.org/2022/04/27/reeves-lets-pay-raises-for-elected-officials-pass/</u>

Traditionally, state utility regulators were charged with ensuring safe, reliable, and affordable access to electricity while providing utilities with a reasonable opportunity to recover costs and provide a fair return to investors. However, their roles are growing in complexity. According to best practices, PUCs must increasingly consider issues such as greenhouse gas emissions reductions, equity, grid reliability and resilience, distributed energy resources, and increased customer choice.⁶⁰ However, PUC modernization has not kept pace with the transition to a decarbonized, more distributed, and flexible energy system.

Decarbonization of the electric grid is the process of reducing or eliminating the carbon emissions produced by the electric power sector.

Decentralization of the electric grid is the process of generating electricity close to where it is consumed by consumers. This includes rooftop or community solar projects, energy storage systems such as batteries, microgrids that operate independently or alongside the main grid, etc.

Source: Natural Resources Defense Council, NCSL, and HEXStream

Best practices note that, in order to meet emerging priorities, state PUCs must overcome organizational and structural challenges that act as barriers to innovation and informed regulatory decision-making. These challenges include outdated mandates; staff and budget constraints; gaps in technical expertise; information asymmetry between utilities and stakeholders; procedure heavy, quasi-judicial processes that require PUCs to consider evidence presented in specific ways; and a culture of risk aversion. ⁶¹ To overcome these barriers, PUCs need to modernize internal organization to match evolving industry needs and encourage innovative decision-making. For example:

- Providing commissioners with access to technical staff to support research and analysis to ensure commissioners are empowered to make informed decisions;
- Ensuring that staff attention is appropriately balanced between traditional and emerging topics, and between short- and long-term priorities;
- Securing additional technical capabilities for meeting specialized needs related to finance, system and financial modeling, equity, climate, and community engagement, including via broad or case-by-case authorization of consultant services for specific activities outside of existing PUC areas of expertise and expanded staff access to cuttingedge local or virtual training offerings; and
- Reducing commissioners' and stakeholders' reliance on utilities' modeling assumptions, data, and methodologies and ensuring that all

⁶⁰ <u>https://rmi.org/the-untapped-potential-of-public-utility-commissions/</u>

⁶¹ <u>https://rmi.org/insight/puc-modernization-issue-briefs?submitted=ghttudklel</u>

stakeholders have access to transparent data needed to understand utility performance.

LPSC has staffing constraints that may hinder its ability to balance its traditional role with growing demands. In fiscal year 2024, LPSC had 95 authorized T.O. positions, which is similar to the median state PUC staffing levels. However, LPSC only had 78 staff and 17 vacancies in fiscal year 2024. In fiscal year 2024, LPSC opened 383 dockets and, according to LPSC, rulemakings and rate cases tend to be the most time and resource intensive given the amount of information to review and analyze prior to making a recommendation to the Commission. Despite this, key divisions involved with the regulation of utilities have few staff compared to the functions performed by these divisions. For example, in fiscal year 2024:

- The Utilities Division, which is responsible for the maintenance of all rates for regulated utilities and auditing regulated utilities, overall results of operations, the rate base, and the rate of return on equity and capital, had 10 staff, including five audit related staff and three utilities administrator or specialist staff.
- The Administrative Hearings Division, which, among other duties, conducts public evidentiary hearings on complex and financially significant issues within the Commission's jurisdiction, consisted of eight employees, including four Attorney positions and four administrative positions.
- Each District office had, on average, five staff, including administrative staff, an executive assistant and technical assistant for each commissioner, consumer specialists, and enforcement agents. According to LPSC, commissioners receive assistance from district staff that have institutional knowledge about the regulation of utilities.

Exhibit 14 provides information on authorized T.O and staffing in LPSC between fiscal years 2020 and 2024.

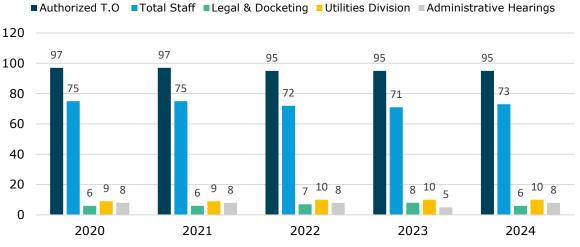


Exhibit 14 Staffing at LPSC Fiscal Years 2020-2024

Note: Staffing includes full- and part-time employees, and does not include student interns and commissioners. The District Offices Division is not presented in the chart.
 Source: Prepared by legislative auditor's staff using information from LaGov and LPSC's budget presentations.

Overall agency turnover increased from 14.7% in fiscal year 2020 to 19.2% in fiscal year 2024. In addition, turnover was high in key divisions and positions, such as the Utilities Division and Attorney and Auditor positions, during this same period. According to LPSC, auditor and attorney positions are hard to recruit and hire and staff in these positions often leave the agency to work in the private sector that offers work from home options and higher salaries. Exhibit 15 shows the turnover rates for the agency and key divisions and positions involved in the regulation of electric utilities between fiscal years 2020 through 2024.

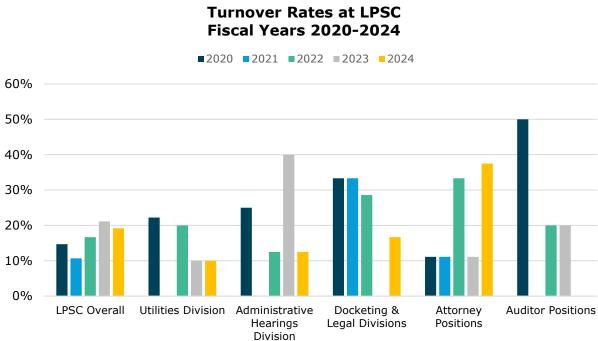


Exhibit 15

Note: Staffing includes full- and part-time employees, and does not include student interns and commissioners. The District Offices Division is not presented in the chart. **Source:** Prepared by legislative auditor's staff using information from LaGov and LPSC's budget presentations.

Like LPSC, other state PUCs have also struggled with recruitment and retention. For example, the Texas Sunset Advisory Commission found that the Texas PUC lacked the expertise and staff resources to independently analyze an abundance of electric data and information to make fully-informed regulatory decisions. Similarly, an evaluation of the New Mexico Public Regulation Commission in 2017 found that a single technical advisor was shared by all five commissioners, and technical staff were overwhelmed. Finally, an audit of the Hawaii PUC found that staff turnover was high, and staff retention was a persistent challenge because the PUC lost talent to the private sector and public utilities. Attorneys were most likely to leave, and low pay was cited as the main reason for leaving.

Best practices state that good regulation requires capable staff, information, and financial resources. However, the way PUCs are operated and funded, both independently and by state legislatures, has largely remained the same for decades, making competitive hiring and solicitation of consistent consulting services difficult.⁶² Commissioners need skilled professionals to assist with navigating emerging challenges. Typically, PUCs prioritize hiring lawyers, applicants with advanced degrees, and professionals who have experience in the industry, which limits the pool of applicants. As noted previously, LPSC faces challenges in recruiting and retaining lawyers and auditors,

⁶² https://www.utilitydive.com/news/utility-of-the-future-we-also-need-fundamental-changes-atstate-regulatory/609860/

both key positions in the regulation of electric utilities. According to LPSC, it provides internal and external training opportunities to staff, including programs by NARUC and New Mexico State University, when its budget permits. In addition, the Commission hires consultants and/or outside counsel to assist on electric utility dockets and on some rulemakings that would affect the electric utilities. However, the Commission does not have an annual budget for outside assistance, as the expenses incurred are not part of the LPSC's appropriated budget but paid by the utility being examined.⁶³ The Commission maintains a list of qualified consultants who have expertise in utility financing, accounting, and rate making. According to LPSC staff, one of the difficulties in finding outside assistance is the highly technical nature of utility regulation.

⁶³ Louisiana Revised Statute 45:1180

APPENDIX A: SCOPE AND METHODOLOGY

This report provides information on Louisiana's generation and consumption of electricity and the reliability of Louisiana's electric grid (electric profile), Louisiana Public Service Commission's (LPSC or Commission) role in regulating Louisiana's electric utilities, and the challenges facing Louisiana's electric grid and LPSC. Most of the federal data used in this report covers calendar years 2010-2023, though some information includes periods prior to and after our scope. Our objectives for this report were:

Objective 1: To provide an overview of Louisiana's electric profile.

Objective 2: To provide information on challenges facing Louisiana's electric grid and LPSC.

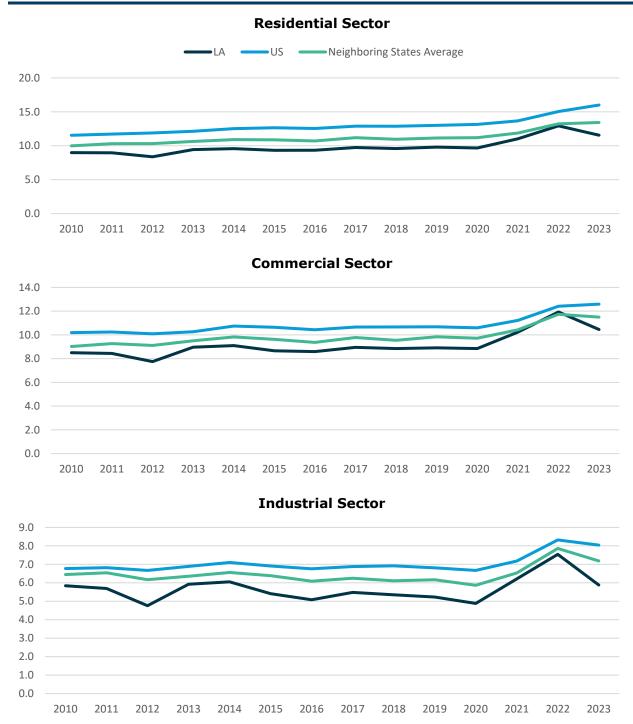
Informational reports are intended to provide more timely information than standards-based performance audits. While these informational reports do not follow *Governmental Auditing Standards*, we conduct quality assurance activities to ensure the information presented is accurate. We incorporated LPSC's feedback throughout this informational report.

To answer our objectives, we performed the following:

- Researched and reviewed applicable federal and state laws and regulations.
- Researched and reviewed recent legislation relevant to LPSC and its regulation of the electric utility industry.
- Researched best practices on the topic of electric generation, transmission, and distribution.
- Researched and reviewed audits of public utility commissions in other states.
- Researched and reviewed LPSC's mission, goals, organizational structure, and proceedings.
- Researched and summarized information in relevant LPSC dockets.
- Interviewed LPSC staff and stakeholders to gain an understanding of the electric utility industry.
- Obtained information from LPSC regarding their regulation of electric utilities.
- Reviewed transcripts of LPSC Business and Executive Sessions.

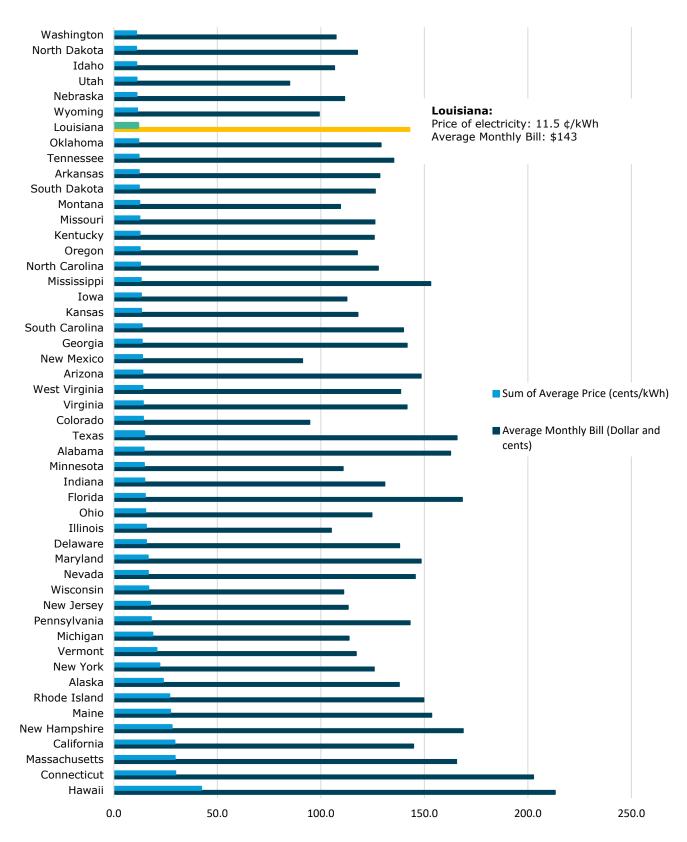
- Downloaded and analyzed data from federal sources:
 - Electric generation, consumption, price, average monthly bills, and grid reliability data from the EIA.
 - State poverty and median income data from the U.S. Census Bureau.
 - Severe weather events data from NOAA.
- Obtained and analyzed LaGov reports to understand staffing needs and turnover in LPSC.
- Researched and reviewed information about staffing challenges at other state PUCs.
- Researched and reviewed information on other state PUCs to identify similar and unique characteristics and how they might affect decision making at state PUCs.
- Researched the compensation of PUC commissioners in select neighboring states.
- Researched LPSC budget documents to understand the agency's revenues and expenditures.
- Obtained information from LPSC regarding training and continuing development of staff and difficulties with recruiting and retaining staff.
- Requested and analyzed consumer complaints against electric utilities in Louisiana from LPSC.

APPENDIX B: RETAIL PRICE OF ELECTRICITY (¢/KWH) IN THE RESIDENTIAL, COMMERCIAL, AND INDUSTRIAL SECTORS 2010 - 2023



Note: Neighboring states include Alabama, Arkansas, Florida, Georgia, Mississippi and Texas. **Source:** Prepared by legislative auditor's staff using data from EIA.

APPENDIX C: AVERAGE MONTHLY BILL (\$) AND RETAIL PRICE OF ELECTRICITY (¢/KWH) – RESIDENTIAL SECTOR 2023



Source: Prepared by legislative auditor's staff using data from EIA.