

Analysis and Recommendations Pursuant to Executive Order JML 24-13

Louisiana Department of Energy and Natural Resources
State Energy Office
(HB810)



Overview

(HB810)

- **Mission:** Our mission is to promote and encourage the exploration, production, conservation, and efficient use of energy and natural resources in the State of Louisiana. Wise use and conservation of energy and natural resources improves the environment, enhances economic development, and ensures a better quality of life for this and future generations.
- **Location:** The Louisiana State Energy Office (LSEO) is housed in the Louisiana Department of Energy and Natural Resources (LDENR) under the Office of the Secretary/Technology Assessment Division.
- Through this process, DENR proposes to expand and codify a long-term historical relationship with the legislatively created Center for Energy Studies (CES) housed at LSU. The logical main focal point of this connection is LSEO.



Overview

(HB810)

- The Louisiana State Energy Office's mission is to promote and encourage the exploration, production, conservation, and efficient use of energy and natural resources.
- Currently housed in the Louisiana Department of Energy and Natural Resources under the Office of the Secretary/Technology Assessment Division.
- House Bill 810 (HB810) lays the foundation for the establishment of the Office of Energy (OOE).



Current Budget Status

(HB810)

- **Federal: \$41,268,501**
 - IIJA Infrastructure Grants – Includes SEP IIJA, 40101(d) Grid Resilience, HALO Hydrogen Hub, Energy Efficiency Community Block Grant (EECBG), Energy Efficiency Revolving Loan Fund (EERLF), Energy Security
 - SEP Grant – This grant funds the majority of salaries and activities within the SEO
 - General Fund: \$1,200,838
 - 40101(d) 15% required State Match – The allocated funds are intended for project development and implementation purposes. This required matching contribution will yield substantial economic and community benefits, particularly in enhancing resilience through measures such as hardening of grid lines to ensure greater security during power outages.
- **Funding Source(s):**
 - Federal (Grants): \$41,268,501
 - General Fund: \$1,200,838
- CES budget approximately \$1.1 M plus external funds.

Budget Category	Budget Allocation	Funding Source
Salaries	\$ 949,810	Federal
Other Compensation	-	
Related Benefits	692,662	Federal
Travel	87,816	Federal
Operating Services	490	Federal
Supplies	101,472	Federal
Professional Services	3,197,976	Federal
Other Charges	36,136,383	Federal
	<hr/> 1,200,838	General Fund
Acquisitions	90,000	Federal
IAT Expenses	11,892	Federal
Total	\$ 42,469,339	Federal / General Fund



Current Personnel Status

(HB810)

LSEO

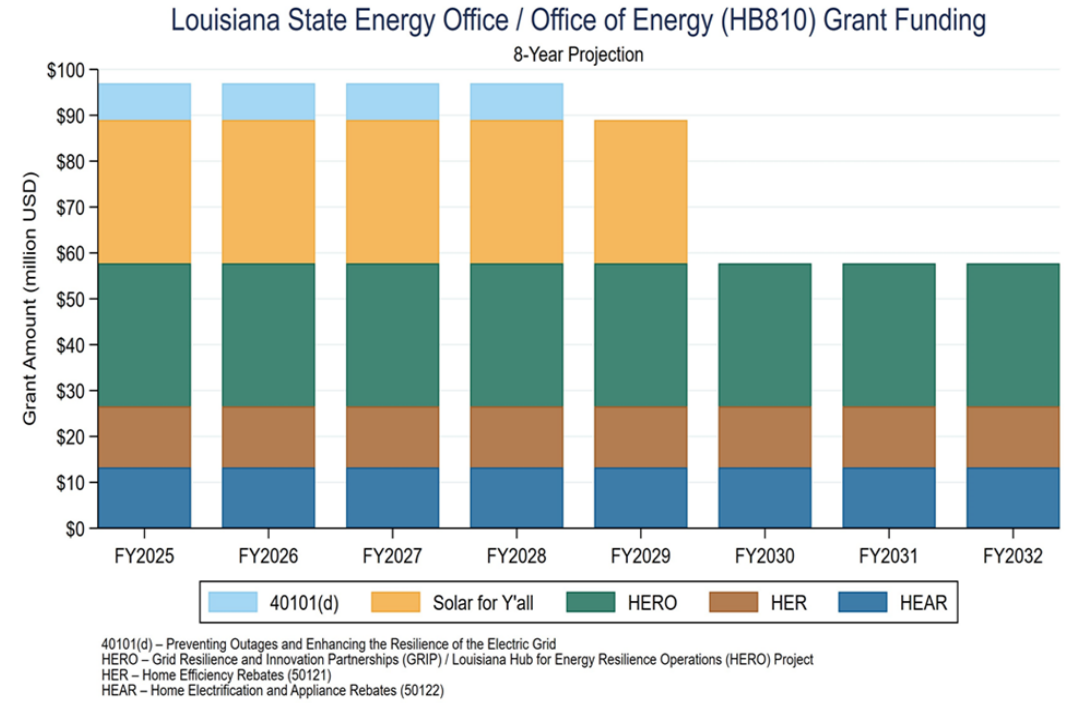
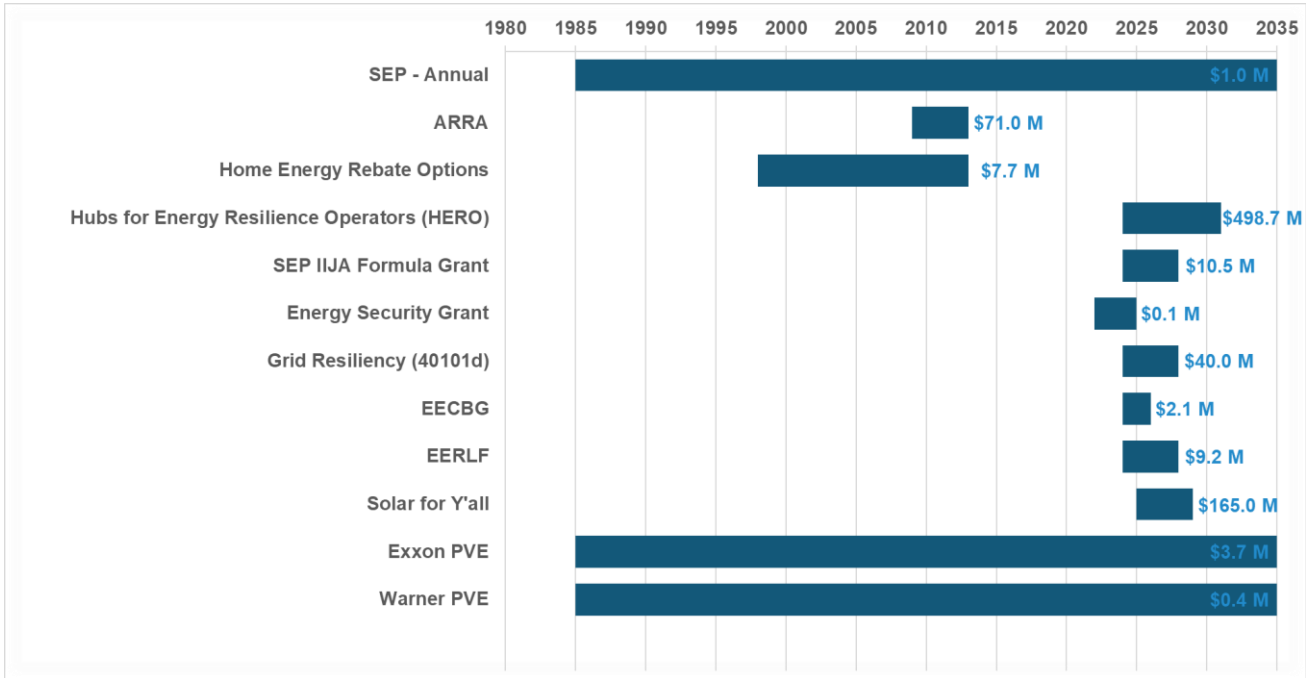
- Filled Positions: 9 positions, 1 Office of Management and Finance (OMF) position housed in the LSEO
 - Director – Petroleum Scientist Admin
 - Deputy Director - Program Manager 2
 - Senior Economist - Economist 4-A
 - Business Analytics Specialist (OMF position house in the LSEO)
 - Executive Staff Officer
 - Two Federal Energy Program Managers
 - Two Education Consultants
- Vacant Positions: 3 positions
 - Two Federal Energy Program Managers – positions were appropriated in the FY2024 budget
 - Administrative Program Specialist A
- Funding for LSEO (HB-810 - OOE) TO is paid through the State Energy Program (SEP) Annual Grant and various Infrastructure Investment and Jobs Act (IIJA) Infrastructure Grants

CES

- Filled Full Time Positions: 11
 - Executive Director (cross-listed as faculty).
 - Director of Research & Development (cross-listed as faculty).
 - Director of Energy Education & Outreach
 - Five Research Faculty
 - Two Research Associates
 - Business Manager
 - Communications Manager
 - Computer Analyst
- Non-full time or non-permanent positions
 - Two Research Fellows
 - Various research staff and graduate students across academic departments funded on specific grants and contracts.



State Energy Office Awarded Grants



Awarded Grant Programs

- Grid Resilience and Innovation Partnerships (GRIP)/Louisiana Hub for Energy Resilience Operations (HERO)
- 40101(d)
- Energy Efficiency Conservation Block Grant Program (EECBG)
- Solar for Y'all
- SEP IIJA
- SEP



Grid Resilience and Innovation Partnerships (GRIP)/ Louisiana Hub for Energy Resilience Operation (HERO) Project

- DOE distributed \$500,000,000 over five years to Louisiana for the HERO Project – *The third largest grant distributed to the states.*
- The HERO Project will focus on three main elements or phases:
 - The launch of a new integrated community energy planning process.
 - The deployment of a network of community resilience hubs consisting of grid-interactive, carbon-free distributed energy resources with long-duration energy storage across Louisiana.
 - The connection of the hubs to state emergency response operations.
- The community energy planning process will bring together utility, community, and state-level data to identify hotspots of greatest energy burden, climate risks, long-duration outages, and grid congestion.
- Will serve as a replicable pilot and scalable model for viable and innovative energy planning that meets the needs of the agency, utility, and community.



40101(d)

- The Department of Energy awarded \$46,032,740 to the State of Louisiana for a term of five years and includes a state match of 15%.
- State awards are based on a formula that includes population size, land area, probability and severity of disruptive events, and a locality's historical expenditures on mitigation efforts.
- Louisiana's Goals include:
 - Modernize the power infrastructure system to withstand stresses and shocks from extreme weather events and large-scale disruptions and move toward a secure, resilient, and affordable grid.
 - Build the next-generation sustainable, customer-centric, carbon-free grid.
 - Advance more equitable, economically sustainable, and resilient communities throughout Louisiana.
 - Reduce overall energy burden, particularly for disadvantaged communities, and ensure energy costs remain competitive.
 - Ensure the continued, safe operation of the energy system



Energy Efficiency Conservation Block Grant Program (EECBG)

- DOE awarded Louisiana \$2,149,350 over three years to implement strategies to reduce energy use, reduce fossil fuel emissions, and improve energy efficiency.
- 60% of the grant must go to unfunded parishes or cities – SEO is working with State Parks to implement solar lighting and the use of recycled materials in State Parks near low-income communities.
- 40% of the grant will be used to retrofit the Hog's House, part of the Our Lady of the Lake Children's Cancer Hospital, with solar lighting, battery storage, and generators. This will allow for those families staying at Hog's House to remain with their children during severe events.



Solar for Y'all

- EPA awarded Louisiana SEO \$165,000,000 over a five-year period to enable low-income and disadvantaged communities to deploy or benefit from zero-emissions technologies.
- The main objectives include:
 - Reduce emissions of greenhouse gases and other air pollutants.
 - Deliver benefits of greenhouse gas and air pollution-reducing projects to American communities, particularly low-income and disadvantaged communities.
 - Mobilize financing and private capital to stimulate additional deployment of greenhouse gas and air pollution-reducing projects.



State Energy Program Infrastructure Investment and Jobs Act (IIJA)

- DOE awarded Louisiana \$10,536,350 over five years to enhance energy security, advance state led energy initiatives, and increase energy affordability.
- Objectives include:
 - Partnering with Louisiana State University to implement Outreach demonstration programs focused on Carbon Capture and Sequestration and Hydrogen as an energy source.
 - Partnering with University of Louisiana at Lafayette to implement a Solar lab and a Solar educational outreach program.
 - Aiding St. James Episcopal Church with an energy audit and implementation of solar energy grid to sustain both the church and school through severe weather events.



State Energy Program (SEP) Grant

- SEP funded the SEO \$1,317,050 for a three-year term, to enhance energy security, advance state-led energy initiatives, and increase energy affordability.
- This funding allows the SEO to provide advisory assistance and direction to the Secretary of LDENR, other state and federal agencies, industry, business, and the general public on energy use, efficiency, supply, and alternatives.
- SEP funds salaries and benefits for the SEO.
- This grant also supports the SEO Outreach program that provides information and education about energy to the public and provides energy education programs for K-12 students.



Pending Grants

- Homes Energy Rebates Program
- State Based Home Energy Efficiency Contractor Training Grant/
Training for Residential Energy Contractors (TREC)
- Energy Efficiency Revolving Loan Fund
- Renewable Energy Siting through Technical Engagement and Planning



Home Energy Rebates Program

- Louisiana's funding opportunity is \$212,566,860 for both programs over eight years.
- This grant includes two separate programs
 - Home Efficiency Rebates (HER) which provides rebates for energy efficiency upgrades that improve the overall energy performance of a single-family home or a multi-family building.
 - Home Electrification and Appliance Rebates (HEAR) which authorizes SEO's to establish programs to provide point-of-sale rebates to eligible entities for qualified electrification projects.
 - SEO has received early administration funds which are being utilized to begin project development.



State-Based Home Energy Efficiency Contractor Training/ Training for Residential Energy Contractors (TREC)

- TREC program provides States the ability to develop and implement a state workforce energy program that prepares workers to deliver energy efficiency, electrification, and clean energy improvements, including those covered under the Homes Rebate Programs.
- Louisiana's funding opportunity through TREC is \$3,633,890 over a four year term. The application was submitted January 31, 2024.
- Partnering with the University of Louisiana at Lafayette, community based organizations, and the Louisiana Housing Corporation to strengthen the State's workforce by increasing available training, actively recruiting professionals, and upskilling workers and contractors currently in the field.



Energy Efficiency Revolving Loan Fund (EERLF) Capitalization Grant Program

- This grant provides capitalization grants to States to establish a revolving loan fund under which the state shall provide loans and grants for energy efficiency audits, upgrades, and retrofits to increase energy efficiency and improve the comfort of buildings.
- The EERLF funding opportunity for Louisiana is \$8,842,900 over a five-year term.
- This program is currently under development but is targeting these objectives:
 - Support IJA objectives to invest in America's workforce.
 - Advance the administration's equity, environmental, and energy priorities.
 - Projects funded will have minimal negative impact on vulnerable communities.



Renewable Energy Siting through Technical Engagement and Planning

- Renewable energy siting refers to a series of decision-making processes and actions used to determine the location and design of new wind, solar, storage, or other renewable energy facilities.
- Partnering with the Bureau of Ocean and Energy Management and the National Oceanic and Atmospheric Administration and the National Centers for Coastal Ocean Science to pursue programmatic and geospatial planning and stakeholder outreach for offshore wind development in state waters.
- Planning and outreach efforts are essential in allowing Louisiana to responsibly and equitably advance offshore wind development and reach the state's procurement goal of 5 gigawatts of offshore wind by 2035.



Federal Grant Economic Impact

Estimated Tax Revenues Supported by IIJA/IRA Grants	
Average Per Year: FY 2024 to FY 2032 (Million \$)	
Federal Tax Impacts	\$ 14.7
State Tax Impacts	
Sales	\$ 0.40
Income	0.37
Corporate	0.06
Other TLF	0.32
Total State	\$ 1.15
Local Tax Impacts	
Sales	\$ 0.98
Property	1.01
Other	0.09
Total Local	\$ 2.07

Estimated Economic Impacts			
FY 2024 to FY2032			
	Employment (Jobs/Year)	Labor Income (Million \$)	Gross State Product (Million \$)
United States			
Direct	341	\$ 229	\$ 297
Indirect	137	81.1	153.2
Induced	355	173.5	328.0
U.S. Total	833	\$ 483	\$ 778
Louisiana			
Direct	201	\$ 135	\$ 176
Indirect	53	26.4	52.4
Induced	123	52.2	95.2
Louisiana Total	378	\$ 214	\$ 324



State Energy Office Outreach



- Exploring Oil
- Renewables and Nonrenewables
- Solar Beads and Paper Activities
- Cooking with Solar
- Saving Energy
- Energy House Design Challenge
- Wind Energy
- Energy Source Circuits



Community Benefits

- Grid Resiliency
- Reduced Grid Demand
- Education and Outreach
- Community Involvement
- Lower Energy Cost for Consumers
- Community Awareness of Energy Infrastructure
- Workforce Development
- Combining of grant opportunities to better meet consumer needs



Issues Presented HB810 Implementation

- Efficiency
 - Inter-agency cooperation
 - Contracting
- Location and Personnel
- Budget
 - Federal funding
 - General funds match



Issues Presented

(HB810)

- **Financial Concerns:**

- The LSEO's (HB810 – OOE) reliance on federal grants as our primary funding source means we anticipate we will not have excess funding. Our budget largely depends on the allocations provided through these grants, leaving little room for surplus.
- While a small fraction of our funding stems from the State General Fund, a portion serves as a necessary 15% state cost match for the 40101(d) grant.
- We estimate that this \$1.1 million of state general fund match is recovered in state tax revenues from economic activities generated from LSEO obtaining external funds.

Estimated Tax Revenues Supported by IJJA/IRA Grants		
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Total State	\$	1.15
Local Tax Impacts		
Sales	\$	0.98
Property		1.01
Other		0.09
Total Local	\$	2.07



Analysis of Issues

(HB810)

- Financial
 - Collaboration with Center for Energy Studies.
- Personnel and Contractors
 - Current and Future Positions
- Location
 - Internal and External
- Budget
- Contracting



Analysis of Issues

(HB810)

- Financial Analysis – Target 10% reduction in state general funds.
 - Note that a 10% decrease in general funds in FY2024 would be approximately \$120,000 compared to SEO’s \$42 million budget allocation.
 - Nonetheless, one way to reduce this general fund is through partnership with CES.

Example of SEO / CES Partnership Reducing General Fund Match Requirement		
Current Structure		
Federal Grant	\$	1,000,000
Federal Match Requirement		10%
General Fund Match	\$	100,000
Possible Structure with CES Partnership		
Federal Grant	\$	1,000,000
Federal Match Requirement		10%
Match Requirement (A)	\$	100,000
Funds to CES From Federal Grant (B)	\$	100,000
CES Match Requirement (C)		50%
Total CES Effort (D) = (B) / (C)	\$	200,000
CES Match (E) = (D) - (B)	\$	100,000
State General Fund Match Needed (A) - (E)	\$	-



Proposed Office Structure

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- Collaborative space at both the SEO and LSU.
- Provides opportunities for cooperative engagement.



Necessary Changes

- LSEO (HB810 OOE) and CES Collaboration
- Personnel
- Budget
 - Federal funds
 - CES funds
- Contracts
- Reliable and Accessible Public Information



For NRSC Review and Approval

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- Inclusion of and Leveraging of grants with CES.
 - Example Orphan Well Program
- Collaboration with CES for providing increased access to data and information.
- Provide transparency, engagement, and continual Educational Outreach, especially in communities affected by grant programs.



Where do we go from here . . .

