

July 1, 2024

Louisiana Public Service Commission  
602 North Fifth Street (Galvez Building) (70802)  
P.O. Box 91154  
Baton Rouge, LA 70821-9154

Dear Ms. O'Brian and Ms. Bowman:

Frontier Energy, Inc. ("Frontier") is pleased to respond to the Commission's Request for Proposals ("RFP") for a statewide Energy Efficiency Program Administrator. We acknowledge and accept the terms described in the RFP and in the Commission's Phase II Rules and guarantee our firm possesses the requisite minimum qualifications and experience outlined in the RFP.

Our firm has worked behind the scenes since 2017, assisting two Louisiana electric utilities navigate the transition to utility-led programs and find success under the Commission's Phase I Quick Start program rules. We believe our experience assisting these utilities with activities touching on all aspects of the energy efficiency lifecycle uniquely positions us to help transition the state from multiple utility-led offerings to a single statewide program, cost-optimized to maximize benefits for the Louisiana customer base under the Phase II Rules.

We have proven our ability to tackle the technical, theoretical, and political challenges faced over the course of a high-profile, multi-year initiative through our decades of work facilitating all aspects of EE program design, administration, evaluation, and implementation. The one value we uphold across all states and all projects is that relationships matter. And, achieving success on an initiative of this scale cannot be achieved without strong connections and trust formed between Frontier and the LPSC. Our team's mindset to building this trust revolves around three main components: 1) People 2) Purpose and 3) Performance. We will apply this philosophy to develop a carefully considered strategic plan and consistently deliver results for the people of Louisiana.

## KEYS TO A SUCCESSFUL TRANSITION



### PEOPLE

Our work philosophy is centered around establishing strong, genuine connections with our partners. We will rely on existing local relationships and build trust with the LPSC and EE stakeholders to successfully evolve the QS programs into an effective statewide offering, benefitting all ratepayers.

### PURPOSE

Our team strives to align our approach with each client's core values and goals. We respect the history of the QS programs and will build on its success, prioritizing our responsibilities in alignment with Commission goals.

### PERFORMANCE

Our success is rooted in our ability to consistently deliver high-quality experiences and services. We are already invested in the LA EE community and seek to continue providing effective and beneficial services for the state of Louisiana.

In addition to our experience working in Louisiana, the Frontier team can draw on expertise and lessons learned from the many programs that we administer or support elsewhere, which span the residential, commercial, industrial, and institutional sectors. Examples include the statewide Quality HVAC program in California, the statewide Illinois Commercial Food Service Program, the joint-utility multifamily program in Minnesota, NYSERDA programs, and multiple programs for Texas utilities.

Frontier brings demonstrated expertise in core components that underpin program success including: market research; measure development and savings analysis; stakeholder engagement; tracking and reporting software; trade ally management, marketing, education, and outreach; incentive processing; QA/QC; and subcontractor management.

Our team is partnering with Creativity Justified, a certified MBE, WOSB, WBE, DBE, and ByBlack advertising agency. They are skilled at planning, supporting, and conducting strategic marketing and outreach campaigns in support of energy efficiency programs. Frontier has also established connections at the University of Louisiana at Lafayette to assist with trade ally coordination, outreach, and other tasks that will help the LPSC meet its goals. Additionally, Frontier intends to engage other local subcontractors should we be selected as the Program Administrator.

We truly appreciate the opportunity to continue to serve the people of Louisiana through statewide energy efficiency programs. Should you have questions regarding this response, please do not hesitate to contact us.

Sincerely,



Jean Krausse, Vice President  
737-236-0279 | [jkrausse@frontierenergy.com](mailto:jkrausse@frontierenergy.com)

Additional Contact:  
Amy Martin, Vice President  
737-236-0287 | [amartin@frontierenergy.com](mailto:amartin@frontierenergy.com)

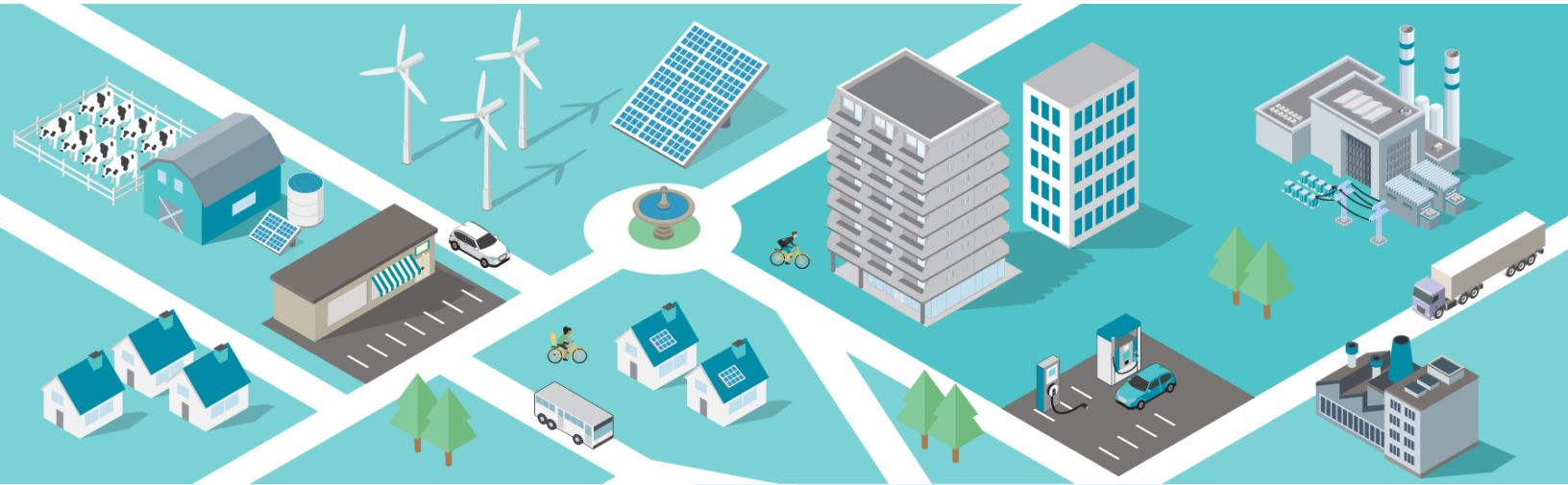
---



# Proposal for Program Administrator

RFP 24-05

July 1, 2024



 COPY

PREPARED BY:

**Frontier Energy, Inc.**  
1515 South Capital of Texas Highway  
Suite 110  
Austin, Texas 78746

PREPARED FOR:



## Table of Contents

Table of Contents.....	i
A. Overall Approach to the Transition of a New Statewide Energy Efficiency Program.....	1
B. Organizational and Management Capabilities.....	13
C. Approach to Administrative Functions .....	17
D. Approach to Technical and Customer Support Functions.....	22
E. Cost Proposal.....	27
Appendix A: Cost Proposal, Rates, and Answer to Question E1	
Appendix B: Challenges & Recommendations for Achieving Goals	
Appendix C: Letters of Support	
Appendix D: Insurance Qualifications	
Appendix E: Sample Contract	
Appendix F: Samples of Reporting	
Appendix G: Marketing Samples	
Appendix H: Financial Qualifications	
Appendix I: Expanded Response to System Development and Deployment Phases – Question B3	

## A. Overall Approach to the Transition of a New Statewide Energy Efficiency Program

---

1. Describe your vision for the program/strategic plan for the 1-year transition period and for the next 4 years of the first budget cycle.

Frontier Energy (Frontier) envisions leading a multi-step process in collaboration with all key stakeholders to clarify, prioritize, and execute a strategic plan resulting in the successful roll-out of statewide energy efficiency (“EE”) programs. We understand and respect the Louisiana Public Service Commission’s (“LPSC” or “Commission”) mission to maximize EE opportunities for Louisiana ratepayers while minimizing administrative costs. Our team also recognizes the challenges inherent in this task (see Appendix B), and we are confident that our experience across all phases of the EE program spectrum will result in a streamlined statewide offering meeting the LPSC’s expectations within the boundaries of the Phase II Energy Efficiency Rules (“Phase II Rule,” “EE Rule” or “Rule”).

Frontier will create a program structure for a multi-year portfolio of EE programs, establish and allocate funding in line with LPSC priorities, develop and oversee the implementation process, potentially implement programs, and establish quality control procedures across the administration spectrum to ensure savings targets and other program goals are achieved year-over-year.

Our strategic plan and design framework will be built around Quick Start (“QS”) program success. We believe the general nature of the SWEPCO, Cleco, and Entergy programs are a solid foundation on which to most cost-effectively and seamlessly expand offerings to jurisdictions not currently offering EE programs with the least disruption possible (for electric and gas customers alike).

During the first part of the 1-year transition period, Frontier Energy will focus on the following main priorities:

### *Building a Local & Customized Frontier Team*

Frontier will build-up a local staff customized to the tasks and expertise required to skillfully execute our program design strategy. Currently, Frontier’s key project staff live in Texas. As the transition year progresses, roles and responsibilities will shift to Louisiana staff guided by the experience and knowledge of our longer-term employees.

It is no secret we will need to immediately build our infrastructure and staff across Louisiana to get boots on the ground. While this does present initial logistical challenges, we feel it is an opportunity to truly customize this statewide program from the ground-up. We will not impose a generic program design template onto the diverse service territories of Louisiana. Nor do we want to hand off vital parts of the administration process to sub-contractors without Louisiana context. Rather, we aim to grow intelligently with intention, forming a Frontier Energy team that will get the job done right while creating opportunities for our Louisiana neighbors.

Beyond building our internal staff, we currently plan to strategically partner with two key players who will help us achieve our goals:

1. Creativity Justified (certified MBE, WOSB, WBE, DBE, and ByBlack advertising agency) – lead marketing and outreach campaigns
2. The University of Louisiana at Lafayette – assist with trade ally coordination, outreach, and other tasks to be identified

### *Clarifying Goals & Defining Priorities*

To establish a strategic framework and meet LPSC targets, Frontier must first delve into the finer details of the Phase II Rule and build a complete understanding of the Commission’s top priorities.

While the EE Rule addresses key aspects of how this program should work, there are a multitude of issues that must be ironed out to ensure a smooth transition and the growth of strong statewide offerings.

The first step is working with the LPSC to clarify goals and define priorities with the EE Rule and plan accordingly. For example, the Rule defines savings and spending targets, but these can be accomplished using a variety of EE measures under a number of different program designs. Additionally, the Phase II Rule lists eight “specific goals” ranging from generally increasing the potential for customers to save energy and reduce bills to reducing emissions to reducing price volatility. Each of these stated goals is worthy of consideration as part of an overall strategy. However, challenges may arise in terms of how to balance one goal with another, especially in light of the additional rule constraints related to legacy programs, low-income customers, and renters.

Flexibility will be key to ensuring the statewide program achieves an LPSC goal of increasing customer opportunities while decreasing administrative costs, as compared to the QS offerings. Frontier will work with the Commissioners and Staff to prioritize goals so that the transition plan and program structure/budgets meet realistic expectations.

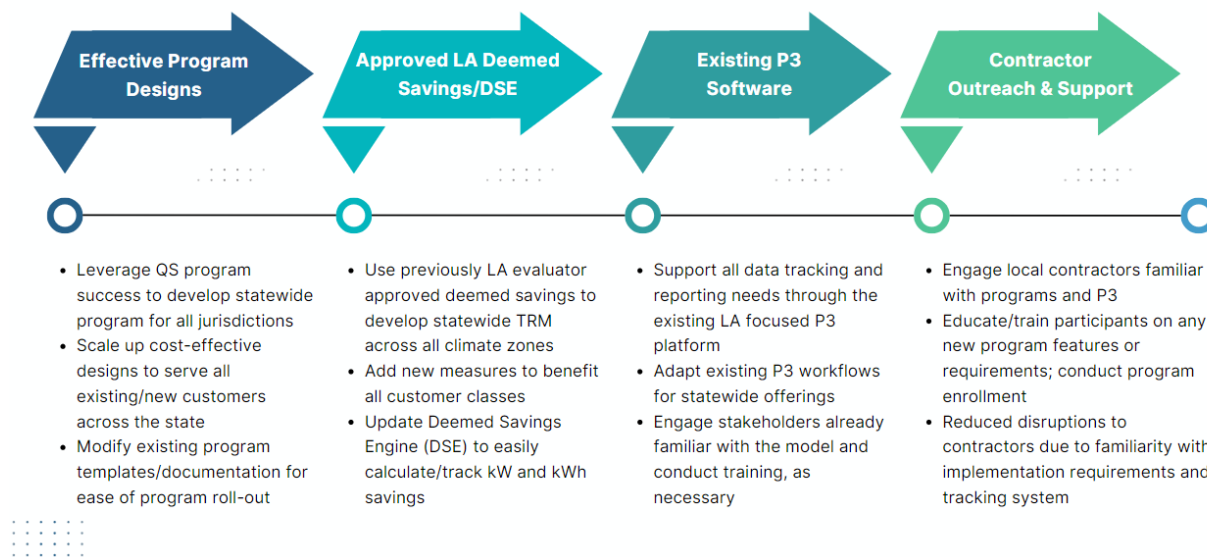
### *Leveraging Quick Start Program Success*

As our administration team develops a program design framework focused on the LPSC’s top priorities, we will look to the past to inform the future. Many of the existing Quick Start programs under the Phase I Rules are successful and cost-effective under a customer-incentive focused design. Frontier will build off these QS designs and existing implementation infrastructure to transition the programs with as little disruption as possible for trade allies, suppliers, customers, and utilities. To do this, we will rely on our deep knowledge of the SWEPCO and Cleco portfolios and more closely review the other active QS programs.

Data analytics and outreach to participating utilities, local trade allies, implementers, and contractors will help us confirm what is working well and what may not be effective under a statewide design or cause too much disruption to key partners. It will also help confirm which measures are most effective, which are underutilized, which communities are underserved and why, and how we can quickly and seamlessly roll out program designs to immediately help all Louisiana customers reduce electricity costs.

The benefit of implementing a strategic plan centered around the expansion of high-performing Quick Start programs is that the transition year can be heavily focused on scaling up existing program infrastructure rather than starting from scratch. Once budget allocation priorities are in place, the Frontier team can immediately move toward program roll-out activities, taking advantage of the existing QS program infrastructure, broadly summarized in the below figure.

## Leveraging Quick Start Program Infrastructure



The Frontier team plans to actively evaluate and adapt the first-year programs in real-time, adjusting as necessary to meet budget and spending requirements. Years two through four designs will be heavily weighted on the success and identified challenges experienced during both the transition and first year. Generally speaking, if the first-year programs are successful, Frontier will maintain its strategic approach and work to increase efficiency and further reduce administrative costs, if possible. If challenges related to program designs, contractor participation, or unique service territory issues arise (as they are expected to), the Frontier team will closely work with the LPSC, its Staff, the utilities, and other stakeholders to implement modifications to improve program performance. This may include offering a different mix of programs, changing incentive rates to increase project payouts, improving outreach training efforts, and many other potential changes. Please see our response to Question A2 for more details.

In summary, our vision for this first four-year budget cycle is to be flexible and creative in pursuit of solving expected challenges. Please see Appendix B for additional discussion related to potential challenges.

### 2. Explain how you would approach program design to address goals from the Phase II Rules which include, among other things, a focus on the legacy public entity program, low-income customers, and rental properties.

Please see our response to Question A1 for our broad program design strategy centered around Quick Start program expansion. Specific to the legacy public entity, low-income, and rental property targets, our approach will focus heavily on ensuring all parts of the state and all eligible customers have access to EE opportunities.

The Frontier team understands and appreciates the reasoning behind the specific goals for low-income customers (15% of budget expenditures), renters (10% of budget expenditures), and public entity facilities. It is important to serve these segments in a manner that actually helps the end user by reducing energy consumption and costs. The high efficiency measures developed by Frontier (which will be converted to a true statewide Technical Reference Manual (“TRM”)) are effective across all customer classes and program types. As a result, these sub-groups can, in many cases, be served within the same program designs as other residential and commercial customers rather than increasing administrative costs to develop very narrow program designs which could, unintentionally, reduce contractor flexibility and unduly hamper program success. That said,



specific program designs could prove useful in specific circumstances to fill in any gaps identified during program year one.

For the first program year, Frontier envisions administering three core statewide standard offer program (“SOP”) offerings based on the QS designs: Low-income, Residential, and Non-Residential (Commercial/Industrial). Please see our responses to Question A5 and the cost proposal for details regarding the SOPs. As the first-year progresses, our team will track whether or not low-income customers are being properly serviced under its program design and if renters and public entities (public schools, higher education institutions, local government/state agency facilities, and other Commission-approved locations) are able to easily take advantage of the high efficiency offerings or if gaps exist and a more tailored program design approach may be warranted. If so, Frontier would explore expanding or modifying the program design in year two to specifically address identified challenges and drive progress. For example, we currently administer and implement multi-family new construction and heat pump programs in Texas specifically targeting renters which have proven very successful.

Ultimately, we believe a streamlined program design approach will help ensure all Commission goals are met under the limited administrative costs it seeks. Where that approach may not meet expectations, different program designs and budget allocations will be enacted.

---

3. [Explain your process for working with the Commissioners to develop budget allocation priorities, and to ensure the Commission's policies and goals are implemented pursuant to the Phase II Rules.](#)

Please see Questions A1 and A2 for more details regarding our program development approach. Please see Questions E1 and Appendix B for more information related to the budget and related challenges.

Frontier will implement a process to establish a final budget and savings goals such that funds collected within a utility service territory are expended in that territory, that an appropriate allocation among residential and non-residential customers is established, that renters, legacy and low-income customers are properly addressed based on the Commission’s direction, and all Phase II Rules are met. To achieve this, our process will rely on flexibility and realistic expectations across the full budget cycle. Broadly, the key steps in this process are described below.

- Meet with Commissioners, Staff, and stakeholders to understand and confirm program design priorities beyond those stated in the EE Rule
  - Work through any competing priorities or other matters that could unintentionally reduce statewide program efficiency and effectiveness
  - Adjust planning expectations as needed to ensure the overall portfolio is reasonable, cost-effective, and meets all LPSC goals
- Confirm annual savings targets & statewide budget
- Develop and apply budget allocation methodology
  - Per service territory, program type, customer class, and other factors as necessary to meet all LPSC goals (please see answer to A2: allocation for key customer classes)
  - Align projected spending levels per project type with estimated savings and KPIs to ensure dollars expended in each area will reliably produce the kWh required to meet targets within overall statewide budget
  - Build in flexibility options allowing for fund shifting across customer classes, service territories, and program years, as necessary to ensure equal EE opportunities for all
- Submit final EE program design and Budget Cycle plans for Commission approval



---

4. Explain your communication plan to ensure there will be proper coordination with multiple participants including the Commission Staff, etc.

Frontier is well-versed in establishing and successfully navigating communication channels among a plethora of stakeholders. Our work administering the Texas utility energy efficiency organization, EUMMOT (representing all eight of the state's investor-owned utilities) involves facilitating discussions among utility partners, the Public Utility Commission of Texas, statewide evaluator, state agencies, advocacy groups, and various other stakeholders. In our experience, the key to success is transparency, planning ahead, and making information readily available and easily accessible. As referenced in our Question A1 response, our top priority will be to establish relationships and communication channels to ensure proper coordination with all necessary parties. Broadly, our team will:

- Engage all key partners in initial conversations to understand priorities and expectations
- Define clear roles and responsibilities per participating organization and per task and outline when/where each party will have the option to engage
- Develop policies and procedures manual, including communication plans, predicted meeting schedules, transition phase milestones & deliverables

To facilitate this process, Frontier will work with the LPSC to use the Commission website as a communication/documentation tool to the best extent possible, linking it to a new statewide EE program website our team will design and maintain. We envision this as the single go-to location for all matters related to the statewide program.

Specific to communication, the website will include/address:

- Calendar listing all key dates/expectations
- Newsletter sign-up so that any interested party can receive timely updates regarding programs, regulatory matters, and other pertinent news/highlights
- Program materials including statewide design documents, program manuals, communication contacts/procedures, and other forms/documents as necessary to ensure transparency, accountability, and clear coordination channels

---

5. Explain your experience in designing and administering programs, such that you will be able to foster a culture of innovation and creativity in the Louisiana statewide EE program, etc.

As of 2024, Frontier is actively working with 192 clients on 271 different energy efficiency programs in 15 different states. We work in many different capacities, from providing consulting and information technology services, to full-service program implementation and administrative services. This engagement in a diversity of EE programs positions our team on the cutting edge of innovation at a national level. When we develop or encounter program strategies or components that are successful, we can share this knowledge and assess whether other programs stand to benefit by using the same or similar tactics.

In the program implementation space, Frontier's active portfolio includes:

- Gas and electric utility clients
- Programs for residential and commercial customers, including homeowners, renters, multifamily building owners, as well as commercial and industrial customers
- Standard offer, market transformation, income-qualified, renewable energy, and demand response program types

We maintain relationships with hundreds of market actors, ensuring they are trained to understand program requirements, submit data and documentation that support energy savings claims, and are paid frequently and accurately for incentives earned.

By necessity, Frontier’s program design and administrative teams are creative and innovative in responding to breadth and diversity of its customers’ goals, markets and regulatory environments. We take pride in our ability to transfer and apply what we’ve learned in one market to others.

We consider innovation on multiple fronts, from technology, to program design, to incentive design, to our approaches to messaging, communications, and marketing. For example, there are several new and maturing technologies that show great potential to reduce energy consumption and demand and to improve grid resiliency, currently and in the short term. These include heat pumps, heat pump water heaters, energy storage, and demand response programs, among others. Each is likely to see improvements in reliability and economic performance in the coming years as manufacturers scale up production lines and federal funding sources make their way to local markets.

Frontier also innovates in program and incentive design, having pioneered approaches that reward investments in the most beneficial options. In CenterPoint Energy’s Agencies in Action targeted low-income program, for example, we developed a competitive process where for-profit owners of multifamily housing complexes serving income-eligible residents are rewarded when they put their own “skin in the game” by supplementing program funding with private capital.

#### *Program Implementation and Disclosure of Current Clients*

While Frontier currently supports Cleco and SWEPCO with program design, incentive and cost-effectiveness analysis, program material development, and software tools used to help manage contractors and program portfolios, we do not directly implement energy efficiency programs in Louisiana (meaning, we do not hire/train trade allies and contractors). Given that Louisiana is moving to a statewide program, Frontier does not see these relationships as being a conflict. In the event a conflict should arise, Frontier will inform LPSC and recommend a strategy to mitigate the conflict, which could include changes in procedures, scope, and/or personnel while also avoiding any disruption to services.

If selected to serve in the Program Administrator capacity, we would additionally seek a program implementation role to compound opportunities to streamline program delivery and minimize costs. We envision our implementation role in the context of standard offer programs (SOPs). Under the SOP design, the program administrator would design the program, hire local contractors to conduct the field work, track the programs in our database system, and run required inspections and QA/QC procedures. The SOP programs would address the most common and supported measures in a consistent manner throughout the state.

This approach is administratively streamlined and avoids what are commonly referred to as “non-cash incentives” that are paid to third-party implementers and used to fund staff, conduct outreach, and identify project opportunities. Because the staff and outreach can, to a great extent, be handled by the program administrator, doubling those costs to hire a third-party implementer would only be considered in specific conditions wherein local contractors may not have the ability/expertise to complete projects in line with our standards, TRM requirements, or other factors (for example, multi-family heat pump initiatives, demand response programs, online marketplace opportunities, or narrowly focused/customized program designs).

---

## 6. Please provide at least two examples of past success in each of the following areas:

### *a) Public Entities*

Frontier Energy has experience working with various public entities such as Cities, Universities, Independent School Districts, Counties, Convention Centers, Water and Waste Water Treatment Plants, and more. We have successfully developed energy conservation plans and implementation strategies to achieve energy reduction goals. Frontier has also assisted various public clients with receiving federal funds from IJJA, IRA, and USDA.

For another project, the University of Minnesota Duluth Energy Coordinator and Energy Plan, Frontier Energy assisted the university with hiring and using one of Frontier Energy's interns to create baselines of each building on the campus. With these data, Frontier developed a plan, benchmarked each building and, if needed, installed data loggers to record usage of each building. The Energy Coordinator at the University and the Frontier team encouraged departments to work together and secure funding for energy conservation projects with a common goal of emission reduction across the whole campus. Frontier also worked with the local utility and secured 10% extra incentives for each project to open an energy savings account. This account funded smaller and other maintenance projects that had been set aside because of funding shortages. Because of this University's effort and Frontier's strategies, various conservation projects were completed and the relationship continues.

Additionally, our work with SWEPCO Texas on its Texas commercial program targets energy efficiency opportunities for public entities including schools and universities. Please see section d. of this question for additional details.

#### *b) Low-Income Customers*

In the targeted low-income weatherization program Frontier administers for Texas-New Mexico Power Company, we found that some customers requesting service from the program were not able to be served by the local community action agency assigned to that territory. In these cases, Frontier developed a plan to work in a "quasi-agency" capacity, essentially doing the work that would otherwise be done by the local agency to qualify the customer and home, and to dispatch contractors to complete qualifying work. We are careful only to offer these quasi-agency services in cases where customers would otherwise not be able to be served by other program participants. The flexibility has enabled us to extend the program's services to several cities and towns where it was not available previously.

Beginning in 2023, CenterPoint Energy directed Frontier Energy as program implementer to reach increased participation targets within specific neighborhoods of the City of Houston. Frontier responded by offering bonus incentives for local community agencies that referred qualifying homes to the program, and supplemented organic program intake with targeted outreach efforts within qualifying neighborhoods. We achieved all program goals in 2023 and are on track to achieve them again in 2024.

#### *c) Rental Properties*

CenterPoint Energy's Multifamily HVAC Retrofit Program in Houston provides incentives for the replacement of older central AC/resistance heat systems with high-efficiency heat pumps, including mini-split heat pumps, in multifamily properties serving eligible low-income tenants. The program is designed to drive highly cost-effective savings and maximize program value to CenterPoint's customers. In addition to heat pumps, other measures are eligible for installation, including but not limited to smart thermostats, insulation, lighting upgrades, and water efficiency measures.

The program requires Project Sponsors to specify their requested incentive level required to perform these installations using a standard bid sheet. As implementer, Frontier evaluates and ranks all applications based on incentive cost per kWh and kW of energy savings achieved. Projects score more highly when they produce more lifetime savings per dollar requested. This encourages rightsizing of systems, for example by pairing HVAC installations with ceiling insulation to reduce cooling and heating requirements overall.

Frontier has implemented the program for CenterPoint Energy since 2015, and consistently achieves all spending and savings goals. In 2023, CenterPoint rewarded Frontier by increasing the program budget from \$4 million to \$5.6 million, enabling the installation of over 3,800 measures in 2,600 multifamily apartment units at 20 different properties.

Frontier has also supported the Bay Area Regional Energy Network (BayREN) Multifamily Program since 2013. The program provides a streamlined approach to rebates for custom multifamily

projects in the Bay Area. Each year, the program has been fully subscribed and awarded additional funding to increase participation.

Frontier leads a team of field analysts and quality assurance specialists who engage multifamily property owners and guide them through the rebate scoping and application process. Participants receive in-field and remote technical assistance to ensure their applications meet program requirements, and the Frontier team reviews and approves applications for rebate payment.

Program staff and consultants, including Frontier, continue to be highly engaged with California Public Utility Commission technical committees, statewide multifamily coordinate groups, regulatory compliance forums, and stakeholder coordination efforts to build the BayREN team's ability and knowledge of navigating the regulatory landscape within its inaugural funding cycle. The BayREN Multifamily program has maintained its dedication to ongoing coordination with the various IOU/local government multifamily programs offered in the Bay Area.

#### *d) Commercial Customers*

Frontier Energy offers broad expertise and capabilities encompassing building envelope and interior systems, codes and standards development, net zero energy buildings and communities, energy storage, microgrids, emerging technologies, distributed generation, commercial foodservice and appliance energy efficiency, energy software development, combined heat and power, energy monitoring systems, smart meter/grid analytics, electric vehicles, and fuel cells. We work with various electric and gas IOUs, municipalities, and cooperatives to either completely manage the commercial and industrial ("C&I") energy conservation programs or support the custom calculations for energy conservation projects. Frontier helps recommending energy savings solutions by performing ASHRAE audits for utilities like Minnesota Power, Natural Gas Energy Audits (NGEA) for CenterPoint Energy, Multifamily Building Efficiency programs for Xcel Energy, CenterPoint Energy, and Minnesota Power along with Xcel Energy's non-profit energy efficiency program. A post-audit report is generated off site and provided to the customer. The report provides recommendations for energy and water savings measures including gas and electric with detailed recommendations of applicable replacement technologies.

In 2022, Frontier was selected to implement SWEPCO Texas' market transformation programs for Educational, Large Commercial, and Small Commercial. Many of these projects would be considered Public Entity program if conducted in Louisiana due to the participating facility types. The Frontier team provides data tracking and reporting in P3, and direct customer and trade partner engagement, including phone calls, in-person or virtual meetings, and site visits involving facility walkthroughs/ audits. The following is a summary of projects from 2023 to date:

#### Educational Facilities

- Types of buildings: Independent School Districts, colleges, and universities.
- Types of measures: Interior and exterior lighting, field lighting, HVAC upgrades, VFD controls, Wi-Fi Enabled Thermostats, Ceiling Insulation, HVAC Tune Ups, and Building Automation Systems.

#### Small Commercial Facilities

- Types of buildings/businesses: Restaurants, Churches, retail locations (auto shops/dealerships, gyms, office buildings, banks, etc.), brewing companies, hotels, trucking warehouses and others.
- Types of Measures: Interior and exterior lighting, HVAC upgrades, VFD controls.

---

#### Frontier Energy Areas of Expertise – Commercial, Industrial & Residential

- ASHRAE Audits
  - Sales and Use Tax Studies
  - Prorate Studies
  - Water Balance Studies
  - Compressed Air and Steam Trap Surveys
  - Infra-red Scans
  - Energy Conservation Programs
  - Trainings
  - Multifamily Programs
  - Direct Install Programs
  - Emerging Technologies Research
  - Incentive/Rebate Management
  - Measurement & Verification
-

## Large Commercial Facilities

- Types of buildings/businesses: City buildings, DOT street lighting, car dealerships, manufacturing facilities, county fairgrounds, hospital campuses, and shopping malls.
- Types of Measures: Interior and exterior lighting, Street lighting, HVAC upgrades, VFD controls on fan motors and pumps, Wi-Fi Enabled Thermostats.

### *e) Industrial Customers*

Frontier has over 30 years of experience conducting ASHRAE audits at C&I sites across the country and has audited over 30,000 facilities, giving us a wide breadth of experience in serving customers with varying circumstances and needs. Frontier's team of engineers and energy analysts have successfully engaged thousands of customers through onsite energy audits, retro commissioning recommendations, technical support, and utility rebate application facilitation.

Frontier is Minnesota Power's C&I energy consultant and service provider, helping businesses served by the utility identify and implement facility projects and process improvements that reduce energy usage and lower costs. Since 1998, Frontier staff have assisted thousands of Minnesota Power commercial customers, and have developed MP's C&I program from saving 5 million kWh annually into saving 50 million kWh annually.

Frontier's New York office has a 30-year history of working with NYSERDA. Our longest running NYSERDA project is the Distributed Energy Resources (NYSERDA DER Website) that we developed and have operated, maintained, and upgraded over the past 25 years. Additionally, Frontier provides technical assistance, standards and quality assurance, and program support under a wide range of NYSERDA programs and one-off research projects

### *f) Gas Utilities*

Since 2015, Frontier has implemented a gas appliance rebates program for Atmos Energy Mid-Tex in Texas, CenterPoint Energy in Minnesota, Comfort Systems in Minnesota, and Great Plains Natural gas in Minnesota. The program offers incentives to: existing residential and commercial customers for installation of qualifying gas appliances, such as water heaters, furnaces, dryers, and smart thermostats; to builders of new single and multifamily homes; and to restaurants and cafeterias for purchases of efficient commercial kitchen appliances. It also provides free energy efficiency kits to homeowners. In 2023, the program successfully distributed 9,613 rebates to 7,360 unique customers.

Frontier previously administered the low-income weatherization programs for electric and gas utilities Arkansas Oklahoma Gas (AOG) and Oklahoma Gas and Electric (OGE). We developed and utilized software that accurately tracked electric and gas savings, paid contractors for work completed, and allocated program costs between the electric and gas utility program sponsors.

Since 2013, Frontier Energy has implemented the Natural Gas Energy Analysis Program (NGEA) on behalf of CenterPoint Energy in Minnesota. Frontier staff work with CenterPoint's customers, including many small businesses such as banks, conference centers, churches, daycares, fitness centers, gas stations, museums, offices, restaurants and schools.

### *g) Investor Owned Electric Utilities*

Much of our work referenced in other segments of this question are in support of investor-owned utilities. With the exception of section h (co-ops/municipals), examples include past successes with IOUs. Based on the RFP's request for conciseness, we reference those examples in response.

### *h) Co-Ops and/or Municipals*

Central Municipal Power Agency and Services (CMPAS) serves 12 utilities in southern Minnesota. CMPAS helps customers of the joint agency's member utilities make smart energy choices with programs that encourage energy efficiency and renewable energy. Frontier Energy is the organization's primary commercial energy consultant and works with 9 utilities in the CMPAS network.



Prior to 2014, CMPAS was falling short of state-mandated energy efficiency goals and running a cost-ineffective program. Since Frontier began working with CMPAS in 2014, savings goals have been exceeded every year. With a dynamic outreach campaign, Frontier staff focused on building small- to mid-size business engagement and encouraging this sector of customers to utilize rebate programs. In the past 5 years, Frontier has engaged 602 small- to mid-size commercial customers in CMPAS's utility and rebate programs.

Frontier assists large industrial customers within CMPAS territory as well. Since 2015, Frontier has worked on behalf of Mountain Lake Municipal Utilities to help Milk Specialties and other commercial-industrial customers in the community save energy and lower electric utility costs. The relationship is saving Milk Specialties more than \$70,000 per year to date, and projects currently planned or underway could bring combined annual savings to more than \$125,000.

Brainerd Public Utilities (BPU) is one of Minnesota's most progressive municipal utilities in terms of advancing energy efficiency. Frontier Energy is a key partner in this effort, serving many of BPU's eight thousand residential and commercial customers across a 25-square-mile area.

Frontier staff work one-on-one with BPU customers. Frontier's engineers and analysts visit business sites, review project plans, assess technologies, calculate potential energy savings, and help participating businesses get maximum rebates to lower their upfront costs of energy-saving facility projects and improve payback. Frontier has helped BPU meet or exceed state-mandated energy savings goals for 17 years running

---

7. Explain how you will ensure gas utilities and electric utilities are equitably served in your program administration and to ensure appropriate spending is allocated and tracked, etc.

Frontier's proposed tracking system of record, P3®, is fully capable of tracking both the electric and gas savings attributable to any measure, as well as additional non-energy savings (such as CO2 reduction or water use reduction) as needed. P3® also supports splitting incentive costs between electric and gas utilities, and is currently being used in this fashion in support of a commercial food service program we implement for Commonwealth Edison (ComEd) in Illinois. Our data systems have offered similar savings- and cost-splitting services in support of low-income weatherization programs in Oklahoma and Arkansas, where costs were shared between electric and gas utilities.

Regarding the Commission's current prohibition on fuel switching incentives, we believe the most appropriate place to address this is in the statewide TRM's baseline scenarios. Where fuel switching is prohibited, upgrading an electric appliance with a more efficient electric appliance results in electric savings, but switching from a gas appliance to an electric appliance would increase the use of electricity, and would therefore not earn incentives. If the TRM is appropriately designed, then program and incentive design follows that lead in a manner that is fuel agnostic.

---

8. Please describe your approach to continuous improvement and quality assurance in all aspects of program administration, etc.

Continuous improvement is a foundational philosophy in P3's design, which makes it a great option to serve as the central repository for program reporting. P3 allows program implementation teams run their programs as they see fit. There isn't a "one size fits all" approach toward program implementation. P3's framework promotes configurability both in data collection and enforcing business requirements.

Before any program launch, Frontier staff will work with stakeholders to design customized workflows that ensure all business and regulatory needs are met and the review and approval process is streamlined.

The workflow is guided by QA/QC plans that Frontier creates at the start of each program year. These plans identify the steps for project creation and submittal, desktop review, payment

processing, field or visual inspections, and conflict resolutions. In all cases, the team tracks the overall incentive budget to guard against underperformance or oversubscription.

The team routinely performs desktop review of all incentive applications according to each program’s QA/QC plan. Desktop review ensures that all necessary documents are submitted, and that information is complete and correct. Incentives are paid accurately and the data for tracking and reporting are captured. Customer and project information is also vetted to guard against duplicate payments within a program or “double-dipping” between programs.

The team also performs visual or site inspections on a percentage of projects, generally focusing more heavily on the earlier projects each participating contractor performs. Contractors with a record of high performance will still have their projects field-inspected, but less frequently than when they first started with a program. Customers agree to field-inspections are part of their participation agreement. Field inspections are randomly selected to ensure against any bias.

If changes to a program require system modifications, Frontier staff will coordinate with the appropriate stakeholders to determine the scope of the change and recommend a solution that still meets the business requirements and minimize any disruptions. More broadly than the database system, our team will develop communication procedures, performance metrics, and continuous improvement procedures to ensure quality across all aspects of program administration. These tasks may be tied into the regularly scheduled meetings with the LPSC and stakeholders.

9. Please provide a list of key performance indicators ("KPIs") that you will use to track to evaluate your performance, your partners' performance, and subcontractors' performance, etc.

Frontier welcomes the opportunity to work with the LPSC to establish KPIs that make sense in line with administrator responsibilities and identified program design goals for the transition year and each phase of the first budget cycle. Frontier proposes the below KPIs and the corresponding parameters on the Assessment Scale, discussed in the cost proposal section of this response, be defined as part of Defining Goals and Objectives. KPIs would be determined based on the Commission’s priorities each year and weighted according to the importance of desired programmatic outcomes.

Our team proposes the below leading KPIs for Commission consideration:

1. Achievement of kW/kWh savings goals
2. Maintaining high levels of customer satisfaction from the LPSC and stakeholders
3. Increasing the numbers of income qualified, renters, and rural customers served

Frontier believes this comprehensive approach ensures that the "at-risk" fee structure effectively drives performance and aligns with the Commission’s strategic objectives.

Additional performance metrics will be considered for various work teams and partners. These may include those depicted below.



**Administrative Performance**

- Conformance with timeline and deliverables
- Provision of opportunities for stakeholder input
- Accuracy of reported savings
- Reporting deadlines met



**Program Health**

- # of participants
- # of contractors enrolled & number of active contractors
- # & type of measures installed
- Energy savings
- Incentives paid



**Customer Support**

- # of calls to the Call Center
- # of website visits and duration of stay
- # of outreach activities/events attended
- Results from customer satisfaction surveys



**Marketing/ Education/Outreach**

- Brand awareness
- # of events attended
- Reach of earned media spots
- Reach of paid media spots



**Partner Management**

- # of training events
- # contractors trained



---

10. Based on your understanding of the Phase II Rules, please provide a list of deliverables (reports, studies, process documentation and manuals) and checkpoints (meetings) expected for the transition year 2025 and during the four-year program budget cycle.

The exact list of deliverables expected for this first budget cycle will be developed in real time as priorities are identified and the statewide program and administrative plan is established. Generally speaking, our team will provide, at minimum, monthly status reports based on LPSC direction (potentially weekly meetings and reports/presentations during the initial transition period). Additional check-point meetings will be held quarterly. Process documentation and manuals will be created and delivered prior to the end of the transition period. Any reports/studies required will be delivered in a timely manner to ensure the Commission and stakeholders have the information they need when they need it.

Specific to reporting requirements within the Phase II Rules, Frontier will:

- Create and annually update a written policies and procedures manual (including but not limited to, communication protocols, information sharing processes, compliance with laws, and related topics)
- Develop and deliver annual reports by April 15 and at the end of each plan year and address all the requirements listed under section G. Program Reporting, Item I
- Submit reports to the Commission on a quarterly and annual basis to document activities, accomplishments, problems, and performance

---

11. Based on your understanding of the Phase II Rules, what data, information, and interaction do you envision needing from the utilities and from Commission Staff?

As referenced in our Cover Letter and response to Question A1, Frontier anticipates working very closely with the LPSC Commissioners, Staff, the utilities, and other participating stakeholders. We understand this role involves serving as a liaison for the investor-owned, cooperative, and natural gas utilities and that information sharing will be vital to carry out our responsibilities (in relation to the EE Working Group, program development, incentive payments, and other factors as described in the Phase II Rules).

During the transition year, we understand the requirements to work directly with Staff to develop program design and budget priorities and obtain approval from the Commissioners. We also understand the need to potentially work closely with the utilities implementing QS offerings to ensure we understand the context of the programs, including successes and challenges. Frontier has existing positive relationships with some of the Louisiana utilities and looks forward to working with all entities participating in this effort. Ultimately, the goal of this statewide offering is to help each utility's customers to reduce bills and increase comfort and resiliency. We would welcome the opportunity to work closely with them in whatever capacity is required and makes logical sense in support of rolling out effective programs.

Specific to data, Frontier would request access to any historical utility program participation data that can be used by the P3 tracking system to flag any premises found to have participated in previous programs. This helps prevent "double-dipping" across program years for certain measures. We would also request utility Customer Information System (CIS) data to help validate whether a premises falls within a given utility's service territory. Frontier may also request access to meter data to inform program design options. Additional data, information, and interaction opportunities will be determined during the transition year.

---

12. Explain how you would "braid" this program with external, complementary programs to maximize customer and system benefits. How would you ensure customers are not "double-dipping?"

"Braiding" typically refers to blending utility funding with non-utility funding to service a single home, premise, or measure. Over the next few years, sources of braided funding are likely to come

from federal monies authorized under the Inflation Reduction Act (IRA), or under the existing (but expanded) Weatherization Assistance Program (WAP) and/or Low-income Heating Energy Assistance Program (LIHEAP). Generally, opportunities to braid funding are considered a benefit, as they allow utility program dollars to be extended; however, care must be taken to ensure each funding source’s requirements are followed, and to avoid double counting energy savings or other program benefits.

In our experience with WAP and LIHEAP in the context of weatherizing income-qualified homes, utility funds typically can be braided with federal funds by segregating funding sources for individual measures, so that each measure receives funding from only one program. This approach enables each measure to be funded by the funding source that values it most highly, while encouraging comprehensive funding availability for all eligible measures in every home.

Frontier’s administrative requirements and information technology systems can help identify and avoid errors where braided funding is applied. By sharing data with other programs, and by having access to data from other programs, we can flag homes that have received or applied for funding via other sources. In the field, assessors and contractors can ask customers about their plans to use and awareness of additional funding sources, and can flag homes for additional review where necessary. Implementers can perform desktop reviews of all incentive applications according to each program’s QA/QC plan, to ensure that all necessary documents are submitted, information is complete and correct, incentives are paid accurately, and the data for tracking and reporting are captured. Customer and project information is also vetted to guard against duplicate payments within a program or “double-dipping” between programs.

13. Include three (3) references for your proposed key personnel and partners, etc.

<p><b>SWEPCO</b> 428 Travis Shreveport, LA 71101</p> <p>Debra Miller EE &amp; Consumer Programs Mgr. 318-673-3324 <a href="mailto:dmiller1@aep.com">dmiller1@aep.com</a></p> <p>Paul Pratt Director Customer Services &amp; Marketing 318-673-3542 <a href="mailto:pepratt@aep.com">pepratt@aep.com</a></p>	<p><b>NYSERDA</b> 17 Columbia Circle Albany, NY 12203-6399</p> <p>Amy E. Kasson-Muzio Program Manager and Team Lead – Standards and Quality Assurance 518-862-1090, ext. 3570 <a href="mailto:Amy.Kasson-Muzio@nyserda.ny.gov">Amy.Kasson-Muzio@nyserda.ny.gov</a></p>	<p><b>MINNESOTA DEPARTMENT OF COMMERCE</b> 85 7<sup>th</sup> Place East, Suite 280 Saint Paul, MN 55101</p> <p>Anthony Q. Fryer Director, Energy Conservation &amp; Optimization 651-539-1858 <a href="mailto:anthony.fryer@state.mn.us">anthony.fryer@state.mn.us</a></p>
---	--	--

## B. Organizational and Management Capabilities

1. Provide a detailed organizational chart which includes roles and responsibilities for personnel, including any partners. How would your organizational structure address accountability and responsibility?

The image below details the roles and responsibilities for key personnel and anticipated initial partners. Please see Question A1 for additional details regarding our top transition year priority to build up Frontier staff in strategic areas of Louisiana.

All team members and partners will be supported by four members of Frontier’s senior leadership team. Every role and project task will be clearly communicated, assigned, and tracked to ensure steps are completed to a high quality, on time, and within budget.

# OUR TEAM

The Frontier team will be lead by key staff members, each with decades of experience in energy efficiency. We will be joined by the marketing firm “Creatively Justified” and will seek partnership with the University of Louisiana at Lafayette to assist with trade ally support.



**Adam Walburger**  
Executive Oversight



**Jean Krausse**  
Program Administrator Lead



**Steve Wiese**  
Administrative/Technical & Support Leads



**Amy D. Martin**

ADMINISTRATIVE



**Derek Neumann**  
Program Design & Management



**Brandon Huff**  
Contract Mgmt



**Jeremy Springer**  
Financial Mgmt



**Alex Rivera**  
Information System/  
Tracking & Reporting



**Amy D. Martin**  
EEWG & Coordination



**Carrita Cloud**  
Marketing & Call Center  
Creatively Justified



**Tanuj Gulati & ULL**  
Training/Trade Ally  
Coordination



**Derek Neumann**  
Measure Management

TECHNICAL & SUPPORT

2. Provide a description of competencies that differentiate you from other Firms (what are your unique assets)?

Since 2017, Frontier has worked behind the scenes to assist two of the jurisdictional Electric IOUs with their Quick Start programs under the Commission’s Phase I EE Rules (SWEPCO and Cleco). Our experience assisting these utilities with activities touching on all aspects of the energy efficiency lifecycle (including regulatory support, general consulting, program design, implementation strategies, software development, reporting, data analytics and additional services) uniquely positions us to help transition the state from multiple utility-led offerings to a single statewide program, cost-optimized to maximize benefits for the Louisiana customer base.

*92% of the customers interviewed indicated they would recommend Frontier to their colleagues in the industry.*

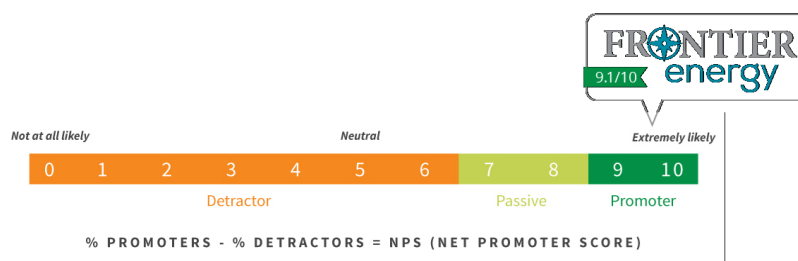
Frontier is equally experienced in serving Natural Gas utilities. In Texas, for example, Frontier administers Atmos Energy’s Mid-Tex Gas Appliance Rebate Program and consults with Atmos on its Keeping the Warmth Low-income Weatherization Program. For the Appliance Rebate Programs, Frontier developed a program design and on-line database application that enables customers to apply online or via mailed-in applications. For the low-income programs, Frontier helped Atmos develop data collection tools necessary for accurately calculating savings and cost-effectiveness metrics, which enables participating agencies to combine weatherization funding from Atmos with funding available from other utilities and the federal government.

Frontier believes the foundational groundwork we have developed for our utility clients in Louisiana provides a solid starting point to transition the programs into a successful statewide offering in a timely and efficient manner, saving Louisiana ratepayers money by adapting and using the existing tools, procedures, and institutional knowledge required to achieve success.

Specifically, our team brings three core components to the table, explained in detail across multiple answers in this response and referenced in our Request for Qualifications submittal.

1. Software Solutions (Data tracking & reporting)
2. Louisiana Deemed Savings Engine (DSE)
3. Local Relationships and Understanding of Louisiana Service Territories

The Frontier team further distinguishes itself by delivering excellent customer. Every two years, Frontier hires an independent consultant to assess customers’ satisfaction with our performance. Through one-on-one interviews, our customers have shared their experience working with the Frontier team. We incorporate their feedback and suggestions for improvement into our performance, continuing to earn our customers’ business and their trust. In 2022, 92% of the customers interviewed indicated they would recommend Frontier Energy to their colleagues in the industry. Another unique metric is our Net Promoter Score® (NPS®), which measures customer experience and predicts business growth. This proven metric provides a core measurement for customer-facing management programs. Frontier recently received an NPS of 9.1, an exceptional achievement reflecting consistently high performance in serving our client base.





- 
3. Please describe your process for designing programs and how you would go about leveraging existing quick start programs in the transition to a statewide program. Explain how your design would be based upon set savings goals and/or follow budget parameters.

Please see our response to Questions A1 – A3 regarding our program design strategy and our plan to leverage the successful aspects and infrastructure of the existing QS programs to seamlessly transition to a statewide program and meet savings goals within budget parameters.

- 
4. Please describe your approach to selecting and overseeing the performance of your partners, program implementers, and subcontractors. What partners do you anticipate using? How will you hire/vet implementation contractors to ensure the highest quality of vendors are being utilized?

Please see our proposed partners in our response to Question B1.

Frontier's experience has shown that reputable contractors and other trade partners such as equipment suppliers are key to successful programs. Frontier staff are experts at continuing to recruit and train new contractors at a steady pace and at becoming a trusted resource for them. We prioritize opportunities to engage with contractors, suppliers, and other trade partners at conferences, industry meetings, and various networking events. Over the years, Frontier teams have developed many strong and lasting relationships with contractors and equipment suppliers. We make it our business to know and understand their business models, and we provide excellent customer service. We call back when we say we will, and we work hard to establish personal relationships with the contractors' in-field and office staff.

Examples of contractor engagement and vetting are briefly summarized below.

#### *Residential and Commercial Solar Photovoltaic Programs*

Frontier implements the SMARTSource Solar Photovoltaic Program for AEP Texas. Frontier vets contractors by verifying required liability insurance coverages; confirming contractors agree that only licensed electrical contractors will offer, perform, and permit all electrical work; confirming contractors have read the Program Guidebook and understand their responsibility to comply with all Program requirements; and confirming contractors employ appropriately-certified employees.

We require that at least one full-time regionally-based employee is currently certified/determined by the North American Board of Certified Energy Practitioners (NABCEP) as a PV Installer; or employs at least one full-time regionally-based employee who has been determined by NABCEP to be eligible to sit for the NABCEP PV Installer exam; or employs at least one full-time regionally-based employee who has successfully completed at least 40 hours of PV installation training provided by a third party.

Once an installer is selected for participation, we track the installer's performance, both in how they interact with the program, in the quality of their field work, and in their customer relationships. Program interaction is rated based on the quality and timeliness of data provided to the program. Inconsistencies and missing data are noted, as is the timeliness of contractors' responses to these issues. In the field, our inspectors observe and note potentially compromising installation practices, and engage in discussions with installers to implement best practices. We track customer complaints as well, assuming the first order of response must be with the installation contractor. Repeated or frequent issues with a contractor can provide a basis for pausing work until corrections are made, or disqualifying a contractor from continuing participation.

#### *Residential & Hard-to-Reach Standard Offer Programs*

Frontier has implemented TNMP's programs serving residential and hard-to-reach (income-qualified) customers for over a decade. Frontier, along with TNMP, selects potential contractors for participation through an application process that includes review of past projects/work, references, in-person meetings, and contractor capabilities and geographic areas served. Once selected, contractors are granted access to the program software tools to help manage projects and calculate

incentives/savings for these completed projects. Frontier ensures that all required contractor documentation is up-to-date and stored in the program software.

Frontier ensures the quality of ongoing and submitted work throughout the program years by providing support to contractors, inspecting completed projects, and reviewing required project documentation. We have created a “documentation guide” listing data and photos required to document every eligible measure type. Attention to detail is practiced while inspecting work performed and the supporting documentation uploaded to the program software.

---

5. **How will you manage to achieve results within budget, and ensure excellent customer satisfaction? Please include performance standards, etc.**

Frontier’s strategic program administration plan will be properly designed and vetted to ensure, to the best of our abilities based on current information, that we will achieve results within budget and to a high level of customer satisfaction. We will enact standards to keep tabs on our progress, identify challenges, and enact procedures to correct as necessary. Our approach to these matters are addressed across a wide number of responses herein.

Please see our answer to Question A9 which more directly addresses standards, metrics, and KPIs, group C responses for a detailed overview of how our controls, P3 system, and other systems contribute to successful program administration, excellent customer satisfaction, and data security, Question D4 which provides a detailed response on our TRM expertise (including working with stakeholders to ensure regulatory compliance and savings integrity), and Appendix B which details challenges.

---

6. **Provide information regarding your ability to meet standard Insurance Requirements. This information may be attached as an appendix and would not count towards the 30- page limit.**

Please see Appendix D. We have attached a Certificate of Insurance for information purposes.

---

7. **Provide information regarding your Firm's Financial Qualifications, etc.**

Please see Appendix I. Frontier Energy has provided audited financial statements for 2022, 2021, and 2020. Audited financials for 2023 can be made available, if needed, once they have been completed later in the year. Please note: Frontier Energy, Inc. is a wholly owned subsidiary of GTI International, Inc (GTII), which is a wholly owned subsidiary of the Institute of Gas Technology (GTI). In accordance with Generally Accepted Accounting Principles, Frontier’s financials are consolidated with the financials of the Institute of GTI and Subsidiaries.

## C. Approach to Administrative Functions

---

1. **What will be your approach towards identifying problems early and changing designs as needed?**

Regular reporting on program metrics helps the Frontier team maintain expectations and flag potential problems that may ultimately impact the program’s success. To deliver on the timeliness and accuracy of reporting, Frontier implements automated processing wherever possible to ensure consistency in data quality. This is enhanced by manual quality control checks on program data.

To mitigate the risk of underperformance, we pay close attention and swiftly respond to issues using a rapid measure, evaluate, and respond methodology. Monthly program progress reports include summary visualizations showing year-to-date participation, energy savings, cost-effectiveness, and incentives disbursed, by measure and against targets. The visualizations highlight measures for the administration team to increase (or decrease) promotion in near-term outreach and engagement. They also allow for reactive adjustment of target participation rates and incentive amounts among measures based on the current market situation. Implementation of this agile feedback loop throughout the program cultivates a refined and robust set of measures. It also

provides up-to-date information to our outreach team so that they can efficiently and effectively support program participants.

Frontier also stresses the importance of proactive and accurate communication. Change is inevitable, so we maintain open communication channels so that updates and issues can be resolved, and we rapidly correct course to manage risk properly.

To mitigate the risk of missed timelines, we ensure that we have redundancy in our program reporting team, including a fully trained alternative program manager who can step in during unplanned absences, and complete internal program management process documentation.

---

## 2. What is your plan for mediating disputes and resolving conflicts?

Even with the best laid plans, some conflicts can be expected to arise at any level within a complex operation, from those between end-use customers and the contractors working in their homes (“you damaged my sheetrock ceiling”) to conflicts between the program administrator and LPSC staff or stakeholders. Frontier’s approach to managing and mitigating conflicts considers both establishment of trust among parties as well as clear and defined procedures to guide conflict resolution.

Our plan first relies on building and maintaining trusting relationships among the parties involved. That involves a great deal of listening and deep consideration of the issues experienced by different parties, as well as a willingness to convene, discuss, and decide on how to resolve issues, even before specific conflicts arise. When they do arise, we convene a smaller group of affected parties to discuss and decide upon a proper course of action. In our experience, simply getting the right people to the table and convening an open and honest discussion of an issue will lead toward a satisfactory resolution 90% of the time.

In addition, we will develop clear procedures for conflict resolution and share them with all stakeholders. Generally, these procedures encourage resolution at the lowest possible level, with escalation only in cases where those parties cannot come to an agreement.

Frontier has many examples of conflict resolution policies built into the programs we implement. Conflict or dispute resolution procedures are established as part of each program’s QA/QC Plan. Typically, a customer service rep collects all the relevant information and enters it into P3 to enable tracking. The Program Manager reviews the information and decides how to proceed according to establish program guidelines. If the dispute can be resolved without making an exception or establishing a new protocol for program guidelines, the Program Manger addresses the issue to approve/deny the dispute resolution. If the dispute cannot be resolved without making an exception or establishing a new program protocol, the Program Manager discusses the issue with the Program Administrator to determine how to proceed. Conflict resolution is included in program reporting so that any trends, such as an increase in conflicts, can be identified and addressed.

Affected parties are notified by phone and in writing of the outcome of their appeal and are provided with an explanation if their appeal is denied. The status of all appeals (Pending, Approved, Denied) is tracked in P3 and any supporting documents and correspondence are uploaded to the portal for each incident.

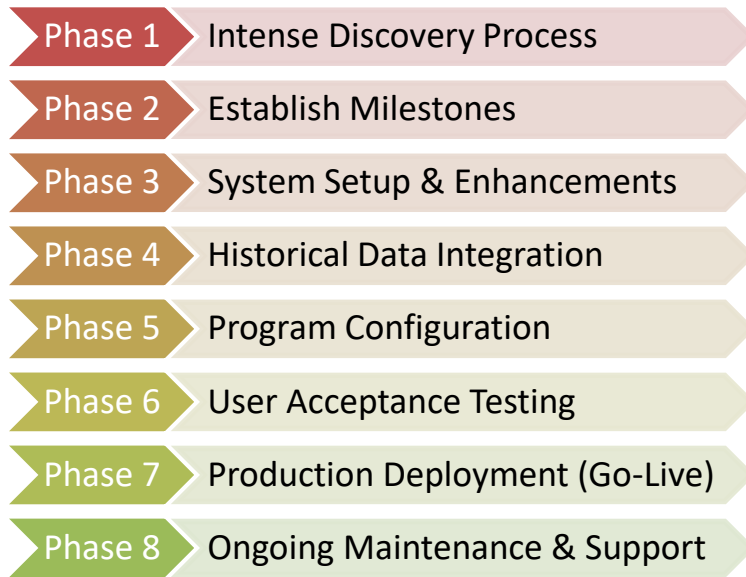
---

## 3. Data System Management. Describe your experience in developing, carrying out ongoing maintenance and development of data systems, and ensuring data systems maintain accurate,



secure, and accessible data. Specifically describe how you will manage and maintain confidentiality and security for data systems.

### P3 Development & Deployment Phases



### *System Development and Deployment Phases*

Frontier’s designated project manager will lead the overall P3 development and deployment process and facilitate communication with key staff. Communication protocols will be established at the outset of the project and will include periodic status calls, email correspondence, web-based seminars, and in-person communication.

The P3 development and deployment schedule will be comprised of eight phases as shown in the graphic. Certain tasks within each phase may be done in parallel for multiple programs. See Appendix I for a description of the eight phases.

### *Data Security*

P3 is an ASP.Net MVC 5 application, written in C#, and hosted as a Microsoft Azure App Service. It uses Microsoft Azure SQL Databases along with Blob and Table storage as the primary data stores, all of which are geo-replicated to prevent data loss. Microsoft’s transparent data encryption ensures all data are encrypted at rest. All communication with P3 is over HTTPS to encrypt data in transit. Each P3 client has their own individual data stores that are segregated from other clients’ data. There is no limit on frequency or volume of data transfer.

### *Access Security Protocols*

P3 provides secure access to the system through registration, two-factor authentication, and user roles and permissions, as described below.

#### Registration

P3 users accessing the system are required to enter a unique username and password combination. Frontier will set up user accounts for administrative-level users and other users who need reporting features. Trade ally and customer users can register in the system using the user registration feature. These users will receive an email with a verification link that must be accessed to complete the registration and profile creation process. Depending on the type of user they select, profile forms typically capture company information if they are a trade ally or premise information if they are a customer. These profile forms can be configured to capture additional information if necessary.

#### Two-Factor Authentication

P3 supports two-factor authentication for added security, which allows users to enable this feature for their specific account. Users will need to download an authenticator application, such as Google Authenticator or Microsoft Authenticator, to their smartphone and either scan a QR code or manually enter a random code to add P3 to the application. The application will then provide a six-digit code that will need to be entered into P3 for verification. Once enabled, users will be prompted to enter the six-digit code provided by the authenticator application each time the user tries to log in. The two-factor authentication can also be configured to remember specific devices for any set number of days, thus eliminating the need to authenticate each time the user attempts to log in.

## Roles and Permissions

P3 employs permission-based access controls. Each client configuration of P3 can have an arbitrary number of defined roles, and each role has a collection of permissions granted to it. Users can then be granted one or more roles. When a user attempts to access a specific view or feature, the system checks to see if any of their roles have been granted the appropriate permission. The system logs user actions.

Frontier adheres to all national and state requirements for protecting information. We enforce industry data security and governance standards such as ISO27001 and NIST. Frontier maintains SOC Type 2 Certifications for data security, software development and hosting, and data management. Copies of the latest annual audit certifications are available upon request.

- 
4. Explain how the data systems developed for the benefit of the Commission's EE program will be maintained and would be transitioned, if necessary, to a successor Program Administrator at the conclusion of the contract period, etc.

Program data tracked in the P3 platform are owned by the Commission and the participating utilities. At the end of the contract period, the new Program Administrator will have the option to continue using the P3 platform to track programs developed by them or the Commission under a subscription arrangement or have the data transferred to the Commission or their selected Program Administrator to import into another tracking system. A P3 subscription includes a license to use the P3 platform for the duration of the subscription period and includes system maintenance and hosting. If the decision is made to transfer data, Frontier Energy will work with the Commission and the new Program Administrator on the specific format and method of transfer.

- 
5. Explain the process you will use to develop custom reports for the LPSC, and track and monitor program results to ensure successful energy efficiency programs, etc.

The Frontier team provides data monitoring and tracking for all the energy efficiency programs we administer for the purposes of program reporting and to gauge progress toward goals and support course adjustment, as needed. Via the P3 platform, Frontier's software team services and maintains a vast set of historical energy efficiency program data from across the United States (including Louisiana) in a relational database management system tailored to the specific tracking and reporting needs of utilities. Data are readily queryable and stored at measure-level granularity, granting analysts access to a wide array of variables used to produce engineering estimates, deemed savings, and rate calculations, all of which come together to produce program and portfolio-wide performance statistics and key performance indicators. Frontier regularly leverages this unparalleled program insight to assess root cause issues influencing project uptake and, using this insight, collaborates with utilities to modify program designs in such a way that potential issues are mitigated and opportunities are capitalized on.

Frontier currently tracks and monitors energy efficiency program performance for both Cleco and SWEPCO. Using information tracked in our P3 systems, our data analytics staff are able to slice and dice data to determine where projects are being completed (geographically and by building type), which EE measures are being installed at the highest (and lowest) rates, if incentive levels appear to be in line with contractor and client expectations, if cost-effectiveness is at targeted levels, and numerous other metrics to help the utilities determine if the programs as designed and implemented are meeting expectations in terms of both savings and overall budgets.

Under a statewide program, the Frontier team will take the same data-focused approach to develop analytics and illustrate program success failure rates in a manner ultimately ensuring the EE programs offered are cost-optimized, hitting targeted goals and maximizing benefits to Louisiana customers.

Below are two examples of Frontier's ability to analyze track data and illustrate the success/failure rate from two different angles.

### *CPS Energy – EM&V of CPS Energy’s DSM Portfolio*

The Frontier team brings strong evaluation, measurement, and verification (EM&V) experience assisting clients who require a deeper dive into program data to better understand how their programs are performing and to support strategic decisions for future program design. Since 2015, Frontier has served as the third-party evaluator of CPS Energy’s portfolio of more than 20 residential and commercial energy efficiency and demand response programs, referred to as the Save for Tomorrow Energy Plan (STEP). Frontier’s work includes program design review, evaluation of implementer proposals, and EM&V including building simulation modeling and development of load shapes, process and impact evaluation, cost-effectiveness analysis, recommendations for improving program performance, and addressing impacts of the City of San Antonio’s transition to 2015 International Energy Conservation Code requirements.

We use both regulatory standard success metrics (cost-effectiveness) and utility-determined metrics (net benefits targets, qualitative goals, etc.) to evaluate if a program is successful or at risk of failure based on one or more factors.

### *Texas Annual Energy Efficiency Plan & Reports (EEPR)*

Each year the Texas utilities must file a EEPR to the Public Utility Commission of Texas. This report details the projected savings and expenditures for two future years, and reports on actual savings and expenditures from the previous two years. Typically, these reports cover multiple programs which span the entire utility service territory. The Frontier team developed the initial template for these reports (going back to the early 2000s) and continues to assist the utilities with reporting savings, expenditures, program write-ups, and factors impacting bonus/cost-recovery calculations.

Please see Appendix F for samples of Frontier’s reporting produced in previous work with programs and jurisdictions.

---

## 6. What is your approach to ensuring accuracy, integrity, and quality by participating contractors, etc.?

By implementing a structured approach to quality assurance, Frontier aims to ensure consistent service quality across all programs, enhance customer satisfaction, and uphold our commitment to excellence in service delivery. Key components of our quality assurance plan include the following:

1. Contractor requirements, selection, and contracting. Frontier will define clear criteria for contractors including experience, qualifications, and adherence to quality standards.
2. Expiration dates on incentives. By establishing expiration dates on reserved incentives, and/or by offering incentives on a first-come, first-served basis, Frontier will promote timely follow through by contractors, limit program liabilities, and maximize opportunities to spend available incentive funding. We will establish clear process timelines to ensure timely program utilization and follow-through and to prevent misuse of funding. We will regularly review expiration dates and communicate updates to stakeholders to maintain transparency, and enforce policies consistently, with automated reminders and exceptions managed via a defined approval process.
3. Service quality expectations. Frontier will define and document service quality expectations in a comprehensive resource available to all programs and stakeholders. We will review and update these standards periodically to align with evolving industry practices and customer expectations.
4. Call center routing and resolution. Frontier will establish a call center to help customers and contractors through issues and complaints. Our call center goal will be to service most callers at the first level (i.e., with the person who answers the phone), and all callers with no more than a single handoff to a program or subject matter expert. For complaints or issues, we will implement a structured resolution protocol with escalation paths identified for unresolved issues.

5. Training. We will provide ongoing training to contractors and call center staff on quality standards, customer service techniques, and system protocols.
6. Audits. We will conduct regular audits to assess contractors, trainers, and call center staff on compliance with quality standards. Audits will provide a feedback loop to encourage continuous improvement, refine processes, and enhance service delivery.

---

7. What Quality Control ("QC") activities do you expect to implement as the Administrator regarding energy efficiency programs. Describe procedures, frequency, and metrics envisioned.

Frontier ensures quality control at several points within the project life cycle for both technical and administrative tasks. Specific to the program-level matters (oversight of contractors and projects), these procedures include:

- **Pre-project review.** In some programs, Frontier will either desk, virtual, or field-review certain project plans before authorizing installation, to ensure the proposed project meets program requirements. These tend to be valuable in programs such as low-income weatherization, where prepayments to local non-profit weatherization agencies are necessary before work can begin, or in commercial/industrial programs, where independent confirmation of existing equipment/conditions is required and incentive levels are high. As an example of the latter, in large lighting retrofit projects the existing lighting type cannot always be confirmed by photographs, so an assessor must be sent to the site to confirm existing conditions. Frequency of desk and field reviews can be determined on a program-by-program basis to meet identified needs.
- **Post-project review.** These reviews may take several forms including desk reviews, virtual reviews (on a real time camera with the contractor who is on site), field reviews. The frequency of these reviews can vary based on needs, and tend to concentrate on new contractors, expensive measures, unusual projects, etc.
- **Customer interviews.** In some cases, customer interviews can perform a similar function as a post-project review. The customer can confirm which measures were installed, and provide feedback on how new measures are performing, satisfaction with the contractor and program, etc. Issues identified during these interviews can be queued for resolution.

Example metrics associated with the quality control process include:

- # of customer complaints
- # of technical issues reported (per # of homes served, per contractor)
- Average time to resolution

## D. Approach to Technical and Customer Support Functions

---

1. Utility Coordination: You will need to communicate and collaborate with multiple utilities about issues related to the EE program. What type of utility coordination team will you put in place, etc.?

Frontier Energy employs Enertrek, a Software as a Service (SAAS) platform, that helps facilitate full-cycle energy efficiency program participation and management. Several key features include streamlined participation, tailor-made program management, robust reporting, and seamless data integration. Contractors and other market actors can apply through a customer application portal via an intuitive user interface, which also provides participant profiles and history. Within P3, measure templates, input forms, workflows, notifications, and rules can be customized to meet the needs of the specific program. Additionally, P3's dynamic reporting function provides payment and budget tracking, transaction history, auditing, and the overall monitoring of program progress. The data that are generated via P3 can be integrated with Frontier's Enterprise Resource Planning software to ensure that payments to contractors and receipts from utilities are properly

coordinated and meet program requirements. Frontier’s internal supplier compliance programs ensure that all regulatory compliance needs are met specific to the needs of the program.

Frontier Energy’s SAAS platforms receive an annual and continuous SOC2 Type audit without bridge letters ensuring security of the data provided and system availability.

---

**2. Marketing/Market Research:** Please describe your approach and capabilities to develop a mass marketing and communications plan to support the program, etc.?

Frontier and its proposed Louisiana-based marketing/outreach subcontractor, Creativity Justified, a certified MBE, WOSB, WBE, DBE, and ByBlack advertising agency, are skilled at planning, supporting, and conducting strategic marketing and outreach campaigns in support of energy efficiency programs, including multifamily, low-income, small business, upstream/midstream commercial foodservice rebates, and other program designs.

The team starts by refining marketing/outreach needs and goals, and for each goal identifying key targets and messages. Key targets may include contractors and/or customers who already are, or are not, participating in programs, equipment manufacturers or suppliers, industry peers, trade groups, or others.

For each key target, we focus on refining the essential message or story tailored to meet their needs via program awareness. We then identify the most effective pathways for delivering key messages to key targets. These pathways may include direct outreach, white papers, flyers, electronic messages, other digital communications, etc. Finally, we follow through to ensure messages were received and reinforced, and to provide more information needed to close the deal. Our marketing/outreach team is skilled at leading program teams through this process, and ensuring marketing is efficiently tailored to meet clearly defined program goals.

The Frontier/Creativity Justified team is adept at applying branding guidelines so that materials are compelling, consistent, and establish the utility or utilities as the “face of the program.” Materials for programs the Frontier team produced include:

- Program manuals and documentation
- Print media, handouts, and brochures
- Identification badging for field work personnel
- Website design and development
- Web content and editable forms
- Social media, email, video, and digital marketing
- Events and trade show exhibits and banners

Specific to developing and managing e-commerce sites, Frontier will work with potential partners with expertise in this area.

See Appendix G for select examples of marketing materials we have provided to clients. Highlights from a selection of our marketing efforts for multiple clients are provided below.

*Illinois Statewide Commercial Food Service Program*

Frontier implements the Illinois Statewide Commercial Food Service, which involves marketing and outreach activities across five different utilities, each servicing a different area of the state. To successfully facilitate this process, our team developed a website (<https://www.il-foodservicerebates.com/>), which has positively influenced participation and increased administrative efficiency.

*Low-income Weatherization Energy Efficiency Programs (Multiple Texas Utilities)*

Frontier implements several targeted low-income programs across Texas. Our team employs a variety of techniques to identify qualifying participants and involve key stakeholders across targeted service territories to more efficiently and effectively engage contractors to meet regulated



spending and energy savings targets. Our general approach involves broad strategies (exact approaches vary based on service territory characteristics):

- Outreach to a wide range of agencies including: housing authorities; weatherization assistance agencies; councils of government; faith-based organizations; municipalities; community development agencies; and local not-for-profits
- Attending community events (alone or in support of utility staff)
- Placing program flyers at selected community centers/neighborhood service centers/churches
- Providing training for and engaging with subcontractors who are able to target participant qualification and measure installation within defined zip codes

---

**3. Training/Trade Ally Coordination:** Please describe your approach and capabilities to manage training for customers and trade allies that support the overall goals of the program, etc.

As previously discussed in our answer to Question B4, Frontier’s experience has shown that reputable contractors and other trade partners are key to successful programs. Frontier staff are experts at continuing to recruit and train new contractors at a steady pace and at becoming a trusted resource for them. In Texas, for example, we support contractors who participate in multiple programs, handling different utility program rules.

Vetting contractors to ensure they are licensed and reputable is a first step to enrolling qualified contractors. This is then followed by program-specific training. Frontier provides program guides that can be readily accessed by contractors and ongoing support to answer questions and troubleshoot issues. Online training modules can be developed to allow contractors to complete training within their own busy schedules.

For the statewide programs, as noted in Answer A1, Frontier will consult with participating utilities, local trade allies, implementers, and contractors to ascertain what is working well and what may not be effective under a statewide design or cause too much disruption to key partners. For the transition, we anticipate the following:

- Develop materials:
  - An online orientation guide that introduces the statewide programs and outlines the requirements and steps for contractor enrollment and participation.
  - Online training module(s).
- Contact contractors and other trade allies who participate or are involved in the Quick Start programs to alert them to the opportunity to participate in the statewide programs. Provide them with the orientation guide and direct them to training modules. Methods of contact can include email, calling campaigns, and/or mailing campaigns of collateral such as postcards and flyers.
- Hold and record a webinar to introduce the statewide programs and contractor management staff, and to answer questions. Post the webinar to the program website and provide the link to all attendees.
- Provide ongoing support via phone and email to assist contractors with enrollment and training and support for their projects.

As the statewide programs become established, the Frontier team will assess the need for and interest in in-person training sessions. Technical trainings on new or newer technologies or tools may also be warranted to ensure contractors stay current on the evolving EE measure landscape. Trainings will be updated as needed to reflect program changes or to incorporate improvements when these are identified.

In addition to the contractor management examples provided in Answer B4, Frontier’s experience with contractor vetting and training includes:

### *California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA)*

Frontier provided contractor management services to CAEATFA for its energy efficiency financing programs from 2017 to 2022. The team managed and trained participating contractors on all aspects of program participation. Contractors completed an online training course at their own pace prior to enrollment. The interactive training incorporated quizzes to ensure understanding of program guidelines. Frontier assigned each contractor an Account Manager to provide personalized support. This level of support minimized submission errors and ensured that contractors fully understood program requirements. All completed projects were reviewed for consistency with program guidelines. Any compliance issues were addressed through 1-on-1 remedial training to ensure future projects were fully compliant.

### *Quality Residential HVAC Services Program*

Frontier is leading a statewide market support program in California to alter HVAC usage across all four IOUs by providing downstream incentives directly to contractors for carrying out quality maintenance or installation services. The program aims to create a network of well-educated, trained, and energized trade allies and contractors. The program offers a streamlined enrollment process, comprehensive training, and incentives for Quality Maintenance Plans, Quality Maintenance Calls, Quality Bids, and Quality Installations at a basic or enhanced tier, and provides extra incentives, training, and tools to Quality Contractors who routinely provide higher quality services. An Advisory Panel of HVAC experts and stakeholders, assembled by Frontier Energy, serves to guide the program and help integrate it into the California HVAC market.

---

#### 4. *Measure Management: Please describe your experience and expectations coordinating with EM&V and Auditing efforts requiring coordination with other LPSC consultants, etc.*

Frontier has extensive experience with statewide Technical Reference Manuals (TRMs) and the deemed savings methodologies at the heart of such documents. While the LPSC did not require a statewide TRM during the Quick Start phase, Frontier has collaboratively worked with Cleco, SWEPCO, and their evaluation, measurement, and verification (EM&V) contractor, ADM Energy, since 2017 to create and actively maintain a repository of deemed savings calculations and documentation protocols based on the Arkansas TRM and adapted for all four Louisiana climate zones, where appropriate. Frontier continues to improve and adapt these deemed savings and add new measures at the utilities' request. Most recently, in 2023, Frontier updated all eligible measures to comply with Arkansas TRM version 7.0 or later, as directed by ADM Energy. This effort ensures claimed savings are in line with updated standards and will more accurately reflect actual projected demand reduction and energy savings across all available measures.

Frontier implements these savings methodologies for our Louisiana clients in our Deemed Savings Engine (DSE), an online tool that connects with P3 or other utility program tracking databases to ensure claimed savings are calculated according to approved protocols. We also produce Excel calculation tools that SWEPCO and Cleco use to calculate savings for commercial lighting and HVAC projects.

These deemed savings algorithms and our DSE could be updated very efficiently to incorporate other utility service areas to ensure statewide savings calculations are consistent, transparent, and accurate. Our team strongly believes in adapting Frontier's existing Louisiana-specific deemed savings and documentation protocols into an official statewide TRM. Updating our DSE is the most cost-optimized approach the LPSC can take to seamlessly transition the programs to a statewide administrative model and ensure program and measure offerings are accurately recorded and tracked across the board (for both electric and gas programs).

### *Frontier's History with Statewide TRMs*

The Frontier team has a long history developing deemed savings for electric and gas utilities. Working on behalf of the Texas investor-owned utilities (IOUs), we assisted with deemed savings development and regulatory filings dating back to 1999. In 2013, Frontier worked with the Public



Utility Commission of Texas (PUCT) and their statewide evaluation contractor to create the inaugural Texas TRM. On behalf of the Texas IOUs and through a collaborative effort with the statewide evaluator, Frontier continues to lead annual deemed savings development in support of every annual TX TRM update, including presenting annual updates to stakeholders through the PUCT's Energy Efficiency Implementation Project (EEIP) meetings. In this role, Frontier maintains a statewide TRM repository to track codes and standards updates, new measure requests, and stakeholder feedback during the interim between TRM update cycles. In addition to TRM development, Frontier also assists the Texas IOUs with TRM related issues pertaining to database configuration, training, daily operations, EM&V reporting, and regulatory planning.

From 2011-2016, Frontier also served a key role working as a sub-contractor to the Arkansas Public Service Commission and Independent Evaluation Monitor (IEM) to assist with deemed savings development for the original edition of the Arkansas TRM. Frontier's work as Technical Manager for the Arkansas EM&V Collaborative included presenting and defending industry best practice engineering methodologies as necessary to ensure the TRM was accurate and up to date, as well as continually refining methodologies and adding high-impact measures to capture savings from new technologies. This experience proved very useful when modifying the Arkansas TRM for use in Louisiana climate zones.

To date, Frontier remains actively involved in deemed savings development and TRM updates in Louisiana, Texas, California, Illinois, Minnesota, New Mexico, New York, and Oklahoma.

Additionally, Frontier has developed gas savings measures for the Arkansas, Illinois, and New Mexico TRMs. While Oklahoma and Texas do not currently require a statewide gas TRM, our team has worked with multiple gas utilities to develop deemed savings methodologies for both states. Frontier has also proposed and outlined the potential for a statewide Texas gas TRM.

In addition, Frontier currently implements a gas appliance rebate program for Atmos Mid-Tex, and consults on Atmos Mid-Tex's low-income weatherization program, Keeping the Warmth. For both programs, Frontier developed savings models based on our work with gas TRMs in neighboring states, defining data and documentation collection requirements, and identifying, applying, and verifying savings for every incentivized measure.

---

5. **Call Center:** Please describe your ability and experience to staff a customer service toll-free telephone line/call center for customers and trade allies interested who have questions, have complaints, or are interested in participating in the program, etc.

Frontier currently has an office in Houston, TX, and staff located in Shreveport, LA. Frontier will fulfill the requirement for two offices in Louisiana in the event of an award as Program Administrator. Frontier brings experience opening new offices, hiring staff, and setting up call centers to ensure local presence for programs.

Frontier provides call center services for several programs. A dedicated program phone number and email address allow program participants to reach the Frontier Energy team. Both modes of communication are directly managed by the Program Manager. The phone and email support operate during standard business hours based on the local time zone, and calls are returned within one business day. A call log is maintained to track the volume, nature, and resolution of calls.

Frontier runs a unified call center in support of all the electric and gas energy efficiency programs we implement in Texas. Different toll-free numbers are associated with different programs, so that the greeting message for callers is specific to the program they are interested in. Once calls come in, our staff take the calls and either resolve them directly or pass them on to the appropriate program manager for resolution.

If selected as the Program Administrator, we intend to explore opportunities to work closely with our partner, Creatively Justified, on call center efforts.

## E. Cost Proposal

---

1. Provide the proposed budget in the required format provided in Attachment B as well as an hourly rate schedule for management personnel and expected functional roles, etc.

Please see Appendix A for a print-out of Attachment B, Frontier Energy' Cost Proposal, further discussion of the Cost Proposal, and Frontier's rate schedule.

---

2. Explain your proposal for the "at Risk" fees and performance requirements, etc.

### **Frontier's proposal for "At Risk" Fees and Performance Requirements is as follows:**

Frontier accepts the Commission's request for 10% of the total contract compensation allocated as "at risk" fees and approaches this structure with the following overlying objectives:

- Maximize flexibility in defining and adjusting KPIs based on evolving priorities.
- Maintain transparent and objective measurement of performance.
- Solicit regular review and feedback mechanisms to ensure continuous improvement.

The breakdown of these fees is proposed as follows:

- 7%: Based on the achievement of energy savings targets.
- 3%: Based on KPIs aligning with the desired outcomes of the Commission.

### **Assessment Scale:**

Energy savings targets and desired outcomes would be assessed on an annual basis using a three-point scale:

1. Unsatisfactory: 0% of the associated at-risk amounts are paid.
2. Below Expectations: 50% of the associated at-risk amounts are paid.
3. Meeting Expectations: 100% of the associated at-risk amounts are paid.

### **Energy Savings**

Because energy savings are the overarching goal of Phase II, Frontier proposes that energy savings for each category of the Assessment Scale are identified for all program years of the agreement term as part of Defining Goals and Objectives.

---

3. How does your Program Administrator budget proposal approach account for the uncertainties associated with overall program budget and program design uncertainty?

Frontier's cost proposal attempts to account for the plethora of uncertainties (those known and still unknown) associated with the rollout of a statewide program. Our team took a 20,000 foot approach to developing the budget, knowing it is difficult at this point to dial-in a more precise estimate. We assumed the budget target of \$0.23/kWh was a reasonable starting point estimate, specific to expanding QS programs designs within service territories currently implementing programs (this value is in line with SWEPCO's actual 2023 results and, based on our knowledge of those programs, we believe it to be a good metric for our projected program design). Further, because the electric IOU ratepayers are expected to fund (and benefit from) the majority of energy efficiency projects (based on our understanding of the required budget allocation methodology), we assumed using that average cost estimate, scaled up to \$0.32/kWh for total statewide spending could provide enough wiggle room for our team to navigate uncertainties that could increase costs beyond current QS program design expectations (please note, this value includes costs to achieve kWh and ccf; we simplified assumptions based on the relative size of the gas programs to develop the budget).

While estimates are based on the mathematical \$/kWh approach and scaled to meet assumed kWh targets, reality offers no such guarantees. Based on experience, in some cases, we may run into challenging service areas or measures/project types could saturate the market hindering program growth. Or, contractors simply may not be scaled enough to serve people in a particular area, either increasing costs or losing out on savings opportunities. We will work to identify and resolve challenges as they arise, building up a strong contractor network, but it will take time and potentially added costs.

Flexibility will be key to ensuring the statewide program achieves the LPSC goal of increasing customer opportunities while decreasing administrative costs, as compared to the QS offerings. Frontier will work with the Commissioners and Staff to prioritize goals so that the transition plan and program structure/budgets meet realistic expectations.

At the highest level, we believe within the scale of our proposed budget, we should be held accountable to incredibly high standards. We are confident we can produce results in line with expectations within our proposed budget under a significant level of uncertainty. But, it requires budget estimates reliant on a number of assumptions, including but not limited to:

- Effectively expanding the QS programs into SOP models to all required jurisdictions,
- Developing new program designs that will achieve savings in line with cost expectations,
- Facilitating high participation levels among trade allies and contractors who will complete work within all program requirements and to the Frontier standard,
- Our ability to find/keep reliable contractors within every service territory, customer class, and program type,
- Successful identification and completion of targeted projects that produce savings in line with our cost-effectiveness checks and budget targets (either as implementer or overseeing implementation), and
- The ability to maintain a diverse mix of high energy savings measures within the TRM (as baselines increase, savings potential decreases; over the years, savings opportunities will decrease requiring cost increases).

Please see our response to Question E1 and Appendix B for additional details.

- 
4. Provide a sample contract, or preferred terms, for use in the development of the final contract. Regardless of whether a sample contract or preferred terms are provided, indicate which terms your Firm considers to be non-negotiable, etc.

See Appendix E for a sample contract with Frontier Energy's preferred terms.



## Appendix B: Challenges & Recommendations for Achieving Program Goals

## Appendix B: Challenges & Recommendations for Achieving Goals

Frontier appreciates the opportunity to highlight our interpretation of the highest priority challenges the LPSC and its program administrator will face in its mission to convert the Quick Start programs into a full statewide energy efficiency effort. Working on the utility-led programs throughout the Phase II rulemaking process, we respect all the time and effort the Commissioners and Staff dedicated to developing the Rule.

We believe if the transition is handled with expertise under a grounding philosophy of prioritizing long-term benefits over near-term goal metrics, the statewide program will ultimately provide huge benefits for Louisiana ratepayers and local communities at large. While our goal is to get to this point within the first budget cycle, we are neither ignorant of nor daunted by the challenges ahead.

The Frontier team developed this proposal response under the mindset that we have the desire and ability to help the LPSC successfully transition the existing energy efficiency programs into a cost-effective statewide offering that prioritizes maximizing customer incentives. How quickly and seamlessly we are able to achieve this will depend on our administrative agility and ability to communicate with the LPSC to solve problems in real time.

We want to be true partners in this endeavor. Our approach and budget rely on a streamlined transition wherein we can truly work collaboratively with the LPSC as a trusted resource with the time and autonomy to carry out program design decisions that put customers first while being respectful of Commissioner wishes and EE Rule targets. In short, it is our firm belief that the only way to manage a transition of this scale is to work hand-in-hand with each other to prioritize the on-the-ground approach and metrics that will ultimately determine success, while understanding even the best laid plans may need to be adjusted in the short term for longer term benefits.

### **Scale & Time**

The overarching challenges the Commission faces over the next few years are directly related to matters of scale and time. Based on our understanding of the Rule, the projected low-end statewide budget estimate and energy savings targets are substantially higher than what is currently being spent and achieved across the state through the QS programs. Frontier understands expanded reach and higher results are a major objective for the Commission under this new program design and we believe the state will accomplish the task. We are also aware and appreciative of the guidance that program objectives will be binding over the quadrennial period as opposed to annual requirements. This flexibility will be incredibly vital as multiple objectives are balanced and infrastructure for new service territories is developed.

However, the challenge of a vast program expansion under an ambitious timeline remains. Focusing on the electric IOU QS programs (which represent the majority of the predicted statewide budget allocation and savings targets), in 2023 the four electric IOUs spent approximately \$22 million to achieve 124,000,000 kWh. This equates to an average evaluated savings as a percentage of annual sales of 0.29%. The new savings target under the Phase II Rule require a statewide kWh goal equal to 0.40%, an 85% average increase over current achievement levels (ranging widely among each electric IOU service territory).

Utility	PY9 Evaluated Savings as % Annual Sales	Phase II Rule Savings Target as % Annual Sales	% Change
<b>Entergy Louisiana</b>	0.20%	0.40%	100%
<b>Entergy Gulf States</b>	0.13%	0.40%	208%
<b>Cleco</b>	0.56%	0.40%	-29%
<b>SWEPCO</b>	0.25%	0.40%	60%
<b>Electric IOU Average</b>	<b>0.29%</b>		<b>85%</b>

In order to meet these higher savings targets, the LPSC projected the electric IOUs would contribute approximately 87% of the total statewide budget, equal to approximately \$56 million (assuming \$0.23/kWh which is in line with SWEPCO’s actual PY9 evaluated results). This represents a 152% increase in projected spending using conservative estimates. Looking at Frontier’s estimated costs as described in section E, Cost Proposal, a budget increase over 200% of 2023 spending levels could be required to meet Commission targets in line with the Phase II Rule.

Electric IOUs	Annual Budget	% Change
PY9 Actual Expenditures	\$ 22,145,724	NA
RFP Estimated Budget Target	\$ 55,882,028	152%
Frontier Proposal (87% of statewide costs)	\$ 70,277,414	217%

These are substantial increases. Based on our experience in both the realities of major regulatory policy shifts and energy efficiency program design and implementation, we anticipate there will be issues across multiple aspects of the program design, budget allocation process, and program implementation roll-out that will slow down progress. Additionally, once programs are approved and implementer funding is released, the challenge remains of spending those customer incentives in the allocated service territories at the \$/kWh or \$/ccf rate envisioned within the appropriate program type (residential, commercial, industrial, low-income, renters, public entities). It may be possible to scale up efficiently in the QS areas (Frontier’s cost proposal depends on this to an extent). However, it could be more difficult to achieve savings at the targeted \$/savings unit rate (which maximizes customer incentives) at the projected program size. This could result in difficulties achieving total statewide savings and spending anticipated budgets while trying to meet the regulatory requirements per service territory and customer type.

The resolution to this matter is not to adjust goals or increase the timeline. Rather it is to temper expectations, emphasize the need for flexibility, and facilitate collaboration and trust-building between the LPSC and Frontier. We respectfully recommend the LPSC be open to situations wherein a single top priority is identified (statewide or per service territory) to meet goals in a phased approach under a truly statewide program design.

We know we have the experience to help identify and guide decisions that will lead to a successful mix of energy efficiency offerings statewide. Any lack of specificity in response to the LPSC’s questions herein relates to our deep knowledge of the EE process and our understanding that we still don’t know what we don’t know yet. We want to work together to discover these unknowns, modify our projected plan, timelines, budgets, and savings targets per year, and help the Commission design and implement a fully functional, optimized statewide EE program for years to come.

### **Program Funding**

One logistical challenge Frontier anticipates is related to program funding. The timing of cash inflows may be uncertain due to fluctuations in participation and unpredictable funding. Timely

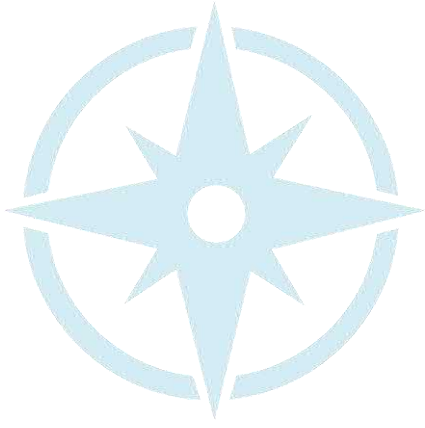
cash outflows, including significant startup costs, are crucial for participant engagement and operational stability. In a high-interest rate environment, the cost of capital is significant.

Ways to mitigate this challenge include:

- 1) Establish an appropriate reserve fund at the outset of program activities OR
- 2) Establish a line of credit and include the associated interest costs in the budget (Frontier has not provided for interest costs in its current budget) AND
- 3) Optimize the business cycle to the extent feasible.

After the transition year, payments to the Program Administrator as well as the contractors participating in the programs will be paid from each jurisdictional utility's EE rider. Since these collections vary from month-to-month, there is a possibility that payment of invoices will be delayed. This could create a financial burden not only for the Program Administrator as well as the contractors being able to do work.





## Appendix C: Letters of Support



**Alan Barhorst, PhD, PE, FASME**  
*Alumni Association/LEQSF Professor and Department Head*  
**Department of Mechanical Engineering**  
P.O. Box 43670 • Lafayette, LA 70504-3678  
Department: (337) 482-6517  
Office: (337) 482-1763  
alan.barhorst@louisiana.edu

*Université des Acadiens*

June 20, 2024

Dear Louisiana Public Service Commissioners,

Frontier Energy is pursuing an RFP your commission has seeded for state-wide energy efficiency programs. Their team has reached out to our department for teaming opportunities. I am writing to support this efforts as Department Head of Mechanical Engineering at UL Lafayette.

Our extensive efforts led by Dr. Peng (Solomon) Yin in the UL Lafayette's Energy Efficiency and Sustainable Energy (EESSE) Center are perfectly aligned with the efforts of Frontier Energy. The EESSE has been leading training, outreach, workforce development and economic development throughout the state.

Frontier and EESSE will team and develop efforts that allow our students to get experience in this effort, providing the state engineers and technicians ready for sustainable energy development, usage, and enhancement.

As with all our research efforts, the department supports these activities by allocating resources, and faculty workload adjustments, to allow the projects of EESSE and related centers and researchers to succeed in order to maintain our Carnegie Research (R1) status.

This effort has my full support.

Sincerely,

A handwritten signature in black ink, appearing to read "Alan A. Barhorst".

Alan A. Barhorst



June 20, 2024

To Louisiana Public Service Commissioners,

Frontier Energy, Inc. is responding to the Louisiana Public Service Commission's RFP to administer statewide energy efficiency programs. Their team reached out to the University of Louisiana at Lafayette (UL Lafayette) seeking our support and participation in their proposed administrative structure. I am writing this letter to support the proposal led by Frontier Energy and express the interest in the participation in their proposed administrative structure.

In addition to its research and educational missions, UL Lafayette's Energy Efficiency and Sustainable Energy (EESE) Center provides and supports training, outreach, workforce development and economic development throughout the state, and is excited for the opportunity to play a role in guiding development and administration of the new statewide energy efficiency programs.

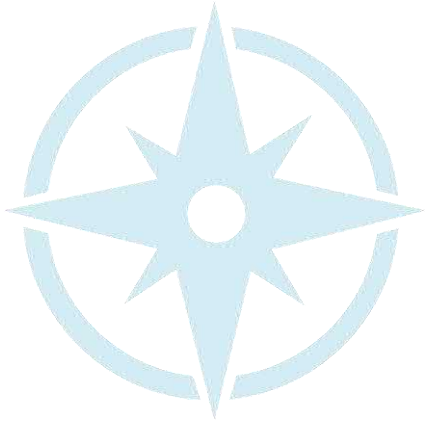
UL Lafayette has been serving a broad range of Louisiana customers for energy efficiency and sustainability improvement via multiple sponsored projects. The Industrial Assessment Center (IAC) sponsored by the Department of Energy provides free energy assessments to commercial and industrial facilities. The Rural Energy for America (REAP) Technical Assistance Program (TAG) sponsored by the U.S. Department of Agriculture (USDA) offers energy assessments and technical assistance to agricultural producers and rural small businesses. The team at UL Lafayette already uses existing utility rebate programs for project implementation. UL Lafayette also maintains a statewide network of companies and non-profit organizations that can help Frontier Energy in ensuring awareness and utilization of the new statewide programs in every corner of the state.

We are writing to indicate our support to Frontier Energy's proposal, and if selected, we look forward to playing a meaningful role in statewide program administration.

Best regards,

A handwritten signature in black ink that reads "Peng Yin".

Peng "Solomon" Yin, Ph.D.  
Associate Professor of Mechanical Engineering  
Director, Energy Efficiency and Sustainable Energy Center  
University of Louisiana at Lafayette  
Email: Peng.yin@louisiana.edu  
Office: (337) 482-5822



## Appendix D: Insurance Qualifications



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

5/1/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an **ADDITIONAL INSURED**, the policy(ies) must have **ADDITIONAL INSURED** provisions or be endorsed. If **SUBROGATION IS WAIVED**, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> Arthur J. Gallagher Risk Management Services, LLC 2850 Golf Rd Rolling Meadows IL 60008	<b>CONTACT NAME:</b> Gallagher Certificate Team	
	<b>PHONE (A/C. No. Ext):</b> 630-773-3800	<b>FAX (A/C. No.):</b> 630-285-4006
<b>E-MAIL ADDRESS:</b> ltasca.certificaterequests@ajg.com		
<b>INSURER(S) AFFORDING COVERAGE</b>		<b>NAIC #</b>
<b>INSURER A:</b> Continental Insurance Company		35289
<b>INSURER B:</b> Valley Forge Insurance Company		20508
<b>INSURER C:</b> Transportation Insurance Company		20494
<b>INSURER D:</b>		
<b>INSURER E:</b>		
<b>INSURER F:</b>		

**COVERAGES** **CERTIFICATE NUMBER:** 356511637 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	<input checked="" type="checkbox"/> <b>COMMERCIAL GENERAL LIABILITY</b> <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:			7018651138	5/1/2024	5/1/2025	EACH OCCURRENCE	\$ 1,000,000
							DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 300,000
							MED EXP (Any one person)	\$ 15,000
							PERSONAL & ADV INJURY	\$ 1,000,000
							GENERAL AGGREGATE	\$ 2,000,000
							PRODUCTS - COMP/OP AGG	\$ 2,000,000
							EBL-EA EMPLOYEE	\$ 1,000,000
A	<input checked="" type="checkbox"/> <b>AUTOMOBILE LIABILITY</b> <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY			7018651141	5/1/2024	5/1/2025	COMBINED SINGLE LIMIT (Ea accident)	\$ 1,000,000
							BODILY INJURY (Per person)	\$
							BODILY INJURY (Per accident)	\$
							PROPERTY DAMAGE (Per accident)	\$
								\$
A	<input checked="" type="checkbox"/> <b>UMBRELLA LIAB</b> <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input checked="" type="checkbox"/> RETENTION \$ 10,000			7018651172	5/1/2024	5/1/2025	EACH OCCURRENCE	\$ 5,000,000
							AGGREGATE	\$ 5,000,000
								\$
B C	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N N	N/A	7018651155 7018651169	5/1/2024 5/1/2024	5/1/2025 5/1/2025	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER	
							E.L. EACH ACCIDENT	\$ 1,000,000
							E.L. DISEASE - EA EMPLOYEE	\$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	\$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

<b>CERTIFICATE HOLDER</b>  **Evidence of Insurance Coverages** For Informational Purposes Only .....	<b>CANCELLATION</b>  SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.  AUTHORIZED REPRESENTATIVE 
--	--

© 1988-2015 ACORD CORPORATION. All rights reserved.





## Appendix E: Sample Contract



[Click here to enter a date.](#)

## **Agreement for Services (Preferred terms – Subject to further negotiation)**

Between

**Client:**

Name: Contact Name

Company: Company Name

Address: Address

Address: Address

Phone: Phone Number

E-mail: E-mail

and

**Consultant:**

Frontier Energy, Inc. (a California Corporation)

1075 Serpentine Lane, Suite B

Pleasanton, CA 94566-4809

### **Project Description**

[Click here to enter text.](#)

**Project Completion Date:** [Click or tap to enter a date.](#)

### **Recitals**

- A. Client desires to engage Consultant to provide consulting services.
- B. Consultant desires to provide consulting services to Client for the Project.
- C. Client desires to retain Consultant to provide certain consulting services, as set forth in Exhibit A (“Scope of Work”), and Consultant desires to provide such services to Client, all pursuant to the terms and conditions set forth herein.

### **Agreement**

This Agreement for Services (“Agreement”) is by and between Client and Consultant, each having a place of business at the addresses set forth above. Client and Consultant may individually be referred to herein as a “Party” and collectively as the “Parties”. In reference to Recitals A through C above, which are incorporated herein, and for good and valuable consideration, the receipt and adequacy of which are acknowledged, the Parties agree as follows:

1. Term. This Agreement shall commence on the Effective Date and shall terminate on the Termination Date as described in Section 3 of this Agreement. Upon any such termination, Consultant shall be entitled to receive, and Client shall be obligated to pay, all fees for services rendered by that date.
2. Fees. Client shall pay all charges, as detailed below and Exhibit A, within thirty (30) days after receipt of a written invoice therefore. A 1 ½% monthly rebilling charge will be added to past-due invoices. The Scope of Work and Fees attached to this Agreement as Exhibit A is incorporated herein by this reference, as may be amended from time to time by mutual written agreement of the Parties.
3. Termination. This Agreement shall continue in effect until the Termination Date which can occur as follows:
  - 3.1 Automatic Termination. This Agreement shall automatically terminate upon the occurrence of any of the following events:
    - (A) The day immediately following the Project Completion Date (the “**Termination Date**”) where this Agreement has not been expressly extended in writing by the Parties;
    - (B) Bankruptcy or insolvency of either Party;
    - (C) Assignment of this Agreement by Client whether by operation of law or other legal principle without the prior written consent of Consultant.
  - 3.2 Right to Terminate this Agreement without Cause. Notwithstanding any other provision of this Agreement, either Party may terminate this Agreement at any time by giving thirty (30) days written notice to the other Party (the “**Termination Notice**”). The Parties’ obligations hereunder shall terminate on the date that is thirty (30) days after the date of the Termination Notice (the “**Termination Date**”). Upon any such termination, Consultant shall be entitled to receive, and Client shall be obligated to pay, all fees for services rendered by that date.
4. Assignment. Consultant shall not assign, delegate or transfer its rights, obligations or interests under this Agreement without the prior written consent of Client which will not be unreasonably withheld.
5. Indemnification. Consultant shall indemnify, defend and hold Client, its principals, officers, directors, shareholders, and employees (the “**Client Parties**”) harmless from and against any and all liabilities resulting from third party claims for loss, damage or injury to persons or property (“**Liabilities**”) arising from the negligence or misconduct of Consultant, including any Liabilities arising from breach of this Agreement. Consultant’s indemnity obligation as set forth in this Section shall survive the termination of this Agreement for a period of one (1) year.

Client shall indemnify, defend and hold Consultant, its principals, officers, directors, shareholders, and employees (the “**Consultant Parties**”) harmless from and against any and all Liabilities arising from the negligence or misconduct of Client, including any Liabilities arising from breach of this Agreement. Client’s indemnity obligation as set forth in this Section shall survive the termination of this Agreement for a period of one (1) year.

In no event shall either party be liable for (A) any lost profits, consequential or punitive damages in connection with this Agreement, (B) any Liabilities arising from the negligence or

willful misconduct of the other party, or (C) any Liabilities arising from the mere discovery and reporting (as may be required by law) of any environmental or construction defects.

## 6. Dispute Resolution.

6.1 Informal Resolution by the Parties. The Parties hereby agree that they shall engage in good faith and reasonable negotiations with each other in order to informally resolve any dispute hereunder (a “**Dispute**”). If, after reasonable attempts by Consultant and Client, the Parties are not able to informally resolve a Dispute by the date that is ten business (10) days after a Party’s written notice (the “**Initial Dispute Notice**”) to the other Party of any such Dispute (the “**Initial Resolution Period**”), then the Parties hereby agree that such Dispute shall be referred to the respective executive responsible for each Party’s respective obligations under this Agreement (the “**Responsible Executive(s)**”). The Responsible Executives will, during the ten (10) business days following the Initial Resolution Period, negotiate in good faith in an effort to informally resolve the Dispute (the “**Executive Resolution Period**”). During the course of the Executive Resolution Period negotiations, all reasonable requests made by one Responsible Executive to the other for information relating to the Dispute will be honored. Both Parties shall continue performing their respective obligations under this Agreement while the Dispute is being resolved, except to the extent that such obligations are in Dispute, unless and until this Agreement expires or is terminated in accordance with Section 3, above. If the Parties are unable to resolve the Dispute during either the Initial Resolution Period or the Executive Resolution Period, then either Party may give written notice to the other Party to further resolve the Dispute through binding arbitration under the procedures of the American Arbitration Association (the “**Arbitration Notice**”).

6.2 Arbitration. Within five (5) business days after receipt of an Arbitration Notice, the Parties shall submit the Dispute to binding arbitration. The Parties shall share equally the arbitrator’s fees, unless the arbitration award provides otherwise. California laws concerning evidence shall apply, provided, however, that the arbitrator shall impose reasonable deadlines on any discovery in order to ensure that the arbitration is held by the deadlines imposed by this Section. The arbitration shall be held within one hundred and fifty (150) miles of Oakland, California, not more than forty-five (45) days after delivery of the Initial Dispute Notice and the arbitrator shall not be able to award, nor shall either Party be entitled to receive lost profits, punitive, incidental, consequential, exemplary, reliance or special damages.

## 7. Miscellaneous Provisions.

7.1 Interpretation. This Agreement sets forth the entire agreement of the Parties concerning the subject matter hereof, and this Agreement supersedes any and all prior negotiations, discussions, and agreements. Any prior agreements, promises, or negotiations not expressly set forth in this Agreement are of no force and effect. Any oral representations of modifications concerning this agreement shall be of no force or effect, except for a subsequent modification in writing signed by the Party against whom enforcement is sought. This Agreement has been drafted by a joint effort of the Parties and shall be interpreted without regard to which Party is the drafting Party, and

- each Party waives the benefit of any law or judicial decision providing otherwise. The term “including,” shall be deemed to mean “including without limitation.”
- 7.2 Successors and Assigns. This Agreement shall inure to, and be binding upon, the respective assigns and successors in interest of the Parties hereto.
- 7.3 Counterparts. This Agreement may be executed in more than one counterpart, each of which shall be deemed an original, and all of which together shall constitute one and the same instrument. Electronic and facsimile signatures on this Agreement shall constitute original signatures of the Parties.
- 7.4 Compliance with Laws. The Parties shall each comply with all rules, orders, determinations, laws and ordinances of any federal, state or local authority having or exercising jurisdiction over the subject matter of this Agreement.
- 7.5 Survival of Terms. All representations, warranties and indemnification made or given by each of the Parties hereto pursuant to this Agreement and all causes of actions, rights and remedies which the Parties may have as a result of a breach of any provision of this Agreement, shall survive any termination of this Agreement, unless otherwise set forth herein.
- 7.6 Governing Law. This Agreement shall be governed by the procedural and substantive law of the State of California, excluding its conflicts of law principles.
- 7.7 Third Party Rights. No rights hereunder shall accrue to the benefit of any person or entity not a Party hereto, except as expressly set forth herein.
- 7.8 Waiver. The waiver by either Party of any breach or violation of, or default under, any provision of this Agreement shall not be deemed a continuing waiver by such Party of any other provision or of any subsequent breach or violation of this Agreement or default hereunder.
- 7.9 Severability. If any term or provision of this Agreement shall, to any extent, be held invalid or unenforceable, the remaining terms and provisions of this Agreement shall not be affected thereby, but each remaining term and provision shall be valid and enforced to the fullest extent permitted by law.
- 7.10 Headings. The section headings in this Agreement are for purposes of reference only and shall not limit or otherwise affect any of the terms hereof.
- 7.11 Force Majeure. Neither party shall hold the other responsible for damages or delay in performance caused by acts of God, strikes, insurrection, war, lockouts, accidents, or other events beyond the other’s control.
- 7.12 Notices. Any and all notices provided for herein shall be in writing and shall be delivered personally, by reputable overnight courier, electronically with confirmation of delivery, United States mail, certified with return receipt requested, postage, and addressed as follows:



If to Consultant: Frontier Energy, Inc.  
Name of VP or CFO  
Address  
City, State Zip  
Phone

If to Client: Company  
Address  
Address  
Tel.:  
Attn:

Such notices shall be deemed received when delivered or rejected, but notices delivered after 5:00 p.m. shall not be considered delivered until the next business day. Either Party may change its address for the purpose of this Section by giving at least five (5) days prior written notice of such change to the other Party in the manner provided herein.

8.13 Amendments. This Agreement may be amended, in whole or in part, only by further written agreement duly executed by each of the Parties hereto.

8.14 Exhibits. All exhibits attached to this Agreement are incorporated into this Agreement by this reference and made a part of this Agreement as if fully set forth herein. The following constitute the exhibits to this Agreement:

**Exhibit A – Scope of Work and Fees**

The Parties have caused this Agreement to be executed by their duly authorized representatives as of the last date and year written below (“Effective Date”).

**CONSULTANT:**

Frontier Energy, Inc.,  
a California corporation,

\_\_\_\_\_  
By: Signatory

Its: Title

Dated: \_\_\_\_\_

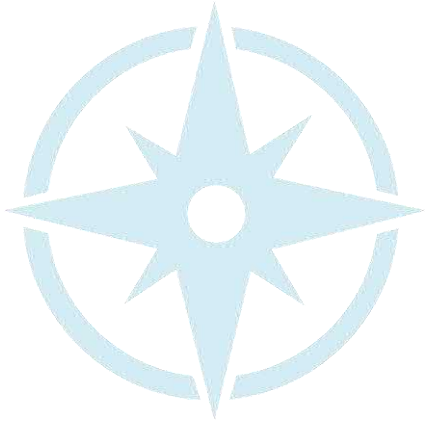
**CLIENT:**

\_\_\_\_\_  
By:

Its:

Dated: \_\_\_\_\_

**Exhibit A**



## Appendix F: Samples of Reporting

Executive Summary Only - Full report available upon request



# Evaluation, Measurement, and Verification of CPS Energy's FY 2023 DSM Portfolio

May 25, 2023



# CONTENTS

- 1. EXECUTIVE SUMMARY ..... 8
  - 1.1 Portfolio Energy and Demand Impacts and Cost-Effectiveness..... 9
  - 1.2 STEP Annual and Final Cumulative Achieved Demand Reduction ..... 12
  - 1.3 Original and New STEP Cost and Savings Breakout ..... 14
  - 1.4 Program Mix for Achieved Demand Reduction ..... 19
  - 1.5 Summary of Savings Evaluation Approach ..... 20
  - 1.6 Summary of Economic Impacts ..... 20
  - 1.7 Year By Year Cost-Effectiveness Comparison ..... 21
- 2. EVALUATION METHODS..... 23
  - 2.1 Energy Impacts..... 23
  - 2.2 Peak Demand Impacts..... 23
  - 2.3 Net Impacts..... 25
  - 2.4 Avoided Cost Benefits ..... 25
  - 2.5 Economic Analysis..... 27
- 3. WEATHERIZATION PROGRAM (CASA VERDE) ..... 29
  - 3.1 Weatherization Program Impacts ..... 29
  - 3.2 Weatherization Program Recommendations ..... 37
- 4. RESIDENTIAL PROGRAMS..... 39
  - 4.1 Summary of Residential Impacts ..... 39
  - 4.2 Cool Roof Rebate ..... 41
  - 4.3 Home Efficiency ..... 43
  - 4.4 Home Energy Assessment ..... 46
  - 4.5 Residential HVAC Program ..... 50
  - 4.6 High-Performance A/C Tune-up..... 55
  - 4.7 New Home Construction Program ..... 57
  - 4.8 Retail Lighting Discounts ..... 61
  - 4.9 Residential Program Recommendations ..... 63
- 5. COMMERCIAL PROGRAMS..... 66
  - 5.1 Summary of Commercial Impacts ..... 66
  - 5.2 Commercial & Industrial Solutions..... 68

5.3	Schools & Institutions Solutions .....	76
5.4	Small Business Solutions.....	83
5.5	Commercial Program Recommendations.....	89
6.	DEMAND RESPONSE PROGRAMS .....	91
6.1	Summary of Demand Response Impacts.....	91
6.2	Smart Thermostat Program .....	94
6.3	Bring Your Own Thermostat (BYOT) Program .....	106
6.4	Direct Install Thermostats .....	114
6.5	Power Players (Behavioral Demand Response).....	119
6.6	Commercial and Automated Demand Response Programs .....	125
6.7	Demand Response Program Recommendations .....	139
7.	EMERGING PROGRAMS .....	140
7.1	Summary of Emerging Programs .....	140
7.2	<i>FlexEV</i> Smart Rewards.....	140
7.3	<i>FlexEV</i> Off-Peak Rewards.....	148
7.4	Emerging Programs Recommendations .....	153
8.	SOLAR ENERGY PROGRAMS .....	154
8.1	Summary of Solar Energy Impacts .....	154
8.2	Residential Solar Program .....	156
8.3	Commercial and Schools Solar Program.....	160
8.4	Other Solar Programs .....	164
8.5	Solar Energy Program Recommendations.....	164
9.	TOTAL IMPACTS AND COST-EFFECTIVENESS.....	165
9.1	Net Program Impacts & Cost-Effectiveness.....	165
9.2	Emissions Reduction .....	168

## FIGURES

Figure 1-1: Residential Solar – Program History: Annual Capacity Installed, Average System Price, and Average Rebate Levels.....	8
Figure 1-2: FY 2023 STEP Program Transitional Periods.....	9
Figure 1-3: Cumulative progress toward STEP Goal .....	12



Figure 1-4: Cumulative progress toward STEP Goal .....	13
Figure 1-5: FY 2023 Net Incremental Contribution toward STEP by Portfolio and Sector .....	19
Figure 1-6: Levelized CSE Trend .....	21
Figure 1-7: STEP Cost-Effectiveness from FY 2015 through FY 2023 .....	21
Figure 1-8: STEP Cost-Effectiveness Comparison.....	22
Figure 3-1: Weatherization – Participation Trends .....	29
Figure 3-2: Weatherization – Frequency of Installation by Measure.....	30
Figure 3-3: Weatherization – Gross Energy and Demand Impact Percentages by Measure.....	31
Figure 3-4: Weatherization – Average kWh/home by Envelope Measure .....	32
Figure 3-5: Weatherization – Average CP, NCP, and 4CP kW/home by Envelope Measure .....	33
Figure 4-1: Summary of Residential Impacts – Net Avoided Energy by Program .....	40
Figure 4-2: Summary of Residential Impacts – Net Avoided Non-Coincident Peak by Program .....	40
Figure 4-3: Summary of Residential Impacts – Net Avoided Coincident Peak by Program.....	40
Figure 4-4: Cool Roof – Participation Trends .....	41
Figure 4-5: Home Efficiency – Participation Trends .....	43
Figure 4-6: Home Efficiency – Pool Pump Participation Share .....	43
Figure 4-7: Home Efficiency – Gross Energy and Demand Impact Percentages by Measure.....	44
Figure 4-8: Home Energy Assessment – Participation Trends .....	46
Figure 4-9: Home Energy Assessment – Installation Frequency by Measure .....	46
Figure 4-10: Home Energy Assessment – Gross Energy and Demand Impact Percentages by Measure ...	47
Figure 4-11: Residential HVAC – Participation Trends .....	50
Figure 4-12: Residential HVAC – Participation Trends by System Type .....	51
Figure 4-13: Residential HVAC – Gross Energy and Demand Impact Percentages by Measure .....	52
Figure 4-14: New Home Construction – Participation Trends .....	57
Figure 4-15: New Home Construction – Builder Participation.....	58
Figure 4-16: New Home Construction – BSAG Certified Builder Participation .....	58
Figure 5-1: Summary of Commercial Impacts – Net Avoided Energy by Program.....	67
Figure 5-2: Summary of Commercial Impacts – Net Avoided NCP by Program.....	67
Figure 5-3: Summary of Commercial Impacts – Net Avoided CP by Program .....	67
Figure 5-4: C&I Solutions – Participation Trends .....	68
Figure 5-5: C&I Solutions – Gross Energy and Demand Impacts by Measure .....	68
Figure 5-6: C&I Solutions – Percent of kWh Savings by Building Type for Sampled Lighting Projects.....	69
Figure 5-7: C&I Solutions – Percent of kWh Savings by System Type for Sampled HVAC Projects.....	71
Figure 5-8: C&I Solutions – Percent of kWh Savings by Baseline Type for Sampled HVAC Projects.....	72
Figure 5-9: C&I Solutions – Energy Savings by Custom Project Type .....	74
Figure 5-10: Schools & Institutions – Participation Trends.....	76
Figure 5-11: Schools & Institutions – Gross Energy and Demand Impacts by Measure Type .....	76
Figure 5-12: Schools & Institutions – Percent of kWh Savings by Building Type for Sampled Lighting Projects .....	77
Figure 5-13: Schools & Institutions – Percent of kWh Savings by System Type for HVAC Projects .....	79
Figure 5-14: Schools & Institutions – Percent of kWh Savings by Baseline Type for HVAC Projects .....	80

Figure 5-15: Schools & Institutions – Energy Savings by Custom Project Type .....	82
Figure 5-16: Small Business Solutions – Direct Install Participation Trends .....	83
Figure 5-17: Small Business Solutions – Gross Energy and Demand Impacts by Measure .....	84
Figure 5-1918: Small Business Solutions – SBDI Desk Review Energy Impacts by Building Type .....	85
Figure 5-19: Small Business Solutions – Midstream Desk Review Lamp Type Distribution .....	86
Figure 6-1: Summary of Demand Response Impacts – Energy (MWh) by Program.....	92
Figure 6-2: Summary of Demand Response Impacts – Non-Coincident Peak Demand (MW) by Program	93
Figure 6-3: Summary of Demand Response Impacts – Coincident Peak Demand (MW) by Program .....	93
Figure 6-4: FY 2023 Smart Thermostat Participation Trend – Total Thermostat/Device Count.....	95
Figure 6-5: Smart Thermostat – FY 2014-2023 Participation Trends by Segment .....	96
Figure 6-6: Smart Thermostat – FY 2017-2023 Participation Share by Thermostat Type .....	96
Figure 6-7: Smart Thermostat – Example 50 percent cycling per-account Load Profile vs. Baseline Profile – 6/6/2022 Event.....	100
Figure 6-8: Smart Thermostat – Summer 2022 Achieved Demand Reduction .....	103
Figure 6-9: BYOT – FY 2015-2023 Participation Trends .....	107
Figure 6-10: BYOT – EOFY Participating Thermostats by Category .....	107
Figure 6-11: BYOT – Incremental Participating Thermostats by Category .....	108
Figure 6-12: BYOT – Summer 2022 Achieved Demand Reduction.....	111
Figure 6-13: Direct Install Program – FY 2018-2023 Participation Trends.....	115
Figure 6-14: Direct Install Thermostats – Achieved Summer 2022 Demand Reduction .....	117
Figure 6-15: Power Players (BDR) – kW Reduction by Event.....	123
Figure 6-16: CADR – FY 2017-2023 Sponsor Counts.....	126
Figure 6-17: CADR – FY 2017-2023 Site Counts .....	126
Figure 6-18: CADR – FY 2017-2023 Contracted kW.....	127
Figure 6-19: CADR – FY 2019-2023 Average Event Duration .....	129
Figure 6-20: CADR – Summer 2022 Delivered Demand Savings .....	132
Figure 6-21: CADR – Option 1 Demand Savings by Event.....	133
Figure 6-22: CADR – Option 2 Demand Savings by Event.....	133
Figure 6-23: CADR – Option 3 Demand Savings by Event.....	134
Figure 6-24: CADR – Option 4 Demand Savings by Event.....	134
Figure 6-25: CADR – Automated DR Demand Savings by Event .....	135
Figure 7-1: <i>FlexEV</i> Smart Rewards – FY 2023 Participation .....	141
Figure 7-2: <i>FlexEV</i> Smart Rewards – Average Non-Event Day Profile by Month .....	143
Figure 7-3: <i>FlexEV</i> Smart Rewards – Example Event Day vs. Baseline Load Profile – Sep 1, 2022.....	144
Figure 7-4: <i>FlexEV</i> Smart Rewards – Per Device/Charger kW Savings by Event .....	145
Figure 7-5: <i>FlexEV</i> Smart Rewards – Total kW Savings by Event.....	146
Figure 7-6: <i>FlexEV</i> Off-Peak Rewards – FY 2023 Participation.....	148
Figure 7-7: <i>FlexEV</i> Off-Peak Rewards – Comparison to Adjusted <i>FlexEV</i> Smart Rewards Non-Event Non- Holiday Weekday Average Load Profile.....	149
Figure 7-8: <i>FlexEV</i> Off-Peak Rewards kW Saving per Device in FY 2023 .....	151
Figure 7-9: <i>FlexEV</i> Off-Peak Rewards total kW Savings by Day in FY 2022.....	151

Figure 8-1: Summary of Solar Energy Impacts – Energy (MWh) by Program .....	154
Figure 8-2: Summary of Solar Energy Impacts – Non-Coincident Peak Demand (MW) by Program .....	154
Figure 8-3: Summary of Solar Energy Impacts – Coincident Peak Demand (MW) by Program .....	155
Figure 8-4: Residential Solar – Program History: Annual Capacity Installed, Average System Price, and Average Rebate Levels.....	157
Figure 8-5: Residential Solar – Percentage of Installed System Costs Paid by Program Rebates .....	157
Figure 8-6: Residential Solar – Average Capacity Trending .....	158
Figure 8-7: Commercial & Schools Solar – Program History: Annual Capacity Installed, Average System Price, and Average Rebate Levels .....	161
Figure 8-8: Commercial & Schools Solar – Percent of Installed System Costs Paid by Program Rebates	161
Figure 9-1: First Year and Lifetime Avoided CO <sub>2</sub> Emissions .....	170

## TABLES

Table 1-1: FY 2023 Portfolio Impacts and Cost-Effectiveness.....	10
Table 1-2: FY 2023 Measure Decay .....	14
Table 1-3: FY 2023 Original and New STEP Costs by Program Type.....	15
Table 1-4: FY 2023 Original and New STEP Net Savings by Program Type .....	17
Table 1-5: FY 2023 Count of Customers Served .....	20
Table 2-1: Top Hours in a TMY3 Weather File from Probabilistic Analysis.....	24
Table 3-1: Weatherization – Gross Energy and Demand Savings .....	36
Table 4-1: Cool Roof – Gross Energy and Demand Savings .....	42
Table 4-2: Home Efficiency – Gross Energy and Demand Savings .....	45
Table 4-3: Home Energy Assessments – Gross Energy and Demand Savings.....	49
Table 4-4: Residential HVAC – Gross Energy and Demand Savings.....	54
Table 4-5: HPTU – Gross Energy and Demand Savings.....	56
Table 4-6: New Home Construction – Incentive Levels .....	57
Table 4-7: New Home Construction – Deemed Savings per Home.....	60
Table 4-8: New Home Construction – Gross Energy and Demand Savings .....	60
Table 4-9: Retail Lighting Discounts – Gross Energy and Demand Savings .....	62
Table 5-1: C&I Solutions –HVAC Tune-up Metrics .....	73
Table 5-2: C&I Solutions – Gross Energy and Demand Savings.....	75
Table 5-3: Schools & Institutions – HVAC Tune-up Metrics.....	80
Table 5-4: Schools & Institutions – Gross Energy and Demand Savings.....	82
Table 5-5: Small Business Solutions – HVAC Tune-up Metrics.....	87
Table 5-6: Small Business Solutions – Gross Energy and Demand Savings.....	88
Table 6-1: Smart Thermostat – EOFY Participation by Group.....	97
Table 6-2: Smart Thermostat – Traditional Cycling vs. Resideo Platform: Number of Events and Average Duration.....	97
Table 6-3: Smart Thermostat – Example kW and kWh Savings Per Device Analysis Process.....	100
Table 6-4: Smart Thermostat – Summer 2022 Average per device kW and Net kWh Savings.....	102

Table 6-5: Smart Thermostat – Delivered Gross Energy and Demand Savings.....	104
Table 6-6: Smart Thermostat – EOFY Gross Energy and Demand Savings .....	104
Table 6-7: Smart Thermostat – Incremental Gross Energy and Demand Savings.....	105
Table 6-8: BYOT – Estimated Average per Device kW and Net kWh Savings by Thermostat Category ...	110
Table 6-9: BYOT – Event Number and Duration Summary by Platform .....	111
Table 6-10: BYOT – Delivered Gross Energy and Demand Savings .....	112
Table 6-11: BYOT – EOFY Gross Energy and Demand Savings .....	112
Table 6-12: BYOT – Incremental Gross Energy and Demand Savings .....	113
Table 6-13: Direct Install Program – DI/HEA/MMAT/WX per Device Savings .....	115
Table 6-14: Direct Install Thermostats – Delivered Gross Energy and Demand Savings.....	117
Table 6-15: Direct Install Thermostats – EOFY Gross Energy and Demand Savings.....	118
Table 6-16: Direct Install Thermostats – Incremental Demand Savings.....	118
Table 6-17: Power Players (BDR) – Summer 2022 Participation.....	120
Table 6-18: Power Players (BDR) – Example: 2022 Wave Average Load by Group, Wave, and Time Period for 6/13/2022.....	121
Table 6-19: Power Players (BDR) – kW Savings per Household by Wave.....	122
Table 6-20: Power Players (BDR) – Delivered Program Energy and Demand Savings .....	123
Table 6-21: Power Players (BDR) – EOFY Program Energy and Demand Savings .....	124
Table 6-22: Power Players (BDR) – Incremental Program Energy and Demand Savings.....	124
Table 6-23: CADR – Program Characteristics .....	125
Table 6-24: CADR – Event Date Distribution .....	127
Table 6-25: CADR – FY 2017-2023 Total Number of Events Called .....	129
Table 6-26: CADR – FY 2017-2023 Estimated Achieved kW Impacts Comparison.....	135
Table 6-27: CADR – Delivered Gross Energy and Demand Savings .....	136
Table 6-28: CADR – EOFY ERCOT 4CP Demand Savings.....	137
Table 6-29: CADR – EOFY Gross Energy and Demand Savings.....	138
Table 7-1 <i>FlexEV</i> Smart Rewards – Program Events by Month.....	141
Table 7-2: <i>FlexEV</i> Smart Rewards – Delivered Energy and Demand Savings.....	146
Table 7-3: <i>FlexEV</i> Smart Rewards – EOFY Program Energy and Demand Savings .....	146
Table 7-4: <i>FlexEV</i> Smart Rewards – Incremental Program Energy and Demand Savings.....	147
Table 7-5: <i>FlexEV</i> Off-Peak Rewards – Delivered Energy and Demand Savings.....	152
Table 7-6: <i>FlexEV</i> Off-Peak Rewards – EOFY Program Energy and Demand Savings .....	152
Table 7-7: <i>FlexEV</i> Off-Peak Rewards – Incremental Program Energy and Demand Savings .....	152
Table 8-1: Residential Solar – Program Gross Energy and Demand Savings .....	159
Table 8-2: Commercial & Schools Solar – Program Rebates.....	160
Table 8-3: Commercial & Schools Solar – Program Gross Energy and Demand Savings.....	163
Table 9-1: FY 2022 Net Portfolio Impacts and Cost-Effectiveness .....	166
Table 9-2: FY 2023 CO <sub>2</sub> Emissions Reduction Impacts by Program (tons) .....	168
Table 9-3: FY 2023 First Year Avoided CO <sub>2</sub> Emissions per Program Participant .....	170
Table 9-4: FY 2023 First Year Avoided NO <sub>x</sub> , SO <sub>2</sub> , and TSP Emissions .....	171

# 1. EXECUTIVE SUMMARY

On June 16, 2022, the City of San Antonio authorized the new initiative the Sustainable Tomorrow Energy Plan (STEP), which aims to reduce community demand by 410 MW, achieve 1% energy savings per year, weatherize 16,000 homes, and contribute to 1.85 million tons of avoided carbon over 5 years through equitable programs designed to help customers save energy and money. For the purposes of this report, the Save for Tomorrow Energy Plan will be referenced as original STEP, and the Sustainable Tomorrow Energy Plan will be referenced as STEP. CPS Energy’s original Save for Tomorrow Energy Plan (original STEP) is an initiative that aimed to save 771 MW of electricity from 2009 to 2020. Fiscal Year (FY) 2020 marked the final year counted toward the 771 MW target. Based on the successful completion of the original STEP goal, and to allow CPS Energy time to complete the development of a new long-term energy efficiency and conservation plan, the City of San Antonio authorized the extension of original STEP through July 31, 2022. During that period, CPS Energy sought community input on the future of its energy efficiency and conservation programs. Through this process, CPS Energy identified program outcomes that mattered most to the community. In addition to energy demand reduction, community stakeholders asked that this new program help create customer bill savings, support customers most in need, and contribute to a low carbon future.

Aside from new and relaunched program offerings, Small Business Solutions (Commercial Energy Efficiency), Commercial & Industrial Demand Response (C&I DR), and Residential Solar Photovoltaics (PV) represent key FY 2023 contributors that outperformed FY 2022. Small business non-coincident peak (NCP) demand savings increased by 188%, primarily due to a heavy focus on the free, no cost offering of high-performance air conditioning tune-ups, which increased by 941%. Despite no major changes to program design or marketing outreach, C&I DR and Residential Solar PV increased by 22% and 38%, respectively. Residential Solar PV savings have steadily increased since FY 2018 in spite of decreasing rebate levels and an approaching program sunset date in December 2022. This performance helps demonstrate that the program is accomplishing its goals and positively affecting measure adoption in the San Antonio market.

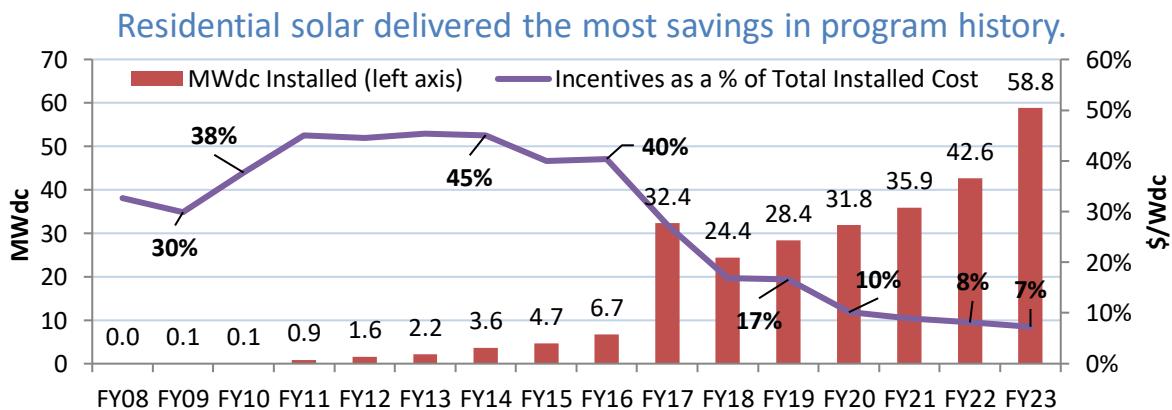


Figure 1-1: Residential Solar – Program History: Annual Capacity Installed and Incentives as a Percent of System Cost

Through a competitive solicitation in 2022, CPS Energy selected Frontier Energy, Inc. (Frontier) and subcontractors Tetra Tech, Inc. (Tetra Tech) and Texas Energy Engineering Services, Inc. (TEESI) to conduct a comprehensive and independent evaluation, measurement, and verification (EM&V) of demand side management (DSM) programs for FY 2023, including contributions to both original and this new STEP program.

This report encompasses all STEP-funded DSM program activity accounted for by CPS Energy within FY 2023, which ran from February 1, 2022 through January 31, 2023. As a result, FY 2023 encompasses the transition period between original STEP (February 1, 2022 through July 31, 2022) and STEP (August 1, 2022 – January 31, 2023). This report describes the EM&V methodology and process and presents the findings of the evaluation. The evaluation focused primarily on verifying the energy and demand savings achieved by CPS Energy’s FY 2023 DSM programs on an annualized basis. Additionally, the evaluation team reviewed program expenditures to calculate program cost-effectiveness and recommended enhancements to program design and implementation for CPS Energy’s consideration.

2022											2023
Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
Original STEP						New STEP					

Figure 1-2: FY 2023 STEP Program Transitional Periods

### 1.1 PORTFOLIO ENERGY AND DEMAND IMPACTS AND COST-EFFECTIVENESS

The FY 2023 portfolio consists of residential weatherization and residential and commercial energy efficiency, demand response, and renewable programs implemented by a combination of internal CPS Energy staff and external implementation vendors. The FY 2023 report includes Frontier’s evaluation of 21 different programs across all categories. Net energy and demand savings are listed in the following table. The savings are represented on an annualized basis to simplify the reporting structure and for easy comparison from year to year.



Table 1-1: FY 2023 Portfolio Impacts and Cost-Effectiveness<sup>1</sup>

Program	NTG Ratio	Net Energy Savings (kWh)	Net CP Demand Savings (kW)	Net NCP Demand Savings (kW)	Net ERCOT 4CP Demand Savings (kW)	Rebate \$	Admin and Marketing \$	Total Program \$	PACT*
<i>Weatherization Program</i>									
Weatherization	100%	6,444,620	3,042	7,147	2,900	\$9,092,811	\$826,946	\$9,919,757	0.98
<i>Energy Efficiency Programs</i>									
Residential HVAC	95%	10,929,775	4,451	4,451	3,775	\$3,125,916	\$80,579	\$3,206,495	4.26
Home Efficiency	93%	3,034,087	794	1,549	660	\$732,055	\$17,614	\$749,669	4.02
New Home Construction	100%	3,423,234	1,990	2,947	2,389	\$3,256,568	\$77,982	\$3,334,550	2.16
Retail Lighting Discounts	77%	12,020,442	1,111	5,980	1,865	\$1,467,759	\$32,747	\$1,500,506	5.65
Home Energy Assessment	84%	308,617	26	111	38	\$95,979	\$1,916	\$97,895	1.83
Cool Roof Rebate	100%	3,420	3	5	4	\$1,773	\$57	\$1,830	3.91
High-Performance AC Tune-up	95%	2,094,803	903	980	841	\$209,750	\$5,400	\$215,150	4.69
<b>Residential Subtotal</b>		<b>31,814,379</b>	<b>9,278</b>	<b>16,024</b>	<b>9,572</b>	<b>\$8,889,800</b>	<b>\$216,295</b>	<b>\$9,106,095</b>	<b>3.69</b>
Commercial & Industrial Solutions	96%	35,536,446	7,210	9,615	6,715	\$5,561,134	\$161,650	\$5,722,784	3.95
Schools & Institutions	96%	24,435,410	2,463	8,017	2,147	\$2,241,214	\$63,023	\$2,304,237	3.35
Small Business Solutions	94%	46,438,686	15,687	17,522	15,496	\$5,105,010	\$137,776	\$5,242,786	6.07
<b>Commercial Subtotal</b>		<b>106,410,542</b>	<b>25,359</b>	<b>35,153</b>	<b>24,359</b>	<b>\$12,907,357</b>	<b>\$362,449</b>	<b>\$13,269,806</b>	<b>4.68</b>
<b>Energy Efficiency Subtotal</b>		<b>138,224,922</b>	<b>34,637</b>	<b>51,178</b>	<b>33,931</b>	<b>\$21,797,157</b>	<b>\$578,744</b>	<b>\$22,375,901</b>	<b>4.28</b>

Table continues on next page.

<sup>1</sup> NTG = Net-to-gross, NCP = Non-coincident peak, CP = Coincident peak, 4CP = ERCOT four coincident peak, PACT = Program administrator benefit-cost ratio.

Program	NTG Ratio	Net Energy Savings (kWh)	Net CP Demand Savings (kW)	Net NCP Demand Savings (kW)	Net ERCOT 4CP Demand Savings (kW)	Rebate \$	Admin and Marketing \$	Total Program \$	PACT*
<b>Demand Response Programs**</b>									
Smart Thermostat	100%	18,498,104	27,417	40,440	26,435	\$1,076,497	\$26,049	\$1,102,546	5.56
Power Players - Behavioral DR	100%	1,430,493	18,164	22,186	8,141	\$1,252,461	\$34,168	\$1,286,629	2.38
Nest DI	100%	12,368,272	12,888	16,170	6,899	\$507,404	\$11,573	\$518,977	1.59
BYOT	100%	51,509,269	46,090	56,957	30,222	\$3,043,160	\$75,101	\$3,118,261	6.77
C&I DR	100%	5,678,140	99,745	130,099	86,988	\$6,029,668	\$174,019	\$6,203,687	3.10
FlexEV Smart Rewards	100%	-	47	103	46	\$32,900	\$65,334	\$98,234	0.36
FlexEV Off-Peak Rewards	100%	-	47	79	43	\$14,505	\$28,805	\$43,310	0.53
<b>Demand Response Subtotal</b>		<b>89,484,278</b>	<b>204,397</b>	<b>266,034</b>	<b>158,773</b>	<b>\$11,956,596</b>	<b>\$415,047</b>	<b>\$12,371,644</b>	<b>3.38</b>
<b>Renewable Energy Programs***</b>									
Residential Solar PV	100%	82,014,146	27,718	66,959	23,301	\$15,381,071	\$3,388,205	\$18,769,276	6.74
Commercial Solar PV	100%	15,155,584	5,338	11,883	4,480	\$2,836,604	\$624,859	\$3,461,463	6.91
Roofless Solar	100%	-	-	-	-	\$0	\$22,002	\$22,002	0.00
<b>Solar Energy Subtotal</b>		<b>97,169,731</b>	<b>33,056</b>	<b>78,842</b>	<b>27,782</b>	<b>\$18,217,676</b>	<b>\$4,035,066</b>	<b>\$22,252,742</b>	<b>6.77</b>
<b>Grand Total</b>		<b>331,323,551</b>	<b>275,133</b>	<b>403,200</b>	<b>223,386</b>	<b>\$61,064,240</b>	<b>\$5,855,803</b>	<b>\$66,920,043</b>	<b>4.51</b>

\*The Program Administrator Cost Test (PACT) output, the benefit-cost ratio, is the ratio of the net present value (NPV) of avoided energy and capacity benefits, divided by the program's incentives and administrative costs. A PACT ratio greater than 1 indicates that the program delivered more benefits than costs incurred from the utility's perspective. The PACT is sometimes referred to as the Utility Cost Test (UCT).

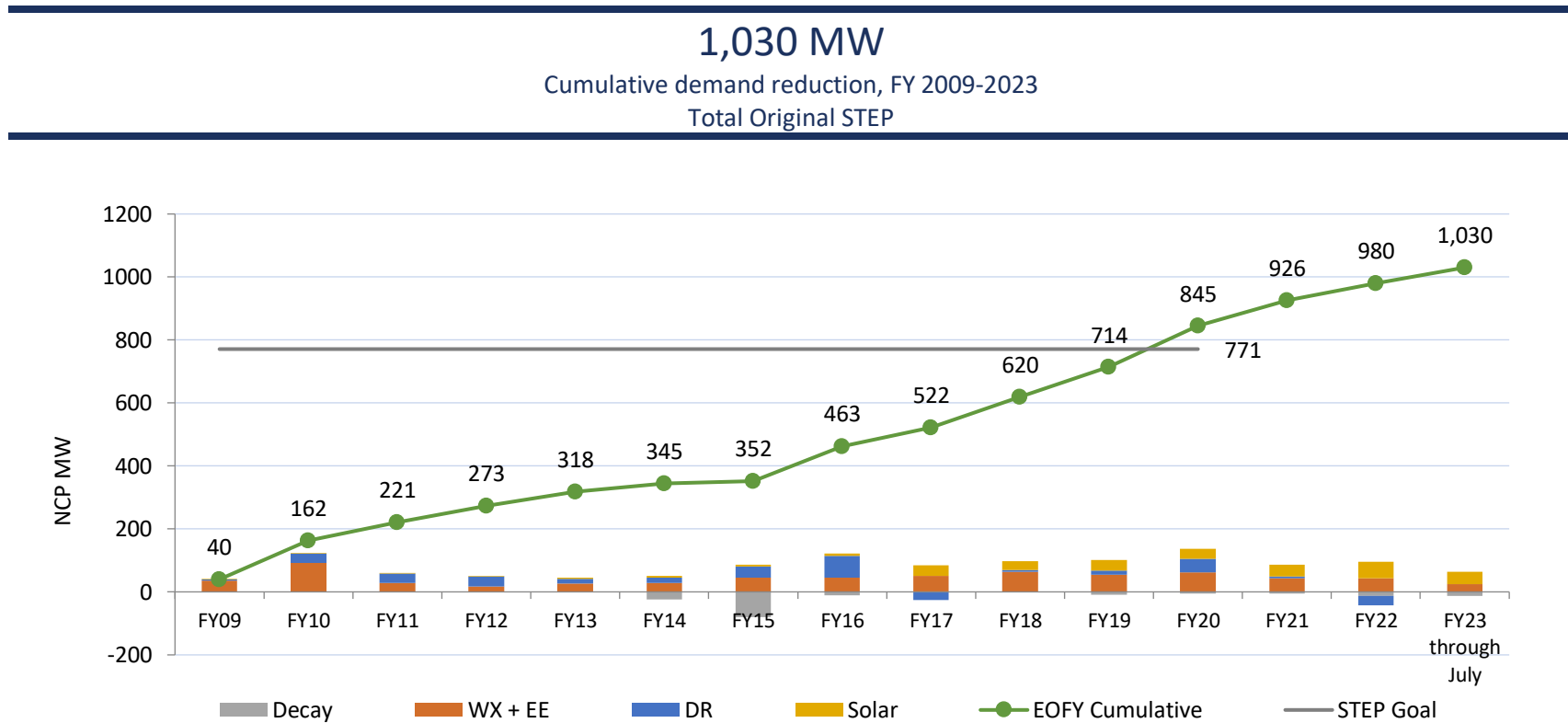
\*\*The PACT for Demand Response Programs is calculated based on the net present value of avoided cost benefits divided by the net present value of program costs *attributable to new, incremental participants during the program year*. Because total program costs in the table represent the costs attributable to all participants, the PACT for Demand Response Programs cannot be directly calculated from data presented in the table. Demand response program net energy and demand savings (in lighter shade) represent end-of-fiscal year program capability, based on end-of-fiscal year enrollment.

\*\*\*CPS Energy's solar rebate programs are evaluated independently from the utility's net metering rate policy. If the estimated costs of net metering credits are factored in, the Residential and Commercial Solar program PACTs would be adjusted to 1.68 and 1.98, respectively.

Additional table notes: Net savings = gross savings x Net-to-Gross ratio / (1 - line loss factor). Rows may not sum to total due to rounding.

**1.2 STEP ANNUAL AND FINAL CUMULATIVE ACHIEVED DEMAND REDUCTION**

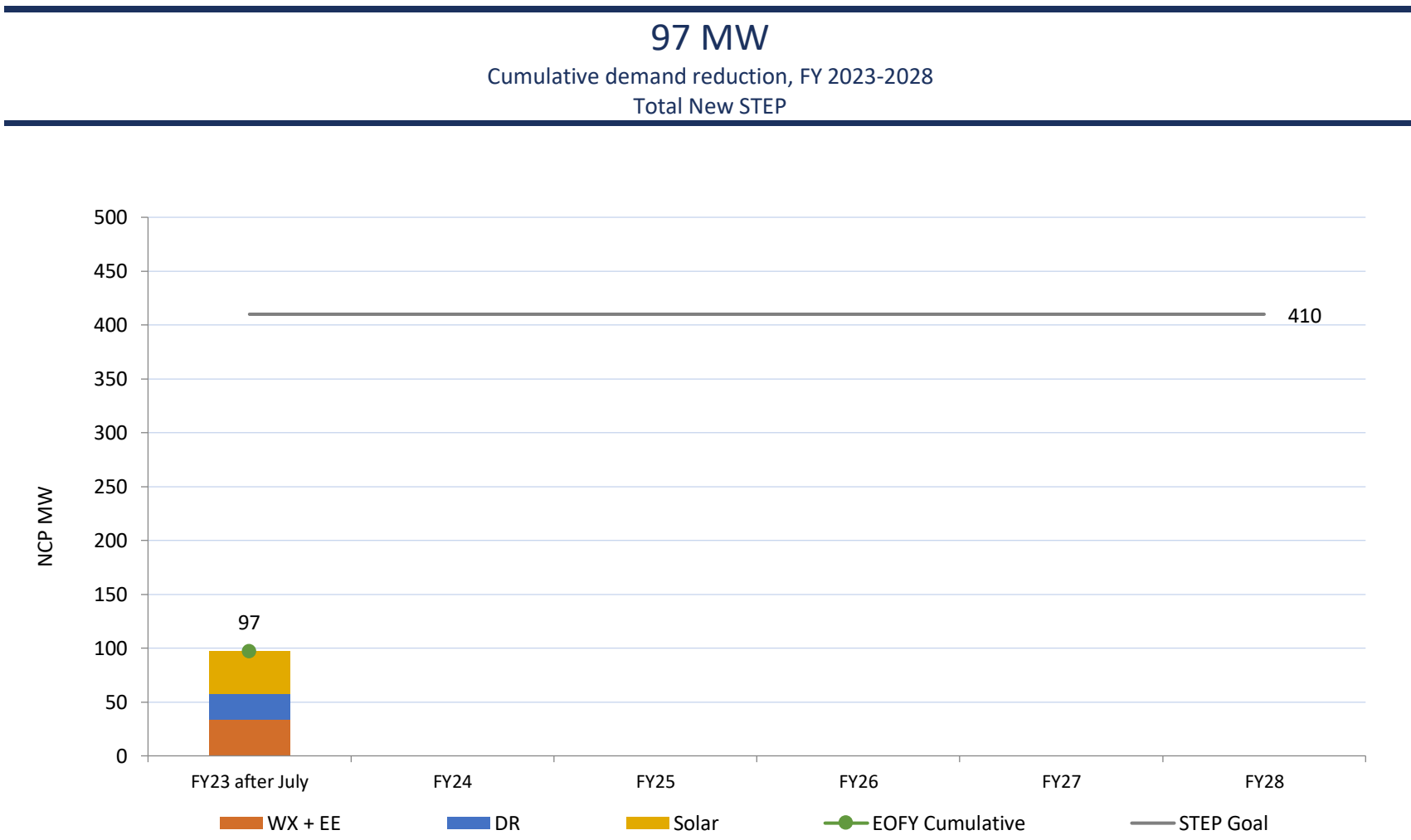
In FY 2023, CPS Energy ended the original STEP programs by adding 50 MW to its achievements, culminating in a total NCP demand reduction of 1,030 MW as depicted in the below image. Annual STEP contributions are counted as the net avoided non-coincident peak (NCP) MW delivered by incremental program participants.



**Figure 1-3: Cumulative progress toward STEP Goal**

In the figure: NCP = Non-coincident peak, FY = Fiscal year, WX = Weatherization, EE = Energy efficiency, DR = Demand response, and EOFY = End-of-fiscal year.

In FY 2023, CPS Energy started the STEP program by adding 97 MW to its achievements toward its new 410 MW goal.



**Figure 1-4: Cumulative progress toward STEP Goal**  
In the figure: NCP = Non-coincident peak, FY = Fiscal year, WX = Weatherization, EE = Energy efficiency, and DR = Demand response.

Under original STEP, measures that were previously installed and reached the end of their useful lives or otherwise rendered ineligible due to regulatory changes are accounted for as decay. Measures reaching the end of their useful lives caused 13.533 MW of decay in FY 2023 and are detailed in the table below.

**Table 1-2: FY 2023 Measure Decay**

Sector	Measure	Decaying MW	Reason for Decay
Residential	Refrigerator Recycling	-0.057	Expiring EUL
Residential	WashRight	-0.040	Expiring EUL
Commercial	Large Lighting	-11.097	Expiring EUL
Commercial	New Construction	-0.051	Expiring EUL
Commercial	LED Street Lights	-0.716	Expiring EUL
Commercial	Whole Building Optimization	-1.572	Expiring EUL
<b>Total</b>		<b>-13.533</b>	

### 1.3 ORIGINAL AND NEW STEP COST AND SAVINGS BREAKOUT

Table 1-3 and Table 1-4 present FY 2023 total costs and gross savings for both original and new STEP programs using the periods defined in the previous section. Gross savings are presented to help tie to program level totals presented in subsequent sections.

Table 1-3: FY 2023 Original and New STEP Costs by Program Type

Program	Original STEP			STEP			Total FY 2023 STEP		
	Direct	Admin	Total	Direct	Admin	Total	Direct	Admin	Total
Weatherization	\$3,672,932	\$367,524	\$4,040,456	\$5,419,879	\$459,422	\$5,879,301	\$9,092,811	\$826,946	\$9,919,757
Residential HVAC	\$1,052,738	\$40,402	\$1,093,141	\$2,073,178	\$40,177	\$2,113,354	\$3,125,916	\$80,579	\$3,206,495
Home Efficiency	\$239,417	\$7,778	\$247,196	\$492,638	\$9,835	\$502,473	\$732,055	\$17,614	\$749,669
New Home Construction	\$1,035,303	\$33,636	\$1,068,939	\$2,221,265	\$44,346	\$2,265,610	\$3,256,568	\$77,982	\$3,334,550
Retail Lighting Discounts	\$274,997	\$8,934	\$283,932	\$1,192,762	\$23,812	\$1,216,574	\$1,467,759	\$32,747	\$1,500,506
Home Energy Assessment	-	-	-	\$95,979	\$1,916	\$97,895	\$95,979	\$1,916	\$97,895
Cool Roof	\$1,743	\$57	\$1,800	\$30	\$1	\$31	\$1,773	\$57	\$1,831
High-Performance A/C Tune-up	-	-	-	\$209,750	\$5,400	\$215,150	\$209,750	\$5,400	\$215,150
<b>Residential Subtotal</b>	<b>\$2,604,200</b>	<b>\$90,808</b>	<b>\$2,695,007</b>	<b>\$6,285,601</b>	<b>\$125,487</b>	<b>\$6,411,087</b>	<b>\$8,889,800</b>	<b>\$216,294</b>	<b>\$9,106,095</b>
Commercial & Industrial Solutions	\$2,989,866	\$97,138	\$3,087,004	\$2,571,268	\$64,512	\$2,635,780	\$5,561,134	\$161,650	\$5,722,784
Schools & Institutions	\$917,861	\$29,820	\$947,682	\$1,323,352	\$33,203	\$1,356,555	\$2,241,214	\$63,023	\$2,304,237
Small Business Solutions	\$1,309,899	\$42,557	\$1,352,457	\$3,795,110	\$95,218	\$3,890,328	\$5,105,010	\$137,776	\$5,242,785
<b>Commercial Subtotal</b>	<b>\$5,217,627</b>	<b>\$169,516</b>	<b>\$5,387,143</b>	<b>\$7,689,730</b>	<b>\$192,933</b>	<b>\$7,882,663</b>	<b>\$12,907,357</b>	<b>\$362,449</b>	<b>\$13,269,806</b>
<b>Energy Efficiency Subtotal</b>	<b>\$7,821,827</b>	<b>\$260,324</b>	<b>\$8,082,150</b>	<b>\$13,975,331</b>	<b>\$318,420</b>	<b>\$14,293,750</b>	<b>\$21,797,157</b>	<b>\$578,743</b>	<b>\$22,375,901</b>

Table continues on next page.

## 1. EXECUTIVE SUMMARY

Program	Original STEP			STEP			Total FY 2023 STEP		
	Direct	Admin	Total	Direct	Admin	Total	Direct	Admin	Total
Smart Thermostat	\$363,887	\$11,822	\$375,709	\$712,610	\$14,227	\$726,837	\$1,076,497	\$26,049	\$1,102,546
Power Players - Behavioral DR	\$731,623	\$23,770	\$755,393	\$520,838	\$10,398	\$531,236	\$1,252,461	\$34,168	\$1,286,629
Nest DI	\$115,195	\$3,743	\$118,938	\$392,209	\$7,830	\$400,039	\$507,404	\$11,573	\$518,977
BYOT	\$1,145,450	\$37,215	\$1,182,665	\$1,897,710	\$37,886	\$1,935,596	\$3,043,160	\$75,101	\$3,118,261
C&I DR	-	\$10,526	\$10,526	\$6,029,668	\$163,492	\$6,193,161	\$6,029,668	\$174,019	\$6,203,687
FlexEV Smart Rewards	\$10,886	\$41,774	\$52,659	\$22,014	\$23,560	\$45,575	\$32,900	\$65,334	\$98,234
FlexEV Off-Peak Rewards	\$4,799	\$18,417	\$23,217	\$9,706	\$10,387	\$20,093	\$14,505	\$28,805	\$43,310
<b>Demand Response Subtotal</b>	<b>\$2,371,840</b>	<b>\$147,267</b>	<b>\$2,519,107</b>	<b>\$9,584,756</b>	<b>\$267,781</b>	<b>\$9,852,537</b>	<b>\$11,956,596</b>	<b>\$415,047</b>	<b>\$12,371,644</b>
Residential Solar PV	\$6,480,093	\$1,438,294	\$7,918,387	\$8,900,978	\$1,949,911	\$10,850,889	\$15,381,071	\$3,388,205	\$18,769,277
Commercial Solar PV	\$1,195,070	\$265,253	\$1,460,323	\$1,641,534	\$359,606	\$2,001,140	\$2,836,604	\$624,859	\$3,461,463
Roofless Solar	-	\$10,887	\$10,887	-	\$11,115	\$11,115	-	\$22,002	\$22,002
<b>Solar Energy Subtotal</b>	<b>\$7,675,164</b>	<b>\$1,714,434</b>	<b>\$9,389,597</b>	<b>\$10,542,512</b>	<b>\$2,320,632</b>	<b>\$12,863,145</b>	<b>\$18,217,676</b>	<b>\$4,035,066</b>	<b>\$22,252,742</b>
<b>Grand Total</b>	<b>\$21,541,763</b>	<b>\$2,489,547</b>	<b>\$24,031,310</b>	<b>\$39,522,478</b>	<b>\$3,366,255</b>	<b>\$42,888,733</b>	<b>\$61,064,240</b>	<b>\$5,855,803</b>	<b>\$66,920,043</b>



Table 1-4: FY 2023 Original and New STEP Net Savings by Program Type<sup>2</sup>

Program	Original STEP				STEP				Total FY 2023 STEP			
	NCP kW	CP kW	4CP kW	kWh	NCP kW	CP kW	4CP kW	kWh	NCP kW	CP kW	4CP kW	kWh
Weatherization	4,257	1,772	1,692	3,831,547	2,890	1,270	1,208	2,613,073	7,147	3,042	2,900	6,444,620
Residential HVAC	2,024	2,024	1,716	4,874,707	2,428	2,427	2,059	6,055,068	4,451	4,451	3,775	10,929,775
Home Efficiency	822	450	383	1,454,746	727	345	277	1,579,341	1,549	794	660	3,034,087
New Home Construction	1,874	1,265	1,519	2,176,548	1,073	725	870	1,246,687	2,947	1,990	2,389	3,423,234
Retail Lighting Discounts	1,155	165	276	2,324,432	4,825	946	1,588	9,696,010	5,980	1,111	1,865	12,020,442
Home Energy Assessment	-	-	-	-	111	26	38	308,617	111	26	38	308,617
Cool Roof	5	3	4	3,420	-	-	-	-	5	3	4	3,420
High-Performance A/C Tune-up	-	-	-	-	980	903	841	2,094,803	980	903	841	2,094,803
<b>Residential Subtotal</b>	<b>5,880</b>	<b>3,906</b>	<b>3,899</b>	<b>10,833,853</b>	<b>10,144</b>	<b>5,372</b>	<b>5,673</b>	<b>20,980,526</b>	<b>16,024</b>	<b>9,278</b>	<b>9,572</b>	<b>31,814,379</b>
Commercial & Industrial Solutions	6,182	4,534	4,231	23,680,194	3,432	2,676	2,484	11,856,252	9,615	7,210	6,715	35,536,446
Schools & Institutions	2,695	1,919	1,673	8,790,292	5,322	544	474	15,645,118	8,017	2,463	2,147	24,435,410
Small Business Solutions	6,993	6,391	6,336	19,706,813	10,529	9,295	9,160	26,731,873	17,522	15,687	15,496	46,438,686
<b>Commercial Subtotal</b>	<b>15,870</b>	<b>12,844</b>	<b>12,240</b>	<b>52,177,299</b>	<b>19,283</b>	<b>12,515</b>	<b>12,118</b>	<b>54,233,244</b>	<b>35,153</b>	<b>25,359</b>	<b>24,359</b>	<b>106,410,542</b>
<b>Energy Efficiency Subtotal</b>	<b>21,750</b>	<b>16,750</b>	<b>16,140</b>	<b>63,011,152</b>	<b>29,427</b>	<b>17,887</b>	<b>17,791</b>	<b>75,213,770</b>	<b>51,178</b>	<b>34,637</b>	<b>33,931</b>	<b>138,224,922</b>

Table continues on next page.

<sup>2</sup> NCP = Non-coincident peak, CP = Coincident peak, 4CP = ERCOT four coincident peak, kWh = Energy savings.

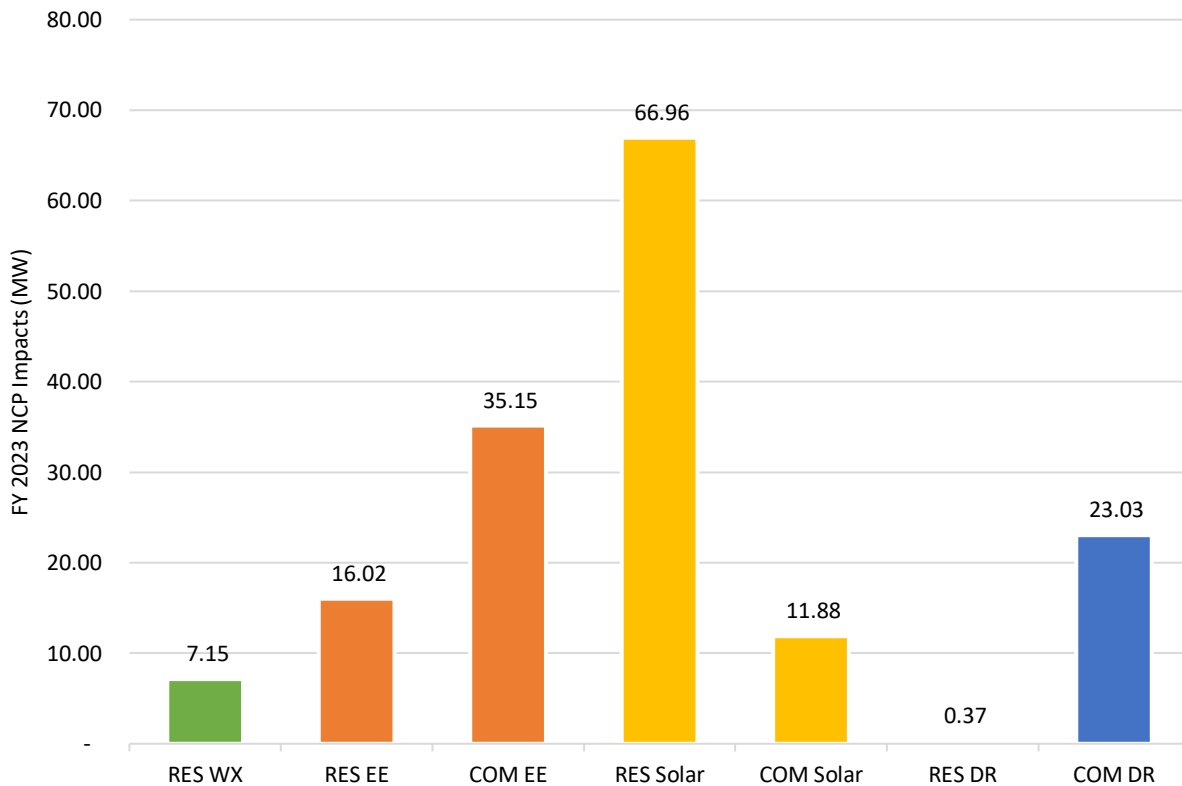
1. EXECUTIVE SUMMARY

Program	Original STEP				STEP				Total FY 2023 STEP			
	NCP kW	CP kW	4CP kW	kWh	NCP kW	CP kW	4CP kW	kWh	NCP kW	CP kW	4CP kW	kWh
Smart Thermostat	Demand response customers are enrolled year-round, but program savings are only claimed at the end of the program year when CPS Energy pays customers for performance.								40,440	27,417	26,435	18,498,104
Power Players - Behavioral DR									22,186	18,164	8,141	1,430,493
Nest DI									16,170	12,888	6,899	12,368,272
BYOT									56,957	46,090	30,222	51,509,269
C&I DR									130,099	99,745	86,988	5,678,140
FlexEV Smart Rewards									103	47	46	-
FlexEV Off-Peak Rewards									79	47	43	-
<b>Demand Response Subtotal</b>									<b>266,034</b>	<b>204,397</b>	<b>158,773</b>	<b>89,484,278</b>
Residential Solar PV	30,704	12,710	10,685	37,607,783	36,255	15,008	12,616	44,406,363	66,959	27,718	23,301	82,014,146
Commercial Solar PV	7,594	3,411	2,863	9,685,754	4,289	1,926	1,617	5,469,830	11,883	5,338	4,480	15,155,584
Roofless Solar	-	-	-	-	-	-	-	-	-	-	-	-
<b>Solar Energy Subtotal</b>	<b>38,299</b>	<b>16,122</b>	<b>13,548</b>	<b>47,293,538</b>	<b>40,544</b>	<b>16,934</b>	<b>14,234</b>	<b>49,876,193</b>	<b>78,842</b>	<b>33,056</b>	<b>27,782</b>	<b>97,169,731</b>
<b>Grand Total</b>	<b>64,306</b>	<b>34,644</b>	<b>31,380</b>	<b>114,136,236</b>	<b>72,861</b>	<b>36,092</b>	<b>33,232</b>	<b>127,703,037</b>	<b>403,200</b>	<b>275,133</b>	<b>223,386</b>	<b>331,323,551</b>

**1.4 PROGRAM MIX FOR ACHIEVED DEMAND REDUCTION**

The STEP portfolio includes contributions from a diverse mix of programs reaching all customer sectors. Incremental impacts in FY 2023 were predominantly driven by the residential solar program with 42 percent of total NCP MW impacts. That program was followed by commercial energy efficiency with 22 percent.

FY 2023 NCP MW impacts were predominantly driven by the Residential Solar program, followed by the combined Commercial Energy Efficiency programs.



**Figure 1-5: FY 2023 Net Incremental Contribution toward STEP by Portfolio and Sector**

In the figure: Res = Residential, DR = Demand Response, Comm = Commercial, EE = Energy Efficiency, WX = Weatherization.

The FY 2023 STEP portfolio reached 486,257 homes and almost 4,472 businesses through weatherization, energy efficiency, demand response, and solar programs. Demand response programs reach the most customers due to their broad applicability and little to no investment cost for the participating customers. The participation counts listed in the following table represent enrolled/participating customers.

Table 1-5: FY 2023 Count of Customers Served

Portfolio	Residential	Commercial
Demand Response <sup>3,4</sup>	468,452	2,039
Energy Efficiency <sup>5</sup>	9,790	2,371
Solar <sup>6</sup>	6,209	62
Weatherization	1,806	-
<b>Total</b>	<b>486,257</b>	<b>4,472</b>

### 1.5 SUMMARY OF SAVINGS EVALUATION APPROACH

Frontier applied evaluation standards as published in the FY 2023 CPS Energy Guidebook, which provides a single common reference for estimating energy and peak demand savings resulting from the installation or implementation of energy efficiency and demand response measures provided through CPS Energy’s programs. The methodologies described by and used in the CPS Energy Guidebook are based on the Public Utility Commission of Texas’ (PUCT) Technical Reference Manual (TRM), with certain modifications required to accommodate CPS Energy’s weather zone and STEP program goals and metrics. The CPS Energy Guidebook is updated annually to maintain consistency with the TRM.

### 1.6 SUMMARY OF ECONOMIC IMPACTS

Frontier’s evaluation included collecting data on administrative, management, and marketing costs as well as total incentives paid. The following economic impact metrics were calculated as described in section 2.5.

- Benefit-Cost Ratio, representing the output of the Program Administrator Cost Test (PACT) run at the portfolio level, was 4.51.
- Cost of Saved Energy (CSE), which represents the levelized program cost per annual kWh saved, was \$0.0252/kWh, slightly lower than the previous year.
- Net Avoided Cost Benefit, or Reduction in Revenue Requirements (RRR), which represents the total avoided costs, or net reduction in utility costs, due to the impact of the energy efficiency improvements, was \$218,962,374.

<sup>3</sup> Demand response residential customer counts include devices per customer estimate that ranges from 1.19 to 1.33 depending on the program. The devices per customer estimate for commercial dwellings ranges from 1.53 to 3.27.

<sup>4</sup> Power Players (Behavioral Demand Response) accounts 347,865 participants in FY 2023.

<sup>5</sup> The Energy Efficiency counts do not include customers affected by the Residential Retail Lighting Discounts or Small Business Solutions Midstream Lighting programs. Because impacts are quantified by lamp/fixture count, there is no way to align program participation metrics with other program designs.

<sup>6</sup> Solar participation does not include customers of the Roofless Solar program. However, there was no participation in FY 2023.

### Levelized cost of saved energy (CSE)

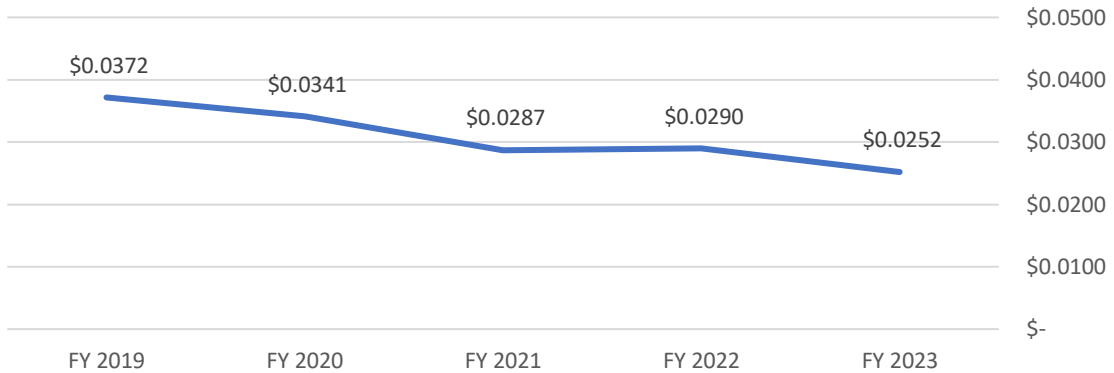


Figure 1-6: Levelized CSE Trend

### 1.7 YEAR BY YEAR COST-EFFECTIVENESS COMPARISON

CPS Energy’s STEP portfolio continues to deliver cost-effective overall performance as measured by the PACT. Annual results should be interpreted within the overall context of each fiscal year evaluation and associated cost-effectiveness inputs.

### FY 2023 STEP Portfolio Reached Highest PACT Ratios to Date

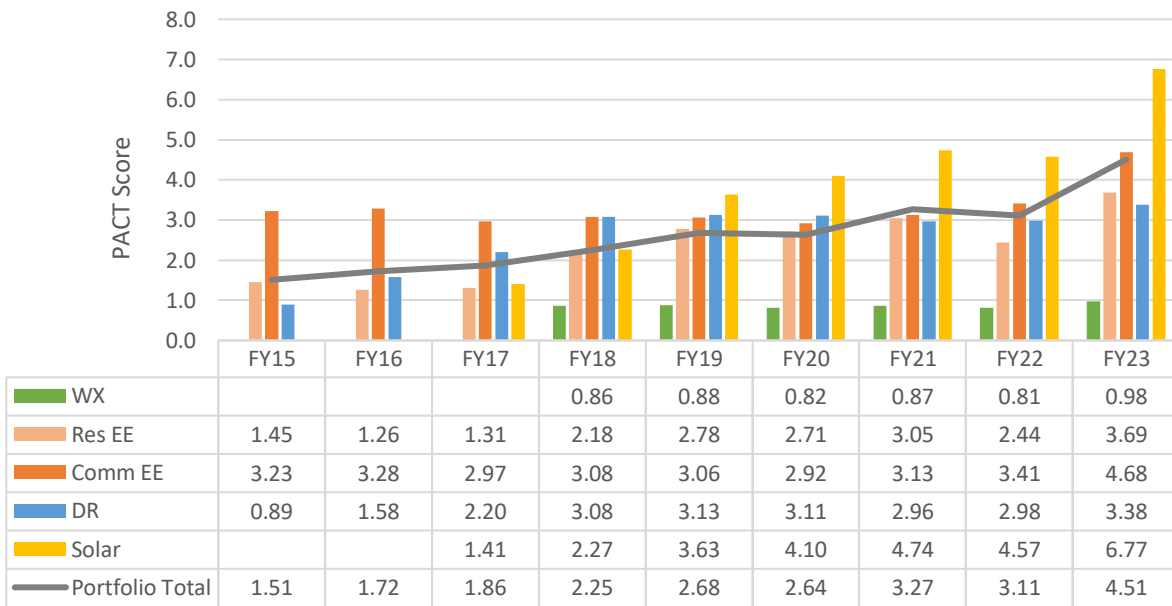


Figure 1-7: STEP Cost-Effectiveness from FY 2015 through FY 2023

In the figure: Res = Residential, DR = Demand Response, Comm = Commercial, EE = Energy Efficiency, WX = Weatherization. In 2015 and 2016, Solar programs were included in Residential and Commercial Energy Efficiency. In 2015 through 2017, Weatherization was included in Residential Energy Efficiency.

FY 2023 PACT scores are higher compared to previous years in part due to an increase in avoided cost of energy. The below graph illustrates what the PACT would have been if the FY22 avoided costs were applied to the FY23 programs, all other factors held constant. The dotted, striped, and solid bars represent actual reported FY22 PACTs, FY23 PACTs if the FY22 avoided costs are applied to the FY23 projects, and actual FY23 PACT results, respectively.

When the FY22 avoided costs are applied to FY23 projects, the PACTs are relatively close across most programs. This means that overall program performance was fairly aligned across both years. However, as illustrated by the difference between the striped and solid bars, the increase in FY23 avoided costs resulted in the PACT values increasing approximately 23% at the portfolio-level. Because all other factors were held constant between these scenarios, the difference between the two can be directly tied to the higher avoided costs. Please see section 2.4 below for additional insights regarding the increasing avoided cost assumptions.

### Impact of Increasing Avoided Costs - Comparison of FY22 Actual PACTs, FY23 PACTs Assuming FY22 Avoided Costs, and FY23 Actual PACTs

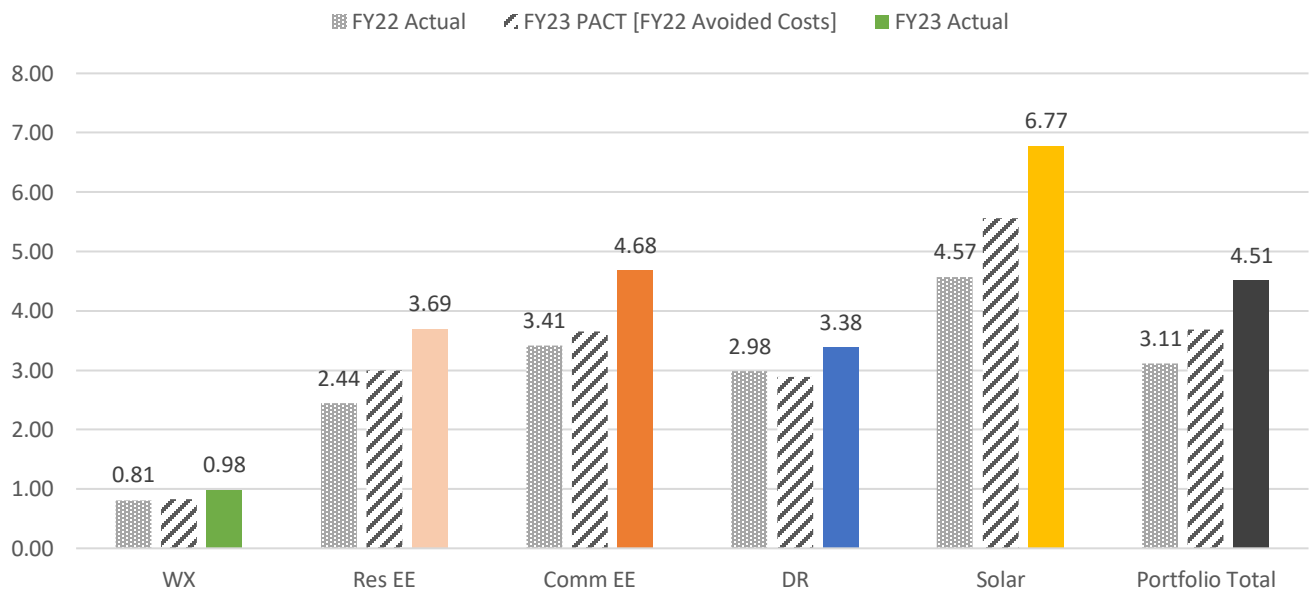


Figure 1-8: STEP Cost-Effectiveness Comparison



## **Filing Receipt**

**Filing Date - 2024-06-06 04:22:13 PM**

**Control Number - 56003**

**Item Number - 18**





June 6, 2024

Commission Filing Clerk  
Public Utility Commission of Texas  
1701 N. Congress Avenue  
P.O. Box 13326  
Austin, TX 78711

**RE: Project No. 56003 – 2024 Energy Plans and Reports Pursuant to 16 TAC § 25.181**

Dear Commission Filing Clerk:

On May 31, 2024, AEP Texas filed its Amended 2024 Energy Efficiency Plan and Report (EEPR). AEP Texas has discovered that the following corrections to the EEPR were necessary:

- Page 20 – Table 9: Revised Table 9 to correct 2023 Reported and Verified Savings for Commercial SOP from 1,557 kW to 1,548 kW.

Please find attached a revised copy of the Amended AEP Texas 2024 EEPR which replaces the filing made on May 31, 2024.

If there are any questions regarding this filing of corrected information, please contact me at 956-282-1157.

Respectfully submitted,

*Danny Trevino*

Danny Trevino  
Energy Efficiency Compliance Coordinator  
Attachment

---

**AEP Texas Inc.**

**2024 Energy Efficiency Plan and Report**

**16 Tex. Admin. Code §§ 25.181, 28.182 and 25.183**

**Amended June 6, 2024**

---

Project No. 56003



An **AEP** Company

## TABLE OF CONTENTS

<b>INTRODUCTION.....</b>	<b>3</b>
<b>EEPR ORGANIZATION.....</b>	<b>4</b>
<b>EXECUTIVE SUMMARY – ENERGY EFFICIENCY PLAN (PLAN).....</b>	<b>5</b>
<b>EXECUTIVE SUMMARY – ENERGY EFFICIENCY REPORT (REPORT) .....</b>	<b>5</b>
<b>ENERGY EFFICIENCY PLAN.....</b>	<b>6</b>
<b>I. 2024 PROGRAMS.....</b>	<b>6</b>
<b>A. 2024 Program Portfolio .....</b>	<b>6</b>
<b>B. Existing Programs.....</b>	<b>8</b>
<b>C. New Programs for 2024.....</b>	<b>12</b>
<b>D. Discontinued Programs .....</b>	<b>12</b>
<b>II. CUSTOMER CLASSES.....</b>	<b>13</b>
<b>III. ENERGY EFFICIENCY GOALS AND PROJECTED SAVINGS.....</b>	<b>14</b>
<b>IV. PROGRAM BUDGETS .....</b>	<b>16</b>
<b>ENERGY EFFICIENCY REPORT .....</b>	<b>19</b>
<b>V. HISTORICAL DEMAND AND ENERGY GOALS AND SAVINGS     ACHIEVED FOR THE PREVIOUS FIVE YEARS .....</b>	<b>19</b>
<b>VI. PROJECTED, REPORTED AND VERIFIED DEMAND AND ENERGY     SAVINGS .....</b>	<b>20</b>
<b>VII. HISTORICAL PROGRAM EXPENDITURES .....</b>	<b>21</b>
<b>VIII. PROGRAM FUNDING FOR PROGRAM YEAR 2023.....</b>	<b>23</b>
<b>IX. MARKET TRANSFORMATION PROGRAM RESULTS 2023 .....</b>	<b>26</b>
<b>X. ADMINISTRATIVE COSTS AND RESEARCH AND DEVELOPMENT .....</b>	<b>27</b>
<b>XI. 2024 ENERGY EFFICIENCY COST RECOVERY FACTOR (EECRF).....</b>	<b>28</b>
<b>XII. 2023 EECRF SUMMARY.....</b>	<b>28</b>
<b>XIII. UNDERSERVED COUNTIES .....</b>	<b>29</b>
<b>ACRONYMS .....</b>	<b>30</b>
<b>APPENDIX A: REPORTED AND VERIFIED DEMAND AND ENERGY REDUCTION BY COUNTY .....</b>	<b>32</b>
<b>APPENDIX B: PROGRAM TEMPLATES.....</b>	<b>34</b>
<b>APPENDIX C: OPTIONAL SUPPORTING DOCUMENTATION .....</b>	<b>35</b>

## INTRODUCTION

AEP Texas Inc. (AEP Texas or Company) presents this Energy Efficiency Plan and Report (EEPR) to comply with Public Utility Commission of Texas (Commission) 16 Tex. Admin. Code §§ 25.181, 25.182 and 25.183 (TAC) (EE Rule), which implement the Public Utility Regulatory Act (PURA) § 39.905.

As mandated by PURA § 39.905, the EE Rule requires that each investor-owned electric transmission and distribution utility (TDU) achieve the following demand reduction goals through market-based standard offer programs (SOPs) and targeted market transformation programs (MTPs). 16 TAC § 25.181(e)(1) provides in pertinent part as follows:

An electric utility shall administer a portfolio of energy efficiency programs to acquire, at a minimum, the following:

- (A) Beginning with the 2013 program year, until the trigger described in subparagraph (B) of this paragraph is reached, the utility shall acquire a 30% reduction of its annual growth in demand of residential and commercial customers.
- (B) If the demand reduction goal to be acquired by a utility under subparagraph (A) of this paragraph is equivalent to at least four-tenths of 1% of its summer weather-adjusted peak demand for the combined residential and commercial customers for the previous program year, the utility shall meet the energy efficiency goal described in subparagraph (C) of this paragraph for each subsequent program year.
- (C) Once the trigger described in subparagraph (B) of this paragraph is reached, the utility shall acquire four-tenths of 1% of its summer weather-adjusted peak demand for the combined residential and commercial customers for the previous program year.
- (D) Except as adjusted in accordance with subsection (u) of this section, a utility's demand reduction goal in any year shall not be lower than its goal for the prior year, unless the commission establishes a goal for a utility pursuant to paragraph (2) of this subsection.

The EE Rule includes specific requirements related to the implementation of SOPs and MTPs that control the manner in which TDUs must administer their portfolio of energy efficiency programs to achieve their mandated annual demand reduction goals. AEP Texas' plans enable it to meet its statutory goals through implementation of energy efficiency programs in a manner that complies with PURA § 39.905 and the EE Rule. This EEPR covers the periods of time required in the EE Rule. The following section describes the information that is contained in each of the subsequent sections and appendices.

## **EEPR ORGANIZATION**

This EEPR consists of an Executive Summary, Energy Efficiency Plan, Energy Efficiency Report, a list of acronyms, and three appendices.

### **Executive Summary**

- Summarizes AEP Texas' plan for achieving its goals and projected energy efficiency savings for program years 2024 and 2025 and highlights AEP Texas' achievements for Program Year (PY) 2023.

### **Energy Efficiency Plan**

- Section I describes the program portfolio. It details how programs will be implemented, presents related informational and outreach activities, and provides an introduction to any programs not included in the 2023 EEPR.
- Section II describes the targeted customer classes, the estimated size of each class, and the method of determining those class sizes.
- Section III presents the energy and demand goals and projected savings for the prescribed planning period detailed by program for each customer class.
- Section IV describes the proposed energy efficiency budgets for the prescribed planning period detailed by program for each customer class.

### **Energy Efficiency Report**

- Section V documents the demand reduction goal for each of the previous five years (2019-2023) based on its weather-adjusted peak demand and actual savings achieved for those years.
- Section VI compares the projected energy and demand savings to its reported and verified savings by program for PY 2022 and 2023.
- Section VII details the incentive and administration expenditures for each of the previous five years (2019-2023) detailed by program for each customer class.
- Section VIII compares AEP Texas' actual 2023 expenditures with its 2023 budget by program for each customer class. It identifies funds committed but not expended and funds remaining and not committed. It also explains any cost deviations of more than 10% from AEP Texas' overall program budget.
- Section IX describes the results from the MTPs.
- Section X describes Administrative costs and Research and Development activities.
- Section XI documents the 2024 EECRF.
- Section XII provides the 2023 EECRF Summary.
- Section XIII identifies the Underserved Counties.

### **Acronyms**

- A list of abbreviations for common terms used within this document.

### **Appendices**

- Appendix A – Reported and verified demand and energy reductions by county for each program.
- Appendix B – Program templates for any new or significantly modified programs and programs not included in the previous EEPR.
- Appendix C – Data, explanations, or documents supporting other sections of the EEPR.

## EXECUTIVE SUMMARY – ENERGY EFFICIENCY PLAN (PLAN)

AEP Texas plans to achieve its 2024 mandated demand and energy goals of 21.55 MW and 37,756 MWh as shown in Table 1 below through residential and non-residential SOPs and MTPs. AEP Texas will utilize a budget of \$19,092,000 to accomplish these goals.

**Table 1: Summary of Goals, Projected Savings (at the Meter), and Budgets <sup>1</sup>**

Calendar Year	Average Peak Demand at Meter (MW)	Goal Metric: 0.4% Peak Demand (MW)	Peak Demand Goal (MW)	Energy Goal (MWh)	Projected Demand Reduction (MW)	Projected Energy Savings (MWh)	Projected Budget (000's)*
2024	5,387	21.55	21.55	37,756	61.78	88,847	\$19,092
2025	5,463	21.85	21.85	38,281	67.55	87,659	\$19,092

\* The Projected Budgets include costs associated with Evaluation, Measurement & Verification activities.

## EXECUTIVE SUMMARY – ENERGY EFFICIENCY REPORT (REPORT)

AEP Texas achieved demand and energy reductions of 62,923 kW and 70,898,719 kWh in 2023. The total energy efficiency cost for achieving these savings was \$17,183,063. This achievement exceeded the 2023 mandated energy efficiency goals of 21,080 kW and 36,932,000 kWh.

A broad portfolio of residential and non-residential SOPs and MTPs was used to accomplish these savings.

<sup>1</sup> Average Peak Demand figures are from Table 4; Projected Savings from Table 5; Projected Budgets from Tables 6 and 7.

# ENERGY EFFICIENCY PLAN

## I. 2024 Programs

### A. 2024 Program Portfolio

AEP Texas has implemented a variety of programs in 2024 to enable it to meet its goals in a manner that complies with PURA § 39.905 and the EE Rule. These programs target broad market segments and specific market sub-segments with significant opportunities for cost-effective energy savings.

Table 2 summarizes the programs and targeted customer class markets for PY 2024. The programs listed in Table 2 are described in further detail in Subsection B. AEP Texas maintains a website containing information on participation, forms required for project submission, and program manuals at [www.AEPTexasEfficiency.com](http://www.AEPTexasEfficiency.com). This site is the primary method of communication used to provide program updates and information to Retail Electric Providers (REPs), potential Energy Efficiency Service Providers (EESPs), and other interested parties.

#### **Implementation Process**

MTPs are implemented by third-party implementers. These implementers design, market, and execute the applicable MTPs. Based on the specific MTP, the implementer may perform outreach activities to recruit local contractors and provide participating contractors specialized education, training/certification, and tools as necessary. Implementers validate proposed measures/projects, perform quality assurance/quality control, and verify and report savings derived from the program.

SOPs are managed in-house with project sponsors providing eligible program measures. Project sponsors are typically EESPs; however, for commercial projects an AEP Texas end-use customer may serve as its own project sponsor. Eligible project sponsors can submit an application(s) for project(s) meeting the minimum SOP requirements.

AEP Texas monitors projects being submitted to not accept duplicate enrollments for the same measures in multiple programs.



## **Outreach Activities**

- Promote internet websites with program information including project eligibility, end-use measures, incentives, procedures, application forms, and in some cases a list of participating project sponsors and the available program budget;
- Utilize mass e-mail notifications to inform and update potential project sponsors on AEP Texas energy efficiency program opportunities;
- Conduct workshops as necessary to explain program elements such as responsibilities of the project participants, program requirements, incentive information and the application and reporting process;
- Conduct specific project sponsor/contractor training sessions as necessary based on the energy efficiency programs being implemented;
- Participate in local, regional, state-wide, and industry-related outreach activities as may be necessary; and
- Facilitate earned media opportunities, spotlighting successful projects and/or interesting stories as applicable.

**Table 2: 2024 Energy Efficiency Program Portfolio**

<b>Program</b>	<b>Target Market</b>	<b>Application</b>
Commercial Solutions MTP	Commercial	Retrofit & New Construction
Commercial SOP	Commercial	Retrofit & New Construction
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	Commercial & Residential	Retrofit
Food Service Pilot MTP	Commercial	Retrofit & New Construction
Hard-to-Reach SOP	Residential Hard-to-Reach	Retrofit & New Construction
High-Performance New Homes MTP	Residential	New Construction
Load Management SOP	Commercial	Retrofit
Multifamily Smart Thermostat Pilot MTP	Residential	Retrofit
Open MTP	Commercial	Retrofit
Residential SOP	Residential	Retrofit & New Construction
SCORE/CitySmart MTP	Commercial	Retrofit & New Construction
SMART Source <sup>SM</sup> Solar PV MTP	Commercial & Residential	Retrofit & New Construction
Targeted Low-Income Energy Efficiency Program	Low-Income Residential	Retrofit
Winter Load Management SOP	Commercial	Retrofit

## ***B. Existing Programs***

### **Commercial Solutions Market Transformation Program (CS MTP)**

The CS MTP targets commercial customers (other than governmental and educational entities) that do not have the in-house expertise to: 1) identify, evaluate, and undertake energy efficiency improvements; 2) properly evaluate energy efficiency proposals from vendors; and/or 3) understand how to leverage their energy savings to finance projects. Incentives are paid to customers for eligible energy efficiency measures that are installed in new or retrofit applications that result in verifiable demand and energy savings.

### **Commercial Standard Offer Program (CSOP)**

The CSOP targets commercial customers of all sizes. Variable incentives are available to project sponsors based upon verified demand and energy savings for eligible measures installed in new or retrofit applications.

### **CoolSaver A/C Tune-Up Market Transformation Program (CoolSaver MTP)**

The CoolSaver MTP is designed to overcome market barriers that prevent residential and small commercial customers from receiving high performance air conditioning (A/C) system tune-ups. The program works through local A/C networks to offer key program components, including:

- Training and certifying A/C technicians on the tune-up and air flow correction services and protocols;
- Paying incentives to A/C contactors for the successful implementation of A/C tune-up and air flow correction services; and
- Paying incentives to A/C contractors who replace existing residential air conditioners and/or heat pumps with new high efficiency units of 16 SEER or higher. Additional incentives are paid for early retirement of operational equipment and for “right-sizing” replacement units.

### **Food Service Pilot Market Transformation Program (Food Service Pilot MTP)**

The Food Service Pilot MTP targets commercial Food Service participants and market actors. This program will feature a point-of-sale rebate at the Food Service equipment dealer and will engage other key market actors to stimulate the adoption of energy efficient equipment.

### **Hard-to-Reach Standard Offer Program (HTR SOP)**

The HTR SOP targets residential customers with total annual household incomes at or below 200% of current federal poverty guidelines. Incentives are paid to project sponsors for eligible measures installed in new and retrofit applications that result in verifiable demand and energy savings. Project comprehensiveness is encouraged and customer education materials regarding energy conservation behavior are distributed by project sponsors.

### **High-Performance New Homes Market Transformation Program (New Homes MTP)**

The New Homes MTP targets several market participants, primarily homebuilders and consumers. The program's goal is to create conditions in which consumers demand energy-efficient homes, and homebuilders supply them. Incentives are paid to homebuilders who construct homes to strict energy-efficient building guidelines and that are at least 5% above the Texas Baseline Reference Home and meet all minimum energy code requirements. The program has a tiered design that uses a combination of mandatory, additional elective, and innovative measures to promote market transformation and drive deep energy savings. ENERGY STAR<sup>®</sup> and complete foam encapsulated homes are offered as alternative pathways to Tiers. Bonus incentives are offered for heat pump water heaters, prewiring for future installation of Level 2 EV chargers, ENERGY STAR smart thermostats, affordable/low-income housing, right-sized HVAC, and to builders who switch from electric resistance furnaces to heat pumps. Each home results in verifiable demand and energy savings. In addition to homebuilder and consumer outreach, the New Homes MTP targets key market actors in the homebuilding production and sales cycle: home energy raters, homebuilder sales agents, real estate agents, HVAC contractors, mortgage lenders, product manufacturers, homebuilder associations, and media outlets.

### **Load Management Standard Offer Program (LM SOP)**

The LM SOP targets non-residential customers with a peak electric demand of 500 kW or more and able to reduce at least 5 kW demand or more during a curtailment event. Curtailment events occur during the program operating period June 1 through September 30, from 1 pm through 7 pm, excluding weekends and federal holidays. Program participants include non-residential customers and Market Actors that include national or local energy efficiency service providers, commercial aggregation groups and REPs. Load curtailment events are dispatched by AEP Texas to the program

participants providing a 30-minute advance notification and will have a one-to-four-hour duration. Incentive payments are based on the average measured and verified demand reduction during the program operating period.

### **Open Market Transformation Program (Open MTP)**

The Open MTP targets traditionally underserved small commercial customers who may not employ knowledgeable personnel with a focus on energy efficiency, who are limited in the ability to implement energy efficiency measures, and/or who typically do not actively seek the help of a professional EESP. Small commercial customers with a peak demand not exceeding 150 kW in the previous twelve consecutive billing months may qualify to participate in the program. Available incentives are paid directly to the contractor, thereby reducing a portion of the project cost for the customer.

The program is intended to overcome market barriers for participating contractors by providing technical support and incentives to implement energy efficiency upgrades and produce demand and energy savings.

### **Residential Standard Offer Program (RSOP)**

The RSOP targets all residential customers, paying incentives to project sponsors for eligible measures installed in new and retrofit applications that result in verified demand and energy savings. Project comprehensiveness is encouraged.

### **SCORE/CitySmart Market Transformation Program (SCORE/CS MTP)**

The SCORE/CS MTP provides energy efficiency and demand reduction solutions for public and private educational entities grades K-12 as well as colleges and universities. In addition to educational facilities, SCORE/CS MTP provides these same solutions to local, state, county, and federal government customers. This program is designed to help educate and assist these customers in lowering their energy use by facilitating the integration of energy efficiency into their short- and long-term planning, budgeting, and operational practices. Incentives are paid to participating customers for eligible energy efficiency measures that are installed in new or retrofit applications that result in verifiable demand and energy savings.

### **SMART Source<sup>SM</sup> Solar PV Market Transformation Program (PV MTP)**

The PV MTP offers incentives to residential and commercial customers for the installation of solar photovoltaic (PV) systems interconnected on the customer's side of the meter. The incentives help offset the initial costs of installing solar PV systems and encourage service providers to seek more installation opportunities. In addition to demand and energy savings achieved from the installations, the PV MTP aims to transform the solar PV market by increasing the number of qualified technicians and installers and decreasing the average installed cost of PV systems, thereby creating greater market economies of scale.

### **Targeted Low-Income Energy Efficiency Program (TLIP)**

The TLIP is designed to cost-effectively reduce the energy consumption and energy costs for low-income residential customers in the AEP Texas service territory. Weatherization service providers install eligible weatherization and energy efficiency measures in qualified households that meet the Department of Energy (DOE) income-eligibility guidelines of at or below 200% of the federal poverty guidelines. A Savings-to-Investment Ratio of 1.0 or higher is required of each serviced dwelling unit.

### **Winter Load Management SOP (WLM SOP)**

The WLM SOP targets non-residential customers with a peak electric demand of 500 kW or more and able to reduce at least 100 kW demand or more during a curtailment event. Curtailment events occur during the program operating period December 1 through February 28, 24 hours a day, seven days a week. Program participants include non-residential customers and Market Actors that include national or local energy efficiency service providers, commercial aggregation groups and REPs. Load curtailment events are dispatched by AEP Texas to the program participants providing a 30-minute advance notification and will have a one-to-four-hour duration. Incentive payments are based on the average measured and verified demand reduction during the program operating period.

### ***C. New Programs for 2024***

#### **Multifamily Smart Thermostat Pilot MTP**

The Multifamily Smart Thermostat Pilot MTP targets residential multi-family properties and provides incentives for the installation of qualified ENERGY STAR® thermostats in an eligible property. To be eligible, properties must be individually metered AEP Texas meters with individual electric resistance heating systems. Existing thermostats cannot already be ENERGY STAR® smart thermostats. Participants in the program may include property owners, management companies, and EESPs.

### ***D. Discontinued Programs***

There are no discontinued programs for 2024.

## II. Customer Classes

The AEP Texas energy efficiency programs target its Residential and Commercial customer classes. The programs also target customer sub-classes, such as Residential Hard-to-Reach and Low-Income, Schools, Small Businesses, and Local Governments.

The annual projected savings targets are allocated among these customer classes and sub-classes by examining historical program results and by evaluating economic trends, in compliance with 16 TAC § 25.181(e)(3).

Table 3 summarizes the number of customers in each customer class and the Residential Hard-to-Reach sub-class. The numbers listed are the actual number of active electric service accounts by class served for the month of January 2024. These numbers were used to determine goal and budget allocations for each customer class and program. It should be noted, however, that the actual distribution of the annual goal and budget required to achieve the goal must remain flexible based upon the conditions of the marketplace, the potential interest a customer class may have in a specific program, and the overriding objective of meeting the mandated demand and energy reduction goals in total. AEP Texas offers a varied portfolio of SOPs and MTPs such that all eligible customer classes have access to energy efficiency alternatives.

**Table 3: Summary of Customer Classes**

<b>Customer Class</b>	<b>Number of Customers</b>
Commercial	211,968
Residential	1,004,607
Hard-to-Reach <sup>2</sup>	315,447

\* Hard-to-Reach customer count is a sub-set of the Residential total.

---

<sup>2</sup> According to the U.S. Census Bureau's 2021 Current Population Survey, 31.4% of Texas families fell below 200% of the poverty threshold in 2020. Applying that percentage to AEP Texas' residential customer base of 1,004,607, the number of HTR customers is estimated to be 315,447.

### **III. Energy Efficiency Goals and Projected Savings**

AEP Texas' 2024 annual demand and energy reduction goals to be achieved are 21.55 MW and 37,756 MWh. AEP Texas' 2025 annual goals are 21.85 MW and 38,281 MWh. These goals have been calculated as prescribed by the EE Rule.

The 2024 goal was calculated by applying four-tenths of 1% (0.004) of the summer weather-adjusted peak demand for its residential and commercial customers to the five year average (2018-2022) peak demand at the meter of 5,387 MW. This resulted in a calculated goal of 21.55 MW.

The 2025 demand goal is calculated by applying four-tenths of 1% (0.004) of the summer weather-adjusted peak demand for its residential and commercial customers to the five-year average (2019-2023) peak demand at the meter of 5,460 MW. This results in a calculated goal of 21.84 MW.

As stated in 16 TAC § 25.181(e)(4), a utility's energy savings goal is calculated from its demand savings goal, using a 20% conservation load factor.

Table 4 presents historical annual growth in demand data for the previous five years that was used to calculate AEP Texas' goals. Table 5 presents the projected demand and energy savings for PY 2024 and PY 2025 by program, for each customer class with fully-deployed program budgets.



**Table 4: Annual Growth in Demand and Energy Consumption – AEP Texas**

Calendar Year	Peak Demand (MW) @ Source						Energy Consumption (GWh) @ Meter				Energy Efficiency Goal Calculations		
	Total System		Residential & Commercial				Total System		Residential & Commercial				
	Actual	Weather Adjusted	Actual	Weather Adjusted	Opt-Out	Peak Demand at Source Net Opt-outs	Actual	Weather Adjusted	Actual	Weather Adjusted	Peak Demand at Meter*	5 year Average Peak Demand at Meter	Goal Metric: 0.4% Peak Demand at Meter
2017	6,391	6,234	5,879	5,722	-101	5,621	31,553	31,334	25,072	24,853	5,069	NA	NA
2018	6,339	6,349	5,817	5,827	-109	5,718	32,020	31,680	25,693	25,353	5,265	NA	NA
2019	6,501	6,364	5,945	5,807	-106	5,701	31,962	31,564	25,675	25,277	5,248	5,043	NA
2020	6,451	6,417	5,875	5,841	-75	5,766	31,746	31,767	25,194	25,214	5,317	5,112	NA
2021	6,451	6,580	5,814	5,943	-25	5,918	32,975	33,004	26,253	26,282	5,457	5,152	NA
2022	6,915	6,842	6,244	6,170	-47	6,123	35,714	35,500	28,877	28,663	5,647	5,207	NA
2023	7,693	7,051	6,797	6,155	-44	6,111	37,936	39,247	39,006	26,797	26,555	5,648	5,271
2024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5,387	21.55
2025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5,463	21.85

\*Line losses are derived from the loss factors determined in the 2021 line loss studies for AEP Texas (Central Division and North Division).

**Table 5: Projected Demand and Energy Savings by Program for Each Customer Class for 2024 and 2025 (at the Meter) – AEP Texas**

Customer Class and Program	Projected Savings 2024		Projected Savings 2025	
	kW	kWh	kW	kWh
<b>Commercial</b>	<b>50,723</b>	<b>57,619,917</b>	<b>50,390</b>	<b>56,330,371</b>
Commercial Solutions MTP	4,125	21,317,683	4,125	21,317,683
Commercial SOP	3,313	13,166,101	2,969	11,807,055
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	3,466	8,047,475	3,466	8,047,475
Food Service Pilot MTP	41	276,622	52	346,122
Load Management SOP	25,709	25,709	25,709	25,709
Open MTP	1,215	5,234,159	1,215	5,234,159
SCORE/CitySmart MTP	2,463	8,259,385	2,463	8,259,385
SMART Source <sup>SM</sup> Solar PV MTP	391	1,282,784	391	1,282,784
Winter Load Management	10,000	10,000	10,000	10,000
<b>Residential</b>	<b>7,800</b>	<b>23,947,347</b>	<b>13,905</b>	<b>24,048,617</b>
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	1,594	6,250,000	1,594	6,250,000
High-Performance New Homes MTP	2,273	3,731,061	2,273	3,731,061
Multifamily Smart Thermostat Pilot MTP	0	831,000	0	831,000
Residential DR Pilot SOP	0	0	6,086	18,257
Residential SOP	3,020	10,133,001	3,039	10,216,014
SMART Source <sup>SM</sup> Solar PV MTP	913	3,002,285	913	3,002,285
<b>Hard-to-Reach</b>	<b>3,253</b>	<b>7,279,788</b>	<b>3,253</b>	<b>7,279,788</b>
Hard-to-Reach SOP	1,449	4,005,591	1,449	4,005,591
TLI EE Program	1,804	3,274,197	1,804	3,274,197
<b>Total Annual Projected Savings</b>	<b>61,775</b>	<b>88,847,052</b>	<b>67,547</b>	<b>87,658,776</b>

#### IV. Program Budgets

Tables 6 and 7 present total proposed budget allocations required to meet AEP Texas’ projected demand and energy savings to be achieved for PY 2024 and 2025. The budget allocations are defined by the overall projected demand and energy savings, the avoided costs of capacity and energy specified in the EE Rule, allocation of demand goals, and the incentive levels by customer class. The budget allocations are detailed by customer class, program, and in the following budget categories: incentives, administration, research and development (R&D), and evaluation, measurement and verification (EM&V).

**Table 6: Projected Annual Budget by Program for Each Customer Class  
for 2024 AEP Texas**

<b>2024</b>	<b>Incentives</b>	<b>Admin</b>	<b>R&amp;D</b>	<b>EM&amp;V</b>	<b>Total Budget</b>
<b>Commercial</b>					
Commercial Solutions MTP	\$903,248	\$115,485			\$1,018,733
Commercial SOP	\$1,875,762	\$218,467			\$2,094,229
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	\$796,700	\$88,522			\$885,222
Food Service Pilot MTP	\$280,000	\$25,000			\$305,000
Load Management SOP	\$737,700	\$85,300			\$823,000
Open MTP	\$1,213,041	\$150,959			\$1,364,000
SCORE/CitySmart MTP	\$1,192,300	\$141,884			\$1,334,184
SMART Source <sup>SM</sup> Solar PV MTP	\$287,310	\$35,017			\$322,327
Winter Load Management	\$350,000	\$25,000			\$375,000
<b>Residential</b>					
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	\$825,000	\$91,667			\$916,667
High-Performance New Homes MTP	\$965,000	\$107,222			\$1,072,222
Multifamily Smart Thermostat Pilot MTP	\$150,000	\$15,000			\$165,000
Residential SOP	\$3,164,657	\$359,868			\$3,524,525
SMART Source <sup>SM</sup> Solar PV MTP	\$670,941	\$79,059			\$750,000
<b>Hard-to-Reach</b>					
Hard-to-Reach SOP	\$1,412,560	\$156,840			\$1,569,400
TLI EE Program	\$1,799,159	\$187,144			\$1,986,303
<b>Research and Development (R&amp;D)</b>					
R&D			\$353,646		\$353,646
<b>Evaluation, Measurement &amp; Verification (EM&amp;V)</b>					
EM&V				\$232,708	\$232,708
<b>Total Budget</b>	<b>\$16,623,378</b>	<b>\$1,882,434</b>	<b>\$353,646</b>	<b>\$232,708</b>	<b>\$19,092,166</b>

**Table 7: Projected Annual Budget by Program for Each Customer Class  
for 2025 AEP Texas**

<b>2025</b>	<b>Incentives</b>	<b>Admin</b>	<b>R&amp;D</b>	<b>EM&amp;V</b>	<b>Total Budget</b>
<b>Commercial</b>					
Commercial Solutions MTP	\$903,248	\$90,485			\$993,733
Commercial SOP	\$1,675,762	\$189,467			\$1,865,229
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	\$796,700	\$88,522			\$885,222
Food Service Pilot MTP	\$280,000	\$25,000			\$305,000
Load Management SOP	\$737,700	\$85,300			\$823,000
Open MTP	\$1,213,041	\$130,959			\$1,344,000
SCORE/CitySmart MTP	\$1,192,300	\$135,884			\$1,328,184
SMART Source <sup>SM</sup> Solar PV MTP	\$287,310	\$35,017			\$322,327
Winter Load Management	\$350,000	\$25,000			\$375,000
<b>Residential</b>					
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	\$825,000	\$91,667			\$916,667
High-Performance New Homes MTP	\$965,000	\$107,222			\$1,072,222
Multifamily Smart Thermostat Pilot MTP	\$150,000	\$15,000			\$165,000
Residential DR Pilot SOP	\$250,000	\$25,000			\$275,000
Residential SOP	\$3,190,157	\$344,368			\$3,534,525
SMART Source <sup>SM</sup> Solar PV MTP	\$670,941	\$74,059			\$745,000
<b>Hard-to-Reach</b>					
Hard-to-Reach SOP	\$1,412,560	\$156,840			\$1,569,400
TLI EE Program	\$1,799,159	\$187,144			\$1,986,303
<b>Research and Development (R&amp;D)</b>					
R&D			\$353,646		\$353,646
<b>Evaluation, Measurement &amp; Verification (EM&amp;V)</b>					
EM&V				\$233,450	\$233,450
<b>Total Budget</b>	<b>\$16,698,878</b>	<b>\$1,806,934</b>	<b>\$353,646</b>	<b>\$233,450</b>	<b>\$19,092,908</b>

# ENERGY EFFICIENCY REPORT

## V. Historical Demand and Energy Goals and Savings Achieved for the Previous Five Years

Table 8 contains the demand and energy reduction goals and actual savings achieved for the previous five years (2019-2023) calculated in accordance with the EE Rule.

**Table 8: Historical Demand and Energy Goals\* and Savings Achieved (at the Meter)**

Calendar Year	Actual Weather Adjusted Demand Goal (MW)	Actual Weather Adjusted Energy Goal (MWh)	Savings Achieved (MW)	Savings Achieved (MWh)
<b>AEP Texas</b>				
2023	21.08	36,932	62.92**	70,899
2022	20.83	36,494	53.40	83,915
2021	20.60	36,091	45.31	83,701
<b>Central</b>				
2020	16.38	28,698	50.45	59,259
2019	16.14	28,277	39.70	58,398
<b>North</b>				
2020	4.26	7,464	5.79	12,768
2019	4.26	7,464	6.58	11,968

\* Actual Weather Adjusted MW and MWh Goals as reported in the EEPs filed in years 2019-2023.

\*\*Central and North divisions are combined. Reported savings achieved at the source are 58.26 MW (58.26x 1/(1-6.73%)) = 62.46 MW for Central division and 4.67 MW (4.67 x 1/(1-10.55%)) = 5.22 MW for North division.

## VI. Projected, Reported and Verified Demand and Energy Savings

**Table 9: Projected versus Reported and Verified Savings for 2023 and 2022 (at the Meter)**

<b>2023</b>	Projected Savings		Reported and Verified Savings	
	Customer Class and Program	kW	kWh	kW
<b>Commercial</b>				
Commercial Solutions MTP	1,664	7,458,262	1,192	6,164,045
Commercial SOP	3,133	16,316,286	1,548	6,128,668
CoolSaverSM A/C Tune-Up MTP	3,466	8,047,475	4,920	10,173,371
Food Service Pilot MTP	25	166,479	0	0
Load Management SOP	26,308	26,308	35,115	35,115
Open MTP	1,215	5,234,159	1,354	4,915,529
SCORE/CitySmart MTP	2,463	8,259,385	2,579	10,419,334
SMART SourceSM Solar PV MTP	269	903,022	246	821,001
Winter Load Management	12,768	12,768	4,281	4,281
<b>Residential</b>				
CoolSaverSM A/C Tune-Up MTP	1,594	6,250,000	1,984	6,726,137
High-Performance New Homes MTP	2,215	3,703,316	2,695	4,551,687
Residential SOP	2,785	11,187,718	2,874	10,206,779
SMART SourceSM Solar PV MTP	759	2,484,661	1,041	3,759,653
<b>Hard-to-Reach</b>				
Hard-to-Reach SOP	1,408	5,065,232	1,447	3,962,708
TLI EE Program	840	1,532,434	1,646	3,030,412
<b>Total Annual Savings</b>	<b>60,913</b>	<b>76,647,505</b>	<b>62,923</b>	<b>70,898,719</b>
<b>2022</b>				
Customer Class and Program	Projected Savings		Reported and Verified Savings	
	kW	kWh	kW	kWh
<b>Commercial</b>				
Commercial Solutions MTP	1,664	7,458,262	1,649	7,980,776
Commercial SOP	2,553	13,452,356	3,131	15,955,810
CoolSaverSM A/C Tune-Up MTP	3,466	8,047,475	5,711	11,685,066
Load Management SOP	26,507	24,387	28,968	28,968
Open MTP	1,215	5,234,159	1,252	4,529,866
SCORE/CitySmart MTP	2,463	8,259,385	2,437	9,927,928
SMART SourceSM Solar PV MTP	278	901,737	320	1,010,922
<b>Residential</b>				
CoolSaverSM A/C Tune-Up MTP	1,594	6,250,000	1,522	7,753,843
High-Performance New Homes MTP	2,353	3,917,476	2,657	4,578,039
Residential SOP	2,191	9,477,985	2,720	10,761,775
SMART SourceSM Solar PV MTP	615	2,101,421	897	3,223,034
<b>Hard-to-Reach</b>				
Hard-to-Reach SOP	1,930	3,845,156	1,470	5,247,286
TLI EE Program	966	1,517,843	671	1,231,753
<b>Total Annual Savings</b>	<b>47,796</b>	<b>70,487,631</b>	<b>53,404</b>	<b>83,915,065</b>

## VII. Historical Program Expenditures

This section documents AEP Texas' incentive and administration expenditures for the previous five years (2019-2023) detailed by program for each customer class.

**Table 10: Historical Program Incentive and Administrative Expenditures for 2019 through 2023 (000's) – AEP Texas**

	2023		2022		2021		2020		2019	
	Incent.	Admin	Incent.	Admin	Incent.	Admin	Incent.	Admin	Incent.	Admin
<b>Commercial</b>										
Commercial Solutions MTP	\$754.21	\$74.67	\$876.53	\$83.80	\$900.63	\$103.88	\$869.07	\$97.15	\$900.31	\$107.09
Commercial SOP	\$897.14	\$178.58	\$1,846.07	\$235.99	\$2,000.12	\$230.86	\$1,798.52	\$216.04	\$1,974.48	\$232.53
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	\$902.27	\$74.92	\$876.77	\$61.63	\$595.48	\$49.88	\$595.50	\$49.42	\$647.82	\$53.34
Food Service Pilot MTP	\$160.00	\$11.43	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP
Load Management SOP	\$1,000.08	\$88.31	\$802.17	\$90.38	\$573.38	\$64.45	\$828.41	\$61.74	\$584.63	\$50.03
Open MTP	\$1,107.22	\$102.65	\$1,055.08	\$111.85	\$1,199.15	\$124.51	\$1,205.48	\$134.37	\$1,195.60	\$144.59
SCORE/CitySmart MTP	\$1,186.92	\$114.44	\$1,180.23	\$112.44	\$1,127.97	\$110.45	\$1,121.97	\$106.35	\$1,111.64	\$113.42
SMART Source <sup>SM</sup> Solar PV MTP	\$207.28	\$20.56	\$169.78	\$17.76	\$197.02	\$19.66	\$254.47	\$27.80	\$284.99	\$22.66
Winter Load Management SOP	\$149.84	\$17.77	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP

(Table continued on next page)

**Table 10: Historical Program Incentive and Administrative Expenditures for 2019 through 2023 (000's) – AEP Texas  
(Continued)**

	2023		2022		2021		2020		2019	
	Incent.	Admin	Incent.	Admin	Incent.	Admin	Incent.	Admin	Incent.	Admin
<b>Residential</b>										
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	\$825.03	\$67.95	\$819.78	\$74.64	\$677.93	\$56.78	\$673.00	\$55.85	\$696.41	\$57.31
High-Performance New Homes MTP	\$931.43	\$95.14	\$844.09	\$97.17	\$947.26	\$90.06	\$909.56	\$78.92	\$807.36	\$73.92
Residential Pool Pump Pilot	NAP	NAP	NAP	NAP	\$73.66	\$10.88	\$65.90	\$13.11	\$76.70	\$9.68
Residential SOP	\$3,175.02	\$294.33	\$2,963.58	\$279.89	\$3,365.28	\$329.41	\$3,445.80	\$326.30	\$3,260.74	\$363.80
SMART Source <sup>SM</sup> Solar PV MTP	\$647.16	\$59.31	\$605.92	\$59.87	\$307.75	\$32.77	\$293.18	\$31.04	\$300.25	\$24.11
<b>Hard-to-Reach</b>										
Hard-to-Reach SOP	\$1,406.17	\$147.65	\$1,427.56	\$135.03	\$1,412.44	\$176.68	\$1,624.91	\$175.96	\$1,453.44	\$127.71
Targeted Low-Income Energy Efficiency Program	\$1,783.49	\$185.75	\$1,611.58	\$178.63	\$1,826.49	\$173.45	\$1,771.13	\$142.18	\$1,813.52	\$183.16
<b>Research and Development (R&amp;D)</b>	NAP	\$283.66	NAP	\$391.13	NAP	\$177.82	NAP	\$280.10	NAP	\$386.96
<b>Evaluation and Measurement Verification (EM&amp;V)</b>	NAP	\$232.71	NAP	\$211.36	NAP	\$206.95	NAP	\$215.60	NAP	\$211.99
<b>Total Expenditures</b>	<b>\$15,133.24</b>	<b>\$2,049.83</b>	<b>\$15,079.13</b>	<b>\$2,141.57</b>	<b>\$15,204.57</b>	<b>\$1,958.49</b>	<b>\$15,456.90</b>	<b>\$2,011.93</b>	<b>\$15,107.89</b>	<b>\$2,162.30</b>



## **VIII. Program Funding for Program Year 2023**

As shown in Table 11 the total projected budget for AEP Texas in 2023 was \$18,797,167 and the actual total funds expended were \$17,183,063. This is an overall total program expenditure difference of 8.6% from the amount budgeted.

The following individual program expenditures differed from their respective proposed budgets by more than 10%, as explained below.

The Commercial Solutions MTP was under budget due to several large projects not being completed and one large M&V project becoming ineligible.

The Commercial Standard Offer Program was under budget due to several supply chain issues around lighting and HVAC measures. Several projects were delayed or canceled by the customer. There were also fewer participants and projects this year with smaller savings per project.

The CoolSaver MTP commercial budget was increased as funding was reallocated to gain additional commercial savings and ensure overall energy efficiency savings goals were met.

The Food Service Pilot MTP program was under budget due to a delayed start.

The Load Management SOP program participants exceeded the budget amount as they underestimated their actual load reduction. As a result, when called on, they exceeded their actual projected load reduction amount.

The Open MTP was under budget due to the addition of the AC tune ups, air infiltration (door sweeps & weather stripping), and hand dryers measures, which have less savings and lower incentives.

The SMART Source Solar PV MTP commercial class was under budget due to a large project being delayed by supply chain issues.

The Winter Load Management SOP program was under budget because fewer participants enrolled. Some of these participants also overestimated their projected load reductions and when time came to curtail, only a portion of their projected load could be reduced. Another issue arose when a load reduction event coincided with necessary business operations and the nominated load could not be fully executed.

The combined 2023 expenditures for the TLIP and the HTR SOP constituted 20.62% of the energy efficiency budget.

**Table 11: Program Funding for Program Year 2023– AEP Texas**

	Total Projected Budget <sup>3</sup>	Numbers of Customers Participating	Actual Funds Expended (Incentives)	Actual Funds Expended (Admin)	Research and Development (R&D)	Evaluation and Measurement Verification (EM&V)	Total Funds Expended
<b>Commercial</b>							
Commercial Solutions MTP	\$1,014,503	68	\$754,211	\$74,674			\$828,885
Commercial SOP	\$2,094,229	86	\$897,138	\$178,577			\$1,075,715
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	\$876,093	944	\$902,266	\$74,924			\$977,189
Food Service Pilot MTP	\$275,000	0	\$160,000	\$11,427			\$171,427
Load Management SOP	\$821,563	385	\$1,000,077	\$88,306			\$1,088,383
Open MTP	\$1,360,294	283	\$1,107,216	\$102,654			\$1,209,870
SCORE/CitySmart MTP	\$1,317,465	74	\$1,186,920	\$114,436			\$1,301,357
SMART Source <sup>SM</sup> Solar PV MTP	\$319,685	9	\$207,285	\$20,564			\$227,849
Winter Load Management SOP	\$375,000	9	\$149,836	\$17,774			\$167,610
<b>Residential</b>							
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	\$905,578	2,857	\$825,027	\$67,950			\$892,977
High-Performance New Homes MTP	\$1,072,222	814	\$931,425	\$95,143			\$1,026,568
Residential SOP	\$3,495,156	3,845	\$3,156,599	\$293,082			\$3,449,682
SMART Source <sup>SM</sup> Solar PV MTP	\$741,375	196	\$647,156	\$59,308			\$706,464
<b>Hard-to-Reach</b>							
Hard-to-Reach SOP	\$1,556,347	1,445	\$1,424,593	\$148,899			\$1,573,493
Targeted Low-Income Energy Efficiency	\$1,986,303	751	\$1,783,486	\$185,746			\$1,969,231
<b>Research and Development</b>	\$353,646				\$283,655		\$283,655
<b>EM&amp;V</b>							
Statewide EM&V Contractor	\$232,709					\$232,709	\$232,709
<b>Total</b>	<b>\$18,797,167</b>	<b>11,766</b>	<b>\$15,133,235</b>	<b>\$1,533,464</b>	<b>\$283,655</b>	<b>\$232,709</b>	<b>\$17,183,063</b>

<sup>3</sup> Projected Budget from the revised EEPR filed May 2023 Project No. 54470.

## **IX. Market Transformation Program Results 2023**

### **Commercial Solutions MTP**

The Commercial Solutions MTP goal was to acquire 1,664 kW demand savings. A total of 1,194 kW was achieved by participation of 68 customers.

### **CoolSaver<sup>SM</sup> MTP**

The CoolSaver<sup>SM</sup> MTP verified and reported 6,904 kW. This included participation by 3,801 residential and commercial customers.

### **High-Performance New Homes MTP (New Homes)**

In 2023, 814 high-performance homes were constructed in the New Homes program with a savings of 2,695 kW. The program provided continuing education courses and other training opportunities for contractors, homebuilders, home energy raters, HVAC contractors and other market actors on the advantages of High-Performance and ENERGY STAR homes and building practices. Training for HVAC market actors focused on Manual J training to re-emphasize the importance of performing load calculations for correctly sizing HVAC systems. AEP Texas continued their partnership with the Environmental Protection Agency's (EPA) ENERGY STAR program and received the ENERGY STAR Partner of the Year Sustained Excellence award.

### **Open MTP**

The Open MTP goal was to acquire 1,215 kW demand savings. A total of 1,354 kW was achieved with 283 small commercial customers and 14 participating contractors.

### **SCORE/CitySmart MTP**

The SCORE/CitySmart MTP was projected to acquire 2,463 kW demand savings. A total of 2,579 kW was achieved. This included participation by 74 customers.

### **SMART Source<sup>SM</sup> Solar PV MTP**

The PV MTP projected to acquire 1,028 kW in demand savings and 3,387,683 kWh in energy savings from the residential and non-residential components. A total of 205 residential and non-residential solar PV projects were completed within the program, resulting in a peak demand reduction of 1,287 kW and 4,580,654 kWh of energy savings.

## **X. Administrative Costs and Research and Development**

### **Administrative Costs**

Administrative costs incurred to meet the energy efficiency goals and objectives include, but may not be limited to, energy efficiency employees' payroll, costs associated with regulatory filings, and EM&V costs outside of the actual cost associated with the EM&V contractor. Any portion of these costs that are not directly assignable to a specific program are allocated among the programs in proportion to the program incentive costs.

### **Program Research and Development**

R&D activities are intended to help AEP Texas meet future energy efficiency goals by researching new technologies and program options and developing better, more efficient ways to administer current programs. In 2023 AEP Texas dedicated resources to enhance data collection and management systems for current programs. In addition, AEP Texas participated with Electric Utility Marketing Managers of Texas (EUMMOT) in researching potentially new deemed savings measures for various programs. AEP Texas contracted with Frontier Energy to conduct a 2-year evaluation of electric vehicle (EV) chargers to modify the Texas TRM. The goal was to determine if savings could be increased to improve cost-effectiveness, therefore allowing TDUs to offer higher incentives for EV chargers. The study found that potential annual kWh savings could be increased over savings outlined in the existing TRM.

### **Informational Activities**

AEP Texas continues to encourage and facilitate the involvement of REPs and EESPs in the delivery of its programs to customers.

## XI. 2024 Energy Efficiency Cost Recovery Factor (EECRF)

AEP Texas' EECRF for PY 2024 was approved by the Commission in Docket No. 55094 and includes \$24,683,795 for AEP Texas as shown in Table 12. The adjusted factors are shown in Table 13.

**Table 12: PY 2024 EECRF**

2024 Projected Costs	\$18,544,458
Performance Bonus for 2022 results	\$6,077,493
Over-recovery, returned to customers with interest	(\$230,118)
EECRF proceeding expenses	\$55,571
Projected EM&V costs	\$233,450
Total EECRF	\$24,683,795

**Table 13: 2024 EECRF Factors**

<b>Customer Class</b>	<b>AEP Texas</b>
Residential Service	\$0.000990 per kWh
Secondary Service (less than or equal to 10 kW)	\$0.000681 per kWh
Secondary Service (greater than 10 kW)	\$0.000902 per kWh
Primary Service	\$0.000559 per kWh
Transmission Service	\$0.000000 per kW

## XII. 2023 EECRF Summary

### 2023 Collections for Energy Efficiency

AEP Texas collected \$25,419,040 through its 2023 EECRF. A performance bonus of \$7,931,405 for exceeding its 2021 energy efficiency goals and \$197,105, including interest, returned to customers, and \$38,261 in EECRF proceeding expenses, are reflected in the total amount collected for energy efficiency in 2023.

### Energy Efficiency Program Costs Expended

AEP Texas expended a total of \$16,950,354 for its 2023 energy efficiency programs. The amount expended is \$1,074,104 less than the 2023 projected budget of \$18,024,458 for energy efficiency programs.

### **Over-Recovery of Energy Efficiency Costs**

AEP Texas’ actual 2023 energy efficiency program costs (including EM&V costs) less municipal rate case expenses paid in 2023 but not yet recovered in rates are \$17,169,086 and actual energy efficiency program revenues are \$25,419,040. These associated 2023 costs and revenues result in a total over-recovery of energy efficiency costs of \$475,483, including the removal of the final true-up of the Transmission Class who had trailing revenues in 2023 from the 2021 true-up. Including interest of \$29,234 the over-recovery is \$504,717. This is the amount that the AEP Texas will request be returned to customers within its 2025 EECRF.

### **XIII. Underserved Counties**

AEP Texas has defined Underserved Counties as any county in the service territory for which no demand or energy savings were reported through any of its 2023 SOPs or MTPs. Per 16 TAC § 25.181(l)(2)(U), a list of the Underserved Counties is shown in Table 14:

**Table 14: Underserved Counties**

Baylor	Briscoe	Brown	Caldwell
Coleman	Collingsworth	Crane	Donley
Gillespie	Goliad	Guadalupe	Hall
Kenedy	Kent	King	Kinney
Mason	McCulloch	McMullen	McNard
Motley	Nolan	Presidio	Schleicher
Stephens	Stonewall	Throckmorton	Wheeler
Wilson			

## ACRONYMS

<b>COMMISSION</b>	Public Utility Commission of Texas
<b>CSOP</b>	Commercial Standard Offer Program
<b>CS MTP</b>	Commercial Solutions Market Transformation Program
<b>DR</b>	Demand Response
<b>DSM</b>	Demand Side Management
<b>EECRF</b>	Energy Efficiency Cost Recovery Factor
<b>EEPR</b>	Energy Efficiency Plan and Report
<b>EE Rule</b>	Energy Efficiency Rule, 16 TAC §§ 25.181, 25.182 and 25.183
<b>EESP</b>	Energy Efficiency Service Providers
<b>EPA</b>	Environmental Protection Agency
<b>EUMMOT</b>	Electric Utility Marketing Managers of Texas
<b>Food Service Pilot MTP</b>	Food Service Pilot Market Transformation Program
<b>HTR</b>	Hard-To-Reach
<b>HTR SOP</b>	Hard-to-Reach Standard Offer Program
<b>LM SOP</b>	Load Management Standard Offer Program
<b>MTP</b>	Market Transformation Program
<b>NAP</b>	Not Applicable
<b>New Homes</b>	High-Performance New Home Market Transformation Program
<b>Open MTP</b>	Open Market Transformation Program



## Acronyms (Continued)

<b>PURA</b>	Public Utility Regulatory Act
<b>PV</b>	Photovoltaic
<b>PV MTP</b>	SMART Source <sup>SM</sup> Solar PV Market Transformation Program
<b>R&amp;D</b>	Research and Development
<b>REP</b>	Retail Electric Provider
<b>RES</b>	Residential
<b>RSOP</b>	Residential Standard Offer Program
<b>SCORE</b>	Schools Conserving Resources
<b>SCORE/CS MTP</b>	SCORE/CitySmart Market Transformation Program
<b>SOP</b>	Standard Offer Program
<b>TDU</b>	Transmission and Distribution Utility
<b>TLIP</b>	Targeted Low-Income Energy Efficiency Program
<b>TRM</b>	Texas Technical Reference Manual
<b>WLM SOP</b>	Winter Load Management Standard Offer Program

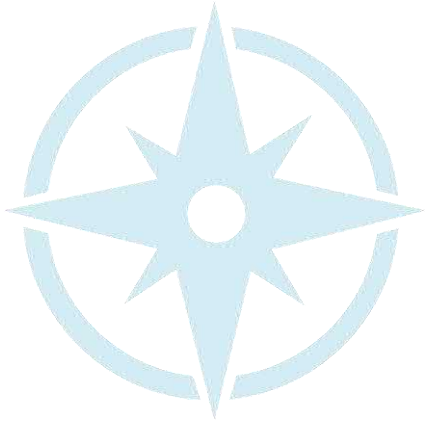
APPENDIX A:

REPORTED AND VERIFIED DEMAND AND ENERGY REDUCTION BY COUNTY: AEP TEXAS

Table with columns: County, Commercial Solutions MTP, Commercial SOP, Consave SMA/C Line-Us (Commercial), Consave SMA/C Line-Us (Residential), Hard-to-Reach SOP, High-Performance New Homes MTP, Load Management SOP, Winter Load Management SOP. Rows list various Texas counties like Aransas, Atascosa, Bandera, etc.

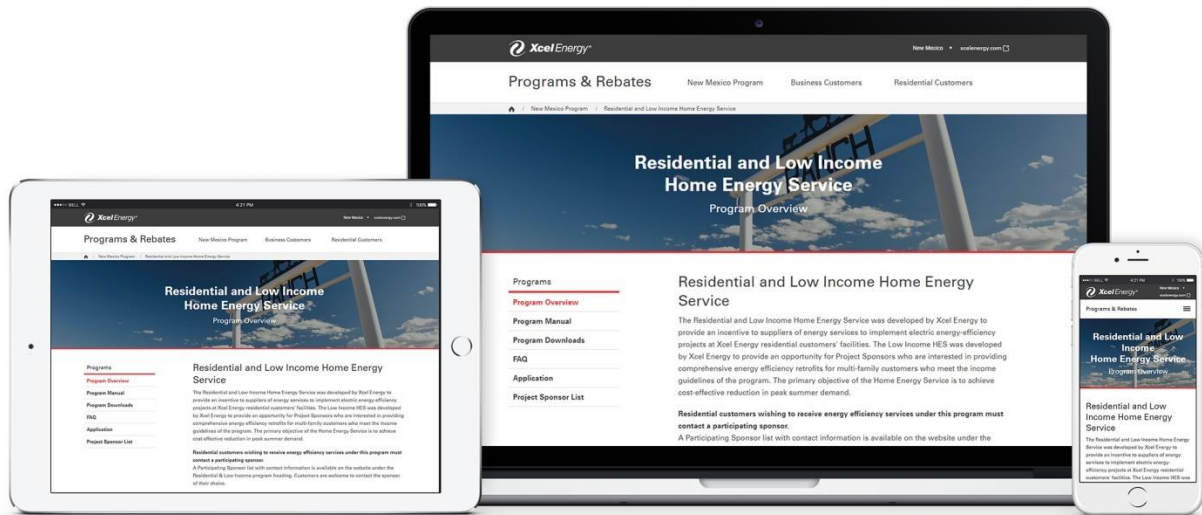
## Reported and Verified Demand and Energy Reduction by County: AEP Texas (Continued)

Reported and Verified Demand and Energy Reduction by County: AEP Texas (Continued)														
County	Open MTP		Residential SOP		SCORE/CitySmart MTP		SMART SourceSM Solar PV (Commercial)		SMART SourceSM Solar PV (Residential)		Targeted Low-Income Energy Efficiency Program		Total	
	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh
Aransas			11.06	60,526.30	34.92	190,961.00					0.81	1,408.54	317.26	602,500
Atascosa					4.57	14,619.00					7.14	25,672.41	29.00	52,313
Bandera													1.04	1,351
Bee			2.82	19,937.24	56.88	118,393.00				12.16	47,728.77		108.25	278,049
Brewster			3.97	8,935.09	17.16	116,320.00				11.58	42,638.35		55.22	246,267
Brooks			2.47	4,224.36									60.31	138,282
Calhoun			0.56	1,522.40									46.06	95,581
Callahan	40.84	52,624.44	50.36	87,032.06			42.04	137,384.25	12.73	44,968.88			160.20	338,969
Cameron	41.54	174,065.82	50.44	133,469.04					60.69	212,254.21	16.35	19,977.92	6,439.64	2,186,637
Childress													10.64	29,274
Coke			1.08	1,773.34	14.73	66,011.00							19.28	67,788
Colorado										3.09	23,948.53		43.42	23,989
Concho													4.68	5
Cottle											3.59	11,716.45	3.76	11,717
Crockett					48.58	137,992.00			5.37	17,037.66			53.95	155,030
De Witt													3.29	4,063
Dickens													1.93	2
Dimmit									6.04	17,698.79	90.05	155,097.76	154.79	175,462
Duval			7.08	40,862.21									9.45	45,416
Eastland									29.36	115,351.77			30.21	115,353
Edwards	10.45	49,786.60											11.18	49,787
Fisher													0.46	0
Foard											6.30	14,899.63	6.30	14,900
Frio									3.67	12,210.19			37.32	12,244
Gonzales					155.91	532,958.00							156.96	532,958
Hardeman											0.34	293.72	0.34	294
Haskell									4.41	15,708.14			7.34	15,708
Hidalgo	493.97	2,035,384.68	1,046.75	4,017,660.25	133.51	487,173.00	44.66	146,115.40	258.16	924,247.03	27.24	57,474.37	14,646.04	26,673,431
Irion			0.39	628.32	3.18	16,765.00							3.57	17,393
Jackson									3.93	20,303.48			5.45	22,853
Jeff Davis									4.80	19,320.58			13.92	64,890
Jim Hogg													3.03	3
Jim Wells			54.17	264,478.75					16.06	49,667.64			94.90	391,438
Jones			46.22	73,475.06	122.14	939,337.00			18.03	58,607.92	7.17	11,325.50	207.65	1,106,505
Karnes													4.93	5
Kimble													17.79	104,243
Kleberg			90.92	583,304.59	838.43	3,222,147.00			5.32	19,079.35			950.02	3,862,541
Knox	13.58	52,142.44									0.24	231.90	15.49	52,376
La Salle													1.57	2
Live Oak			0.11	784.00									4,536.77	407,412
Matagorda											627.43	1,096,965.36	1,363.04	1,239,104
Maverick					10.45	36,724.00			10.34	32,865.30	49.60	95,613.67	85.76	176,559
Medina													80.06	80
Nueces	27.98	129,157.51	412.49	2,243,776.72	160.28	540,058.00			110.06	472,773.10	26.12	46,704.21	8,297.92	11,100,064
Pecos													1.84	2
Reagan					100.44	382,198.00							101.90	382,199
Real											10.13	20,950.77	10.13	20,951
Reeves					57.59	206,807.00							57.59	206,807
Refugio			1.49	8,018.22									868.83	12,598
Runnels			85.58	119,523.75									193.01	260,412
San Patricio			110.78	577,938.87	188.33	448,953.00			12.39	54,056.32	117.78	130,315.52	8,133.77	1,695,762
Shackelford									10.53	36,183.64			10.53	36,184
Starr	8.14	33,834.73	164.58	604,418.69							1.63	3,638.01	2,382.40	1,639,796
Sterling													1.43	5,075
Sutton			1.12	1,571.03									1.63	1,572
Taylor	416.19	1,002,054.16	614.94	1,087,091.20	8.95	30,988.00	57.80	213,465.23	132.73	427,958.92	508.89	1,055,662.22	2,929.87	4,363,794
Tom Green	41.95	152,944.74	76.97	162,505.88	100.22	390,785.00	18.80	61,216.31	76.86	268,236.97			740.17	1,933,042
Upton													1.26	1
Uvalde									4.23	13,193.89	24.14	43,765.77	180.28	161,377
Val Verde									4.57	13,855.49	97.59	226,822.47	181.78	347,514
Victoria			10.06	17,632.93	43.76	214,757.00			5.97	16,336.82			2,812.43	808,624
Webb	280.46	1,265,836.85	23.58	71,100.66	490.29	2,352,540.00	83.06	262,820.14	199.06	708,242.24	29.49	34,447.43	6,175.50	8,395,472
Wharton													16.24	21,219
Willbarger											1.34	2,598.44	46.08	54,855
Willacy			4.17	14,578.01					3.74	12,330.41			1,177.55	181,929
Zapata									7.53	37,181.70			11.83	47,443
Zavala											0.26	501.28	4.17	509



## Appendix G: Marketing Samples

## Marketing Materials Examples



**Xcel Energy Efficiency Website built by Frontier (Launch version shown)  
for New Mexico and Texas Programs (<http://www.xcelenergyefficiency.com/>)**

Frontier worked with Xcel Energy stakeholders to learn their needs and target audience for a new website they requested. Using design guidelines to standardize the client’s marketing brand approach, Frontier built the Xcel Energy Efficiency website using HTML5, CSS3, and jQuery. The website is responsive, consistent across all browsers, and user-friendly for tablet and mobile devices. Frontier ensures that the website adheres to search engine optimization (SEO) best practices and like all Frontier-developed websites, includes Google Analytics Tracking Code to provide real-time tracking and reporting on website traffic and performance. Frontier monitors website analytics, maintains and updates content, and periodically makes improvements to the site in collaboration with Xcel Energy.



## Contractor Outreach Materials for CenterPoint Energy Low Income and Multifamily Programs

Frontier designed the large-format banner shown at left in accordance with CenterPoint Energy’s corporate branding guidelines, to advertise the Multifamily Market Transformation Program implemented by the Frontier team. The 32” x 83” banner was used at trade shows targeting multifamily housing developers and builders for the new construction elements of the program, as well as multifamily property owners for the retrofit direct install program element.

## Multifamily Trade Ally Marketing and Outreach

For CenterPoint’s Multifamily Program initiatives, Frontier designed the double-sided half sheet size handout above for print and digital outreach to energy raters to encourage them to participate in the High Efficiency New Construction program element.

**CenterPoint Energy** Multifamily Market Transformation Program Incentives for New Construction

## Two program elements Two ways to win

CenterPoint Energy offers two paths to earn incentives for multifamily new construction. Apply for both and maximize your incentive payments!

### Water and Space Heating

Incentives for energy efficient hot water and electric equipment:

	Incentive per dwelling unit	
	Market Rate	Income Eligible
Multifamily Water Heaters	\$250	\$450
Boilers	\$150	\$250
Commercial Gas Heating Systems**	\$350-\$500	\$550-\$750

\* Incentive based on net energy savings  
\*\* Incentive based on net energy savings

### High Efficiency New Construction

Five types of incentives for market rate and income eligible:

- Energy Performance™: **\$0.02/kWh**
- Energy Star™ new windows: **\$405/dwelling unit**
- Advanced water distribution: **\$5/dwelling unit**
- Water recovery: **\$20/dwelling unit**

\* Energy Performance only available  
\*\* Equipment: A/C, Washers, Dishwashers, Lighting, Mirrors, Insulation

#### Process

**CONTACT:** Call or email program manager to determine eligibility.

**APPLY:** With program manager guidance, submit application and documentation via email.

**INSTALL:** Upon acceptance and award, project sponsor completes installation measures.

**INSPECT:** Inspect and, final approval, and incentive payment check from CenterPoint Energy.

**CenterPoint Energy**  
On-Site Energy Efficiency Consultant  
1-800-955-5889  
john.l.faraco@centerpointenergy.com

**Water and Space Heating**  
Ampel, Vukobrat, Purdy, Energy, Inc.  
5010 Westheimer Road  
Houston, Texas 77056  
www.aevenergy.com

**High Efficiency New Construction**  
Aston Corp., Tempco, LLC  
14000 West Loop South  
Houston, Texas 77040  
www.aevenergy.com

Frontier Energy Services and Solutions are a division of Frontier, Inc.

## Program case studies

### Multifamily Market Transformation Program Incentives for New Construction

#### High Efficiency New Construction

**“Epcor Residential is committed to providing our residents with increased value, comfort, durability, and efficiency as demonstrated by NBS Green Certification. Through the Multifamily Program, CenterPoint Energy helped us to achieve this goal and supported us in doing so throughout the construction process.”**

— Epcor Residential, developer

Community	The Pierpont 23770 Springwoods Village Pkwy, Spring, TX 77373
Size	304 units
Savings	kWh savings = 219,127 / Peak kW savings = 105.43
Incentives	Developer Incentive = \$34,400 / Rate Incentive = \$7,000
Project Measures	ENERGY STAR Appliances, ENERGY STAR Windows, High efficiency lighting, NBS Green Certification

#### Multifamily Water and Space Heating

**“CenterPoint Energy made it easy to meet our goals and provide an energy efficient solution to our residents that was also environmentally responsible. The Multifamily Program incentive was a cost-effective way to help us make this transition to gas.”**

— RPH Contractors, construction manager

Community	Smart Living at Telephone Road 3802 Telephone Road Houston, TX 77025
Size	740 units
Savings	kWh savings - estimated at 49,319 kWh
Incentives	Developer Incentive = \$84,000
Project Measures	Natural gas tankless water heaters, Hydraulic heating

**Multifamily Outreach to Market-Rate and Income Qualified Housing Developers**

Frontier Energy created the 8” x 10” flyer above to promote the CenterPoint Multifamily High Efficiency New Construction and Water & Space Heating program elements. The flyer is accessible to various project sponsor types including builders, construction managers, contractors, and property developers. To develop this flyer, Frontier engaged with project sponsors from successfully-completed projects to include their case studies, photos, and testimonials to promote the program and encourage future participation on new projects.



# 7 Energy Efficiency Tips

## 1 Adjust your thermostat a little and save a lot.

- Lower your energy use for heating and cooling by keeping your home's temperature at 68° (in winter) and 78° (in summer) while you're away or sleeping.
- If possible, install a programmable or smart thermostat and save even more. Set an energy-saving temperature, avoid overriding it, and use the "hold" button to maintain a constant temperature while you're away.



## 2 Let your windows do the work.

- In cold weather, keep the shades open and let the sunlight heat your home. Close shades and drapes at night to insulate windows from cold air outside.
- To keep out the heat of the summer sun, close window shades and drapes in warm weather.



## 3 Be water-wise.

- With a new 2.0 or 1.5 gallon-per-minute showerhead, a 10 minute shower will use 15-20 gallons of water, saving 10-15 gallons over a typical bath. A new showerhead can also save energy used to heat water.
- Repair leaky faucets or alert your landlord to leaks. A leak that fills a coffee cup in 10 minutes can waste over 3,000 gallons of water a year.



## 4 Mind your air registers, returns, and radiators.

- Keep air registers clear of furniture so air can circulate freely.
- Be sure to change your air return filter every 1-3 months to keep your heating/cooling system running efficiently.
- If your home has radiators, place heat resistant reflectors or aluminum foil between the radiator and wall to reflect heat back into the room.



## 5 Select efficient appliances.

- If you're in the market for a new appliance, look for the ENERGY STAR® label and other information on product efficiency. Think of the appliance as having two price tags: one for the purchase price and another for the operating cost. Energy efficient appliances can lower your energy usage for as long as you have the appliance – and some appliances can last for 10-20 years.

## 6 Choose cold water for washing clothes.

- Water heating accounts for 90 percent of the energy your machine uses to wash clothes – only 10 percent goes to the motor. Switching to cold water for washing clothes can save energy and help your clothes last longer.
- Wash a full load of laundry rather than a partial load. Washing full loads can save more than 3,400 gallons of water each year.



## 7 Don't over-dry your laundry.

- If available, use your dryer's moisture sensor to automatically turn the machine off when clothes are dry. Remember to clean the lint trap before every load.
- Dry full loads or reduce drying time for partial loads.



### Energy Efficiency Tips Leave-Behind Flyer for Residential Customers in CenterPoint Energy Low Income and Multifamily Programs

Frontier worked with CenterPoint to develop a leave-behind educational flyer including energy efficiency tips. For this project we created content that could apply to multiple markets and customer types (single family and multifamily, homeowners, and renters) in order to maximize outreach efforts across multiple client programs.



CenterPoint Energy's Agencies in Action program provides **100% free energy efficiency upgrades to help income-qualified residents.**

Free Upgrades  
+  
Lower Electric Bills = **SAVE TWICE**

**Are you eligible? Criteria include:**

- Residential customer of CenterPoint Energy Electric
- Home at least **16 years old**
- Annual household income of **less than 200%** of federal poverty guideline or receiving benefits from a **public assistance program** (Food Stamps, Medical Assistance or Medicaid, Supplemental Security Income, Public Housing, Children's Health Insurance, Temporary Assistance to Needy Families)

For other criteria and enrollment, **contact a participating community agency** ▶

**AGENCIES IN ACTION PROGRAM ENERGY EFFICIENCY POTENTIAL UPGRADES**

- LED lighting
- Attic and wall insulation
- Refrigerators
- Solar window screens
- Central heating and air conditioning
- Air infiltration reduction
- Water heating measures

**CONTACT AN AGENCY TO ENROLL IN THE PROGRAM**

<p><b>1</b> <b>Ambassadors CCC</b> Dr. Chris Spellman 817-689-6457 ccspas@msn.com</p> <p><b>2</b> <b>Avenue CDC</b> Dinah Eghan-Waife 713-864-8099 dinah@avenuecdc.org</p> <p><b>3</b> <b>BakerRipley</b> Sommer Harrison 713-685-6512 sharrison@BakerRipley.org</p> <p><b>4</b> <b>Baytown Resource and Assistance Center</b> Hilda Villalobos 281-424-5752 hilda.villalobos@baytown-resourcecenter.org</p> <p><b>5</b> <b>Brazoria County Community Development</b> Virginia Puente 979-864-1953 virginiap@brazoria-county.com</p> <p><b>6</b> <b>Chinese Community Center</b> Emily Liang 713-271-6100 emily@cccHouston.org</p>	<p><b>7</b> <b>Fort Bend Habitat for Humanity</b> Sherwin Sun 281-403-0708 sherwin@fortbendhabitat.org</p> <p><b>8</b> <b>Greater Northside Plaza CDC</b> Barbara Curry 713-864-8011 gnplcd@outlook.com</p> <p><b>9</b> <b>Love Network of Baytown</b> Mike Horner/Mel Stone 281-422-5683 lovenetworkofbaytown@gmail.com</p> <p><b>10</b> <b>Network of Opportunities Around Here (NOAH)</b> Ed Bubb 832-287-9035 execdir@g0zhoah.org</p> <p><b>11</b> <b>People's United Summit</b> Allen Provost 832-423-3999 aprovest19@yahoo.com</p> <p><b>12</b> <b>Premier Center</b> Kathy West 832-506-8121 premierdiagnosticcenter@gmail.com</p> <p><b>13</b> <b>VN Teamwork</b> Mike Nguyen 281-495-8936 mikecnguyen@vnteamwork.org</p>
--	---

**AEP Texas Targeted Low Income Weatherization Program**  
AEPTexas.com/save

**SAVING ENERGY IS FOR EVERYONE!**

The AEP Texas Targeted Low Income Weatherization Program provides **100% free energy efficiency upgrades to help income-qualified residents.**

**ELIGIBLE CRITERIA**

- Residential customer of AEP Texas**
- Annual household income of **less than 200%** of federal poverty guideline or receiving benefits from a **public assistance program\***

\* Food Stamps, Medical Assistance or Medicare, Supplemental Security Income, Public Housing, Children's Health Insurance, Temporary Assistance to Needy Families

For other criteria and enrollment, **contact a participating community agency** ▶

**POTENTIAL UPGRADES**

- LED lighting
- Attic and wall insulation
- Solar window screens
- Central heating and air conditioning
- Air infiltration reduction and duct sealing
- Water heating measures

**CONTACT AN AGENCY TO ENROLL IN THE PROGRAM**

<b>ArkTex COG</b> Bay City - Ingleside	<b>903-280-8349</b>
<b>Community Council of South Central TX</b> Uvalde - Del Rio	<b>830-303-4376</b>
<b>Christian Brother Community Development</b> Rio Grande Valley	<b>956-309-3061</b>
<b>Community Action Committee of Victoria</b> Goliad - Victoria - Refugio	<b>361-578-2989</b>
<b>Community Action Corp of South Texas</b> Laredo - Alice - Odem	<b>361-207-1802</b>
<b>Community Services Agency of South Texas</b> Carrizo Springs - Enclinal - Pearsall	<b>830-876-2918</b>
<b>Hartlingen Community Development Corp</b> San Benito - Alamo - Raymondville	<b>956-421-2351</b>
<b>Pete Ortiz American GI Forum</b> Corpus Christi	<b>361-585-0318</b>

Frontier Energy implements this program for AEP Texas.

## Residential Customer Marketing and Outreach

Frontier designed flyers to advertise targeted low-income programs we implement for residential customers of CenterPoint Energy and American Electric Power.



Energy Efficiency PROGRAM



Energy Efficiency



Energy Efficiency Program



## Illinois Commercial Food Service Program

### Save instantly on qualifying high-efficiency kitchen equipment

Energy-efficient commercial food service equipment can offer energy savings of 10 to 70%\* over standard models, depending on product category. That means for every \$1,000 spent on utility bills, you could be spending up to \$700 in unnecessary costs.

Commercial food service equipment has come a long way. Energy-efficient models are reliable and can help you save money. And with discounts up to \$4,000, you can choose the right equipment for your kitchen, at the best price and without sacrificing performance. For the full list of qualifying commercial food service equipment, visit: [IL-FoodserviceRebates.com/qualifying-equipment](http://IL-FoodserviceRebates.com/qualifying-equipment)

### No paperwork needed

Forget about waiting for a rebate check. Your participating supplier will help you find equipment options best suited for your facility, fill out the paperwork, and instantly apply your discount on the invoice. Visit [IL-FoodserviceRebates.com/participating-suppliers](http://IL-FoodserviceRebates.com/participating-suppliers) for a comprehensive list of participating suppliers.

Many types of equipment qualify for discounts, including:

Equipment	Discounts up to
Broilers	\$4,000
Steam Cookers	\$3,000
Demand-Controlled Kitchen Ventilation	\$2,500
Ovens	\$2,500
Dishwashers	\$1,500
Fryers	\$950
Griddles	\$500
Refrigerators/Freezers	\$300

Questions? Call us at 888-214-4014 or visit [IL-FoodserviceRebates.com](http://IL-FoodserviceRebates.com)

Terms and conditions may apply.

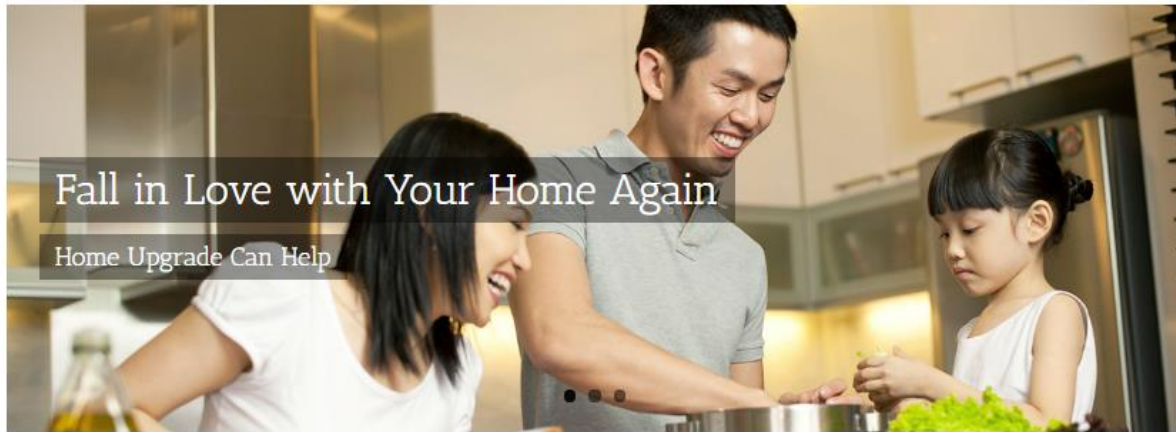
This program is funded by Ameren Illinois, ComEd, Nicor Gas, Peoples Gas and North Shore Gas customers in compliance with state law.

0423

\*[energystar.gov/cfs](http://energystar.gov/cfs)

## Statewide Illinois Commercial Food Service Program

Frontier created a website (<https://www.il-foodservicerebates.com/>) and the flyer shown above to promote the midstream/upstream Illinois Commercial Food Service program, which involves five participating utilities.



## Fall in Love with Your Home Again

Home Upgrade Can Help



### How much can I save?

Save energy. Earn rebates. Energy Upgrade California® Home Upgrade can help you take the next step toward more comfortable, healthy living. [Learn more](#)



### Find a contractor near you

Start your Home Upgrade today with a Participating Contractor. [Learn More](#)



### Attend an Event

Join us at a workshop or event and learn more about energy efficiency. [Learn More](#)



### Community Events

There are no upcoming events at this time.

[See all events](#)



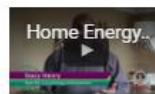
### Contractor Events

There are no upcoming events at this time.

[See all events](#)



### Latest News



**Home Energy Tour: Rancho Cucamonga**  
Here's how one couple in Rancho Cucamonga made energy efficient improvements to their home with [...]



**Consumer alert: Caller ID Spoofing**  
The Energy Network has received reports that an unknown organization is calling homeowners while improperly [...]



**Home Upgrade from a Contractor's Perspective**  
A Participating Contractor of Home Upgrade, Joel Pereda from Enso2, answers questions about how Home Upgrade [...]

## Energy Network Website (Launch version) and Marketing Materials

Frontier created the website shown above and marketing materials shown below for the Energy Network, an energy efficiency organization funded by the California Public Utilities Commission and serving Southern California.



## Zero Net Energy: Home Assessment Guide

### Is your home ZNE ready?

A zero net energy (ZNE) home is highly energy efficient and produces as much energy as it consumes. This guide can help.

**ZNE is the new standard for home energy savings.**

Almost any home can be retrofitted to become ZNE. First, the home must be improved through energy efficiency upgrades. Then add a renewable energy source to cover the home's energy demand.

In three easy steps, this Home Assessment Guide will help you identify potential upgrades to get your home on the path to ZNE:

- 1 Assess your home.** Create a list of potential upgrades for your home.
- 2 Start improvements.** Find a contractor and begin your energy upgrades.
- 3 Save with rebates and incentives.** Lower the cost of your upgrades.

**1**  
Energy Efficiency

Airtight, insulated building  
Efficient appliances/HVAC  
Energy conscious choices

**2**  
Renewable Energy

Solar or wind generators

**The Path to Zero Net Energy**

**energynetwork**  
residents taking action to save energy

The Energy Network is administered by the County of Los Angeles and funded by California utility ratepayers under the auspices of the California Public Utilities Commission. 03-15-17

### 1 Assess Your Home

Use this prioritized checklist to determine potential upgrades.

**Mark the upgrades that you have not yet completed:**

**Best Upgrades**

- Replace inefficient lights with LED bulbs. LED bulbs use up to 80% less energy than incandescents.
- Upgrade to efficient appliances and electronics. ENERGY STAR products can lower energy bill costs up to 10% and reduce water usage.

**Most Cost-Effective Upgrades**

- Complete whole home air sealing and weatherstripping. Sealing is one of the least expensive upgrades, and can help save up to 20% on heating and cooling costs.
- Complete duct sealing and insulation. A typical home loses up to half of its heating and cooling energy due to leaks due to poor insulation.
- Upgrade attic and wall insulation. This will help prevent your home from being too heated or cooled or through the ceiling, floors, and walls.
- Upgrade to an energy efficient water heater. Newer models heat water with less energy, heat-hat water heater envelope insulation. Insulation will pay for itself in less than a year, and helps the heater retain its temperature.

**Additional Upgrades**

- Install renewable energy systems. Energy efficient models will be more effective at reducing or through your home.
- Install programmable thermostat. This will allow you to have better control over heating and cooling usage.
- Upgrade to energy efficient windows. These can help save 7-15% on heating and cooling costs by better insulating from the outside temperature.

**Renewable Energy Upgrades**

- Install renewable energy systems. Use solar panels or wind generators. Before installing renewables, first complete the upgrades above. By first reducing your home's demand for energy, you can lower your upfront costs for renewable systems.

**energynetwork** (877) 765-2227 [www.tenres.com](http://www.tenres.com)

### Initial Upgrades Guide

The first step on the path to ZNE is assessing which improvements can help reduce the energy demand of your home. Review the recommended upgrade items.

- 1 Lighting:** Replace bulbs with high efficiency LEDs that last longer and use less energy. Make sure switches are tested.
- 2 Appliances:** Replace old refrigerators, freezers, and laundry machines with efficient ENERGY STAR models. These will reduce energy and water usage.
- 3 Air Sealing:** Check and seal leaks in doors and windows to stop air leaks and drafts. HVAC duct leaks can cause up to 30% of a home's energy loss, and should also be sealed and insulated.
- 4 Insulation:** Installing insulation is the most cost-effective project to decrease energy bills and control indoor temperature. First, inspect homes for heat retention insulation, ensuring heating and cooling efforts to be less effort.
- 5 Water Heating:** Older water heaters are inefficient and obsolete. Start with more energy with high efficiency tankless or solar models.
- 6 Heating and Cooling:** Install air seal, insulation, and duct equipment with uniform results to save energy. Make sure ducts are sealed.
- 7 Windows:** Upgrade existing, leaky windows with efficient dual-pane designs to better regulate the temperature of your home.
- 8 Windows:** Upgrade after initial upgrades are completed. The home is ready for renewables like rooftop solar. This will cover the remaining energy demand.

**energynetwork** (877) 765-2227 [www.tenres.com](http://www.tenres.com)

### 2 Start Improvements

Once you've completed the assessment, you'll have a list of upgrades to start with. A contractor can help you choose the right system for your home, and make sure you are eligible for rebates and incentives. The Energy Upgrade California Home Upgrade program requires the use of Participating Contractors who are trained, insured, and have energy efficiency training from the Building Performance Institute.

To find a Participating Contractor, visit [www.tenres.com](http://www.tenres.com).

### 3 Save with Rebates and Incentives

The Energy Upgrade California Home Upgrade program is a great way to get your home on the path to ZNE.

For homeowners with Los Angeles County who are customers of both Southern California Edison and SoCalGas, Home Upgrade offers up to \$3,000 in rebates and incentives. Eligible improvements include air sealing, insulation, windows, and more.

**Home Upgrade**  
Energy Upgrade California®

To learn more about Home Upgrade or see if you're-eligible for an incentive, visit [www.tenres.com/homeupgrade](http://www.tenres.com/homeupgrade).

Be sure to also visit your utility provider's website to find offerings that may be used in addition to Home Upgrade rebates.

**energynetwork** (877) 765-2227 [www.tenres.com](http://www.tenres.com)

## Home Energy Loans

Streamlined financing for your Home Upgrade project.

- No Money Down, No Fees
- Low Monthly Payments
- Instant Online Credit Approval

**Qualifying Projects**

- Only available for participants in the Energy Upgrade California® Home Upgrade rebate and incentive program.
- Once you qualify, you can also finance other energy upgrades. If financing a solar project, it must be permitted and installed concurrently with the Home Upgrade project.
- Residential, single-family detached properties only. The property must be served by SoCalGas® and/or Southern California Edison. Not available in Santa Barbara, Ventura, or San Luis Obispo counties.

**Financing Terms**

- 4.99% APR for 5-year term; 5.99% for 10-year term; 6.99% for a 15-year term.
- Unsecured loan from \$2,500 up to \$50,000.
- Minimum of 660 FICO score, debt-to-income (DTI) ratio maximum of 50%.
- No prepayment penalties or closing costs. Loan value may equal full amount of qualifying scope of work (not including rebates and incentives).
- The financed project can also include selected eligible energy measures, including solar; visit <http://www.tenres.com/financing> for more details.

**How to Apply**

- Apply online.
- Provide the Home Upgrade "Notice of Incentive Approval" (your contractor will do this) and receive a "Notice to Proceed" with construction.
- Submit closing documents to Metadors after project completion, and receive your funding.

**Apply today!**  
<http://www.tenres.com/financing>

"What started out as a minor AC repair turned into several home upgrades, thanks to the low interest 10-year financing."  
— Dan, Santa Clarita Valley

**energynetwork** **Metadors Community Credit Union** **Go Green Financing Energy Upgrade California** **Home Upgrade Energy Upgrade California**

**energynetwork** (877) 765-2227 <http://www.tenres.com/financing> [homeupgrade@theenergynetwork.com](mailto:homeupgrade@theenergynetwork.com)

\*After 12,000 miles, 10-year term, 3.99% APR. Note: Annual Percentage Rate (APR) for 12,000 miles: 4.99% - 13.00%. APR: 5.99% - 11.00%, 6.99% - 10.00%. Rates are subject to change at any time. Rates include a 30% discount for automatic payments. Must meet credit and income criteria. Borrowing requires equal opportunity notice. \*APR is for rate to be applied. The Energy Network is administered by the County of Los Angeles and funded by California utility ratepayers under the auspices of the California Public Utilities Commission. Home Energy Loans uses special lending from California utility regulators to offer alternative financing of Energy Upgrade California home upgrade projects. This program is available through Metadors Community Credit Union and is sponsored by the Energy Network, an energy efficiency organization.

## Lunch & Learn

from The Energy Network

### Energy Efficiency for Homeowners

## THURSDAY

MARCH 23, 2017  
12:00PM TO 1:00PM

**RSVP by 3/17**

Lunch will be provided to RSVPs

RSVP: <http://www.tenres.com/HBLunchnLearn>

**EVENT LOCATION:**  
Huntington Beach City Hall,  
Room B-8 Lower Level

**What You'll Learn**

- Learn how your home uses & loses energy
- Find out about rebates & financing
- Meet local Participating Contractors who can help answer your questions

**energynetwork** **Home Upgrade Energy Upgrade California®**

The Energy Network is administered by the County of Los Angeles and funded by California utility ratepayers under the auspices of the California Public Utilities Commission. [www.theenergynetwork.com](http://www.theenergynetwork.com)

## The Energy Network: Interactive Materials and Event Flyers



## Appendix I: Expanded Response to System Development and Deployment Phases – Question B3

## Appendix I: Expanded Response to System Development and Deployment Phases – Question B3

### *Phase 1: Intense Discovery Process*

The P3 development and deployment schedule begins with an intense requirements-gathering process. Requirements-gathering is an iterative process that will begin in Phase 1 and continue as we move into Phase 5: Program Configuration. This will involve direct communication with program managers and other key stakeholders to learn about their needs for the system.

The discovery process will gather details including but not limited to the examples shown below:

- List of programs
- Application journey for each program
- Program milestone dates such as program launch, closing, and other deadlines
- Measures
- Calculation sources
- Incentives
- Reporting features desired
- Specific information about the user categories

One of the key benefits of the P3 system is that it allows for data to be imported from other programs that are tracked externally. Depending on the level of data received, external program impacts can be displayed and rolled up at the portfolio level, while also allowing users to examine and edit project data at a granular level. For any externally tracked programs third-party implementation partners may wish to integrate in P3, Frontier will coordinate with these stakeholders for requirements-gathering to scope each program's import process, which includes data format, method of data transfer, and frequency. Development and testing related to externally tracked data will occur in Phase 3: System Setup & Enhancements.

Based on the information gathered for internal and external programs and requirements, Frontier will work with stakeholders to formulate a project plan that meets the overall goals for the system. Specific tasks and definition of the project scope are articulated through an iterative process. This ensures that all parties have a clear understanding (or can participate) regarding decisions made by the accountable entities. Frontier and key stakeholders will jointly finalize the project scope. Frontier will also begin outlining program workflows for programs that will be internally tracked within the P3 system.

### *Phase 2: Establish Milestones*

Once the scope is finalized, we develop a work breakdown structure (WBS) and begin creating tickets for our development team in our internal ticketing system. The WBS will be used to establish milestones. Tickets will then be organized into sprints for each approved project milestone.

If during the process of completing a milestone there is a change in scope or we discover something was not addressed during the requirements gathering phase, we will update the WBS and re-evaluate milestones. Agile project management assumes there will be changes and acknowledges that it is impossible to pin down every detail of a complex undertaking in advance of starting the deployment. Instead, by anticipating and embracing change through our project management process, we can mitigate risks and focus on continuous improvement.

We will provide ongoing status updates toward milestone completion. Upon Phase 2 completion, we will work with stakeholders to finalize the scope for implementation of Phase 3: System Setup and Enhancements.

### *Phase 3: System Setup & Enhancements*

Frontier will begin the initial system deployment process and work on any necessary enhancements to meet stakeholder requirements that were identified during Phases 1 and 2. Frontier will work on both system setup and new enhancements concurrently.

Stakeholders can provide new feature and enhancement requests via email or during scheduled check-in meetings. Mission-critical enhancement requests will be reviewed individually and depending on the scope may otherwise require post-deployment review so as to not delay scheduled deployment tasks. If a new feature may impact a scheduled deployment, Frontier will communicate the new release date to stakeholders.

Frontier will also begin developing measure calculations that were identified during Phase 1 in the Deemed Savings Engine.

### *Test, Training, and Production Environments*

For the P3 product, Frontier maintains three environments: local test, user acceptance testing (UAT), and production. The UAT environment is where the system test (ST) plan can be executed prior to production release deployment.

Once a release candidate is prepared, it is first deployed to the local test environment to undergo all functional, regression, integration, and related test cases. Test cases are created to ensure that the business and technical requirements outlined during the requirements gathering process are met. If the release candidate passes all test cases it is then promoted to a UAT environment where key staff can perform their UAT test cases. Staff users will document their test results and provide these to Frontier for further action.

If the release candidate fails to pass all test cases in either testing environment, all relevant deployment tickets will be reopened. A new release candidate will be prepared once all remediation/fixes are complete. If the release candidate passes all UAT test cases it is then scheduled for deployment. Typically, clients use the UAT environment for training, but we can set up a separate training environment upon request. For additional details on testing, see Phase 6: User Acceptance Testing.

To support our Blue-Green deployment cycle, Frontier maintains two identical production environments which contain all historical data. For additional details see Phase 7: Production Deployment (Go-Live).

### *Phase 4: Historical Data Integration*

Frontier will work with existing database vendors in coordinating historical data migration for the previous programs from the current tracking system to the P3 system.

P3 will use the historical data for duplicate checking and reporting. Identified administrative users with the appropriate permissions will be able to view historical records in a similar manner to viewing records for active programs in addition to exporting data for reporting purposes. We have successfully implemented this approach with many of our existing clients.

### *Phase 5: Program Configuration*

The program configuration phase is typically an iterative process, which includes configuring, testing, and deploying individual programs separately. Programs can be configured concurrently if necessary. We will work with stakeholders in determining the schedule of each program launch.

For programs that will be tracked within the P3 system, Frontier will work with program managers to understand each program's unique processes and business requirements. For each program, Frontier will create and provide system requirements documents that specify form design, workflows, data validations, and system logic applied from program enrollments to project invoicing.

We will also provide program and measure variables documents used to configure new program year launches. These documents include but are not limited to program open and close dates, budget, program goal, measure inputs, any measure dependencies, and incentive structures. P3 supports various incentive structures including savings-based, lookups, or algorithmic rates.

Frontier will walk through each configuration data point with stakeholders to ensure there is a mutual understanding of how each variable will impact the program. Frontier will use the finalized program and measure variables documents as configuration guidelines in the production environment. In most cases, these lists are finalized during the UAT phase, which is outlined in Phase 6: User Acceptance Testing.

#### *Phase 6: User Acceptance Testing*

Frontier has established a testing protocol to ensure comprehensive and consistent testing of applications through the deployment process. A comprehensive, regressive test plan will document test scope and test cases for individual elements within the P3 system for key stakeholders and the expected outcomes of each test.

The test plan involves four types of testing:

1. Functionality testing will focus on determining whether the system functions per the intended configuration. Key stakeholders will ensure that all processes outlined in the workflow diagrams and flowcharts provided by Frontier are functioning as configured.
2. Usability testing will focus on the user-friendliness of the system. The Frontier team will ensure that the system layout and functionality make sense from a user's perspective and are in line with staff specifications.
3. Simulation testing will focus on end-to-end testing of every system tool and resource. The project team will ensure that the system functions as a whole. This type of testing will include the testing of all possible roles and associated with system interaction. No system feature will be approved for release until it has been thoroughly tested and passed from end-to-end.
4. Test script completion refers to the use of test scripts that outline the configured functionality of the database. These scripts will be used by Frontier as a tool to complete functionality and simulation testing.

Once each program workflow is configured and tested internally by Frontier, the program will be made available to stakeholders in a UAT environment for verification via UAT. Key staff will perform testing to validate that the program is functioning as specified in the requirements. Any defects will be documented, and all critical defects will be resolved by Frontier. Once a defect is resolved, the updated program will be made available to validate resolution of any defects. After key staff are satisfied with system functionality, formal sign-off of UAT will occur.

Frontier will work with key staff in establishing a training schedule for individual programs tracked within P3. Training may be web-based, on-site, or a combination of both. The agenda for each training will cover general system functionality and specific system functionality as it pertains to effectively managing individual programs. For each training session, Frontier will provide visual aids and training materials to give users an opportunity to register and follow along within a test site.

#### *Phase 7: Production Deployment (Go-Live)*

Prior to the Go-Live date, Frontier will coordinate with key stakeholders for the initial Go-Live processes and any impacts that may occur. This may include developing communications along with any necessary transition instructions that will be provided to current users prior to the Go-Live date. We will also work with key stakeholders in setting up administrative (admin) users with system accounts and assign each user the appropriate roles and program permissions.



Frontier will make the P3 production site available to all registered users. System email notifications will also be live, which will allow non-administrative users, such as trade allies and customers, the ability to successfully register in the system and begin interacting with available programs.

Projects and associated measures will be using the latest savings and incentive calculation methodologies and reporting can begin.

#### *Phase 8: Ongoing Maintenance & Support*

The P3 subscription includes maintenance, enhancements, and support. Frontier will provide unlimited ongoing email and phone support for end users. Support hours follow standard operating hours: Monday–Friday 8am–5pm (EST).

#### *Development Cycle*

Frontier uses a Blue-Green deployment cycle. This means that there are two identical production environments configured but only one of them is active at a time. When a release is scheduled, the release candidate is deployed to the inactive production environment.

After checking that all files were deployed successfully and any related processes have been completed, such as database updates or other update scripts, all live traffic is routed to the environment containing the release. This gives Frontier an opportunity to verify the installation of the new release before opening access to all users. It also allows Frontier to easily switch back to the previous release of the software in the event of an unforeseen issue post-deployment. Frontier will provide key stakeholders with a list of tasks and activities that will be performed during the scheduled Go-Live process.

#### *Enhancements*

We schedule regular check-ins with our utility clients to discuss feature suggestions and improvements. Enhancement requests that do not fit within the P3 product roadmap will be reviewed individually. Some requests that are outside the P3 framework may not be possible.

#### *Training*

As part of the P3 subscription, Frontier will provide training to system users. Training may be web-based, on-site, or a combination of both if desired. The agenda for each training will cover general system functionality and specific system functionality as it pertains to effectively managing individual programs. Users will be given an opportunity to register and follow along within a test site.

#### *System Documentation*

User guides are written in a format that provides instructions and reference screenshots for how to use the system. Frontier provides video user guides that demonstrate specific functionality and features within P3. The P3 system also supports an online “Help” section where users can access a variety of different materials.