



Utility Open House for Federal Customers: Florida Power & Light

May 8, 2024 | 11:00 AM – 3:30 PM ET

This Training Offers IACET CEUs

How to obtain your CEUs:

1. Visit the Whole Building Design Guide (WBDG) at wbdg.org to log in or create an account
2. Enroll in the training
3. Attend the training in full
4. Return to your WBDG account's Enrolled courses
5. Select the training's "Proceed to Course" button
6. Complete an assessment
7. Submit a training evaluation
8. Download your certificate.

What's an IACET CEU?

An International Association for Continuing Education and Training (IACET) continuing education unit (CEU) is a unit of credit equal to 10 hours of participation in an accredited program designed for professionals with certificates or licenses to practice various professions.



Agenda

11:00 AM (EDT)	Welcome and Opening Remarks
11:20 AM	Grid-Interactive Efficient Buildings, Demand Response and Time-Variable Pricing
11:55 AM	Fleet Electrification
12:30 PM	Carbon Pollution-Free Electricity (CFE) Discussion
1:05 PM	Break
1:35 PM	Resilience
2:10 PM	Utility Energy Service Contracts (UESC)
2:45 PM	Utilizing General Services Administration (GSA) Areawide Contracts
3:15 PM	Final Q&A, Resources and Next Steps
3:30 PM	Adjourn



FEMP Welcome

Mary Sotos

Director, Federal Energy Management Program
U.S. Department of Energy

Federal Goals Lead to Electrification



Energy Act of 2020

- Use performance contracting to address at least 50% of cost-effective ECMs identified in facility audits (w/in 2 years)



Executive Order 14057

- Net zero federal operations by 2050
- 100% net zero buildings, zero-emission fleets, 100% carbon pollution-free electricity by 2030



Federal Building Performance Standard

- Support achievement of net-zero emissions for federal building portfolio
- Zero scope 1 emissions from on-site fossil fuel use in 30% of federal buildings by 2030

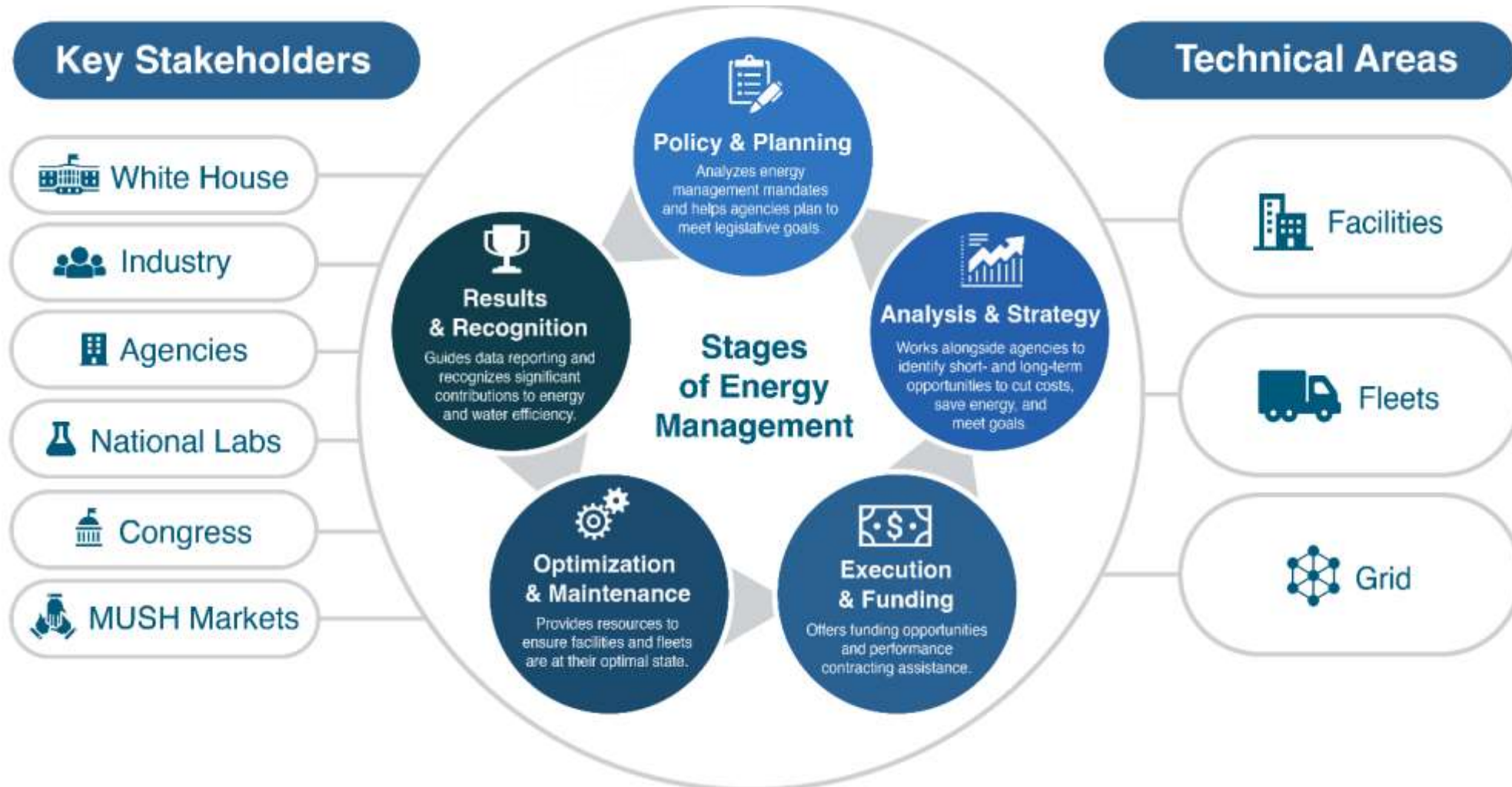


Climate Smart Building Initiative

- Establish emissions reduction targets delivered through performance contracting
- Increase on-site clean electricity generation

FEMP Empowers Federal Agencies to Lead By Example

FEMP works with **key stakeholders** to support **all stages of energy management** in federal agencies' **critical areas**



FEMP Support Moves Agencies Forward

Access off-the-shelf resources and request specialized support.



Request Technical Assistance

FEMP's technical experts learn about your needs and provide customized support.



Access Tools

Available tools help collect data, assess resilience, identify opportunities for carbon pollution-free electricity, and much more.



Join a Community

Communities are available for federal employees & industry stakeholders to share lessons learned and drive decision-making.



Apply for Funding & Access Support

\$250M in AFECT funding is available as well as performance contracting support.



Get Recognition

















Nominate individuals, projects, and sites for a variety of available federal recognition programs.



Take Training

On-site, in-person, and on-demand FEMP-delivered training supports an informed, capable workforce.

FEMP Tools & Support

-  Smart Facility Accelerator
-  FEDS Spotlight
-  REopt
-  ESPC
-  Technical Resilience Navigator
-  **Federal Utility Partnership Working Group**
-  Re-tuning Trainings
-  EVI Locate
-  **UESC**
-  CDF Calculator
-  Treasure Hunts
-  Interagency Task Force
-  **Federal Energy & Water Management Awards**
-  Energy Exchange
-  **AFECT Funding**
-  Electricity Procurement Analysis
and much, much more...

FEMP's Goal for Today: Agencies Take Action!

Request a consultation with FEMP or your utility to:

- *Discuss your site's energy goals, challenges, and priorities*
- *Identify program offerings that align with your needs*
- *Sign up for incentives*
- *Connect with subject matter experts to learn more about any of the topics discussed today*

Consultation Request Form

Fill out this [*linked form*](#) or scan the QR code below.

FEMP will connect you with the appropriate party for follow-up, which may include FEMP technical experts, utility POCS, and/or the relevant Utility Lead Agency.



FPL Opening Remarks

Jaime Holland

FPL VP of Corporate Real Estate

5/8/2024



Grid-Interactive Efficient Buildings (GEB)

Jason Koman

Energy Technology Program Specialist

DOE FEMP

Legislative Drivers

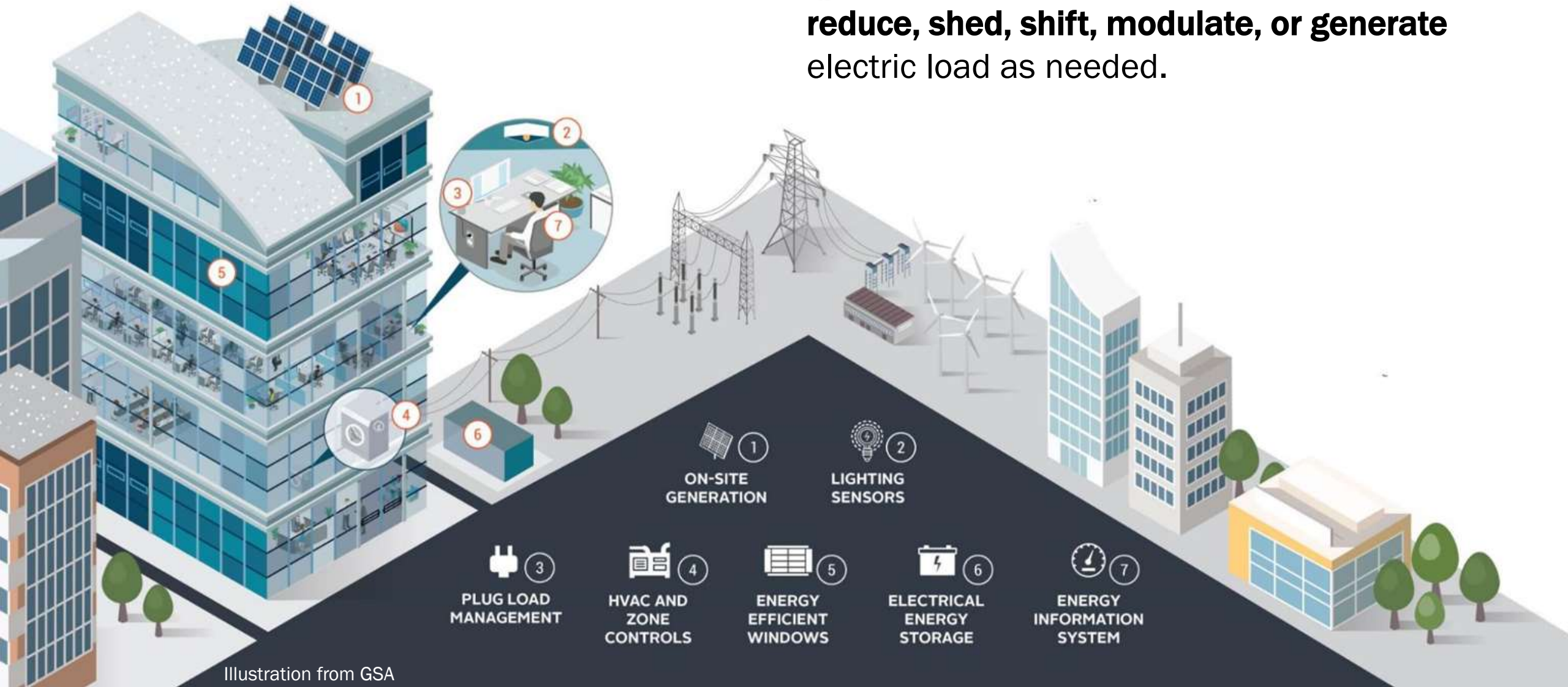
- **Energy Independence and Security Act (EISA) of 2007**
 - Numerous mentions (114 to be exact!) of “smart” (e.g., smart grid technologies, smart consumer devices and appliances, smart services and practices)
- **Energy Act of 2020, Smart Building Acceleration**
 - Requires the Secretary of Energy, as a part of the Better Building Challenge, to develop smart building accelerators to demonstrate innovative policies and approaches to accelerate the transition to smart buildings.
 - Establishes an R&D program focused on building-to-grid integration.
- **E.O. 14057, Catalyzing America’s Clean Energy Industries and Jobs through Federal Sustainability**
 - Guidance for both existing facilities (energy efficiency and deep energy retrofits) and new construction and modernization to implement GEB



What are GEBs?

GEBs incorporate energy efficiency, renewables, energy storage, and load flexibility.

GEBs employ these capabilities to flexibly **reduce, shed, shift, modulate, or generate** electric load as needed.



FEMP GEB Program Support

- FEMP's GEB program is available to provide technical assistance and guidance around implementing GEB strategies
 - Technology Insights
 - Financing Guidance
 - Utility Rate and Incentive Considerations
 - Case Studies



[GSA Oklahoma City Federal Building Case Study](#)

- Highlights a robust GEB project carried out via an utility energy service contract (UESC)
- FEMP's GEB team is available to develop additional cases studies. **Let us help you tell your story!**



Utility Rate Considerations

- Demand response programs
- Coincident peak demand charges
- Virtual power plant/aggregator laws
- Minimum billing demand clauses
- Time-Variable Pricing
 - Real-time pricing (RTP)
 - Day-ahead hourly pricing
 - Block-and-index pricing (sometimes called block-and swing pricing)

Demand Response and Time-Variable Pricing Programs

Federal Energy Management Program

Federal Energy Management Program • Demand Response and Time-Variable Pricing Programs

The Federal Energy Management Program developed profiles of demand response and time-variable pricing programs throughout the United States. These profiles are grouped regionally by state.

- Western States
- Northeastern States
- Southeastern and Midwestern States



Demand response (DR) is a short-term, voluntary decrease in electrical consumption by end-use customers that is generally triggered by compromised grid reliability or high wholesale market prices. In exchange for conducting (and sometimes just committing) to curtail their load, customers are remunerated.

<https://www.energy.gov/eere/femp/demand-response-and-time-variable-pricing-programs>



Utility Offerings and Incentives

Favorable Utility Rates

- High peak demand rates
- Large differences between peak and non-peak energy and demand charges
- Terms of Use (TOU) rates available with high on-peak charges

Incentives

- Prescriptive and customized offerings for efficient building equipment and distributed energy technologies, e.g., lighting, refrigeration equipment, HVAC equipment, smart thermostats, photovoltaics, batteries

Table 6. Illustrative Utility Rate Favorability for GEB

Rate Type	GEB Favorability	Total Energy Charges	Total Demand Charges
Low energy and demand rates	Less	\$0.05–0.10/kWh	\$5–\$10/kW
High demand rate (low energy rate)	More	\$0.05–0.10/kWh	\$10–\$20/kW
High demand rate (high energy rate)	Most	\$0.10–\$0.20/kWh	\$10–\$20/kW

<https://www.nrel.gov/docs/fy21osti/78190.pdf>



Demand Response and Time-VARIABLE Pricing (DR/TVP)

Billie Holecek

Research Associate

Lawrence Berkeley National Lab

What is Demand Response?

Demand response (DR) is a short-term, voluntary decrease in electrical consumption by end-use customers to stabilize the grid, triggered by:

- compromised grid reliability,
- high wholesale market prices, or
- supply/demand imbalance.



Image Source: DOE (www.energy.gov/oe/demand-response)



Program Types

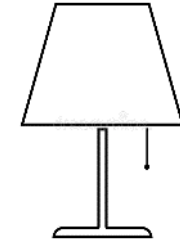
- **Formal DR Programs**
 - Run by utilities and independent system operators (ISO)/regional transmission organizations (RTO)
 - Reliability-based and price-based programs
- **“Informal” DR – load management to:**
 - Reduce demand charges
 - Lower electricity costs by optimizing TVP rates



Load Management Techniques (Common Examples)

- **Lighting**

- Dimming via control
- “Bi-level” switching: 2 or 3 lit lamps/fixture to 1 or 2



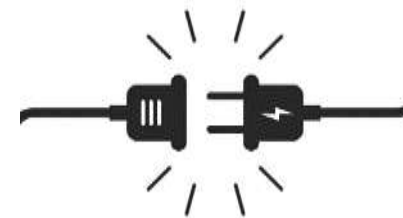
- **Cooling**

- Raising set points of space or chilled water
- “Demand-limiting” air handling unit (AHU) fans



- **Plug Load**

- Notifying employees to minimize lighting and office equipment power (via on-off switch or sleep settings)



- **Miscellaneous**

- Shut down (and power off) bank of elevators
- Shut down pool and irrigation pumps



DR/TVP Programs Benefits

Participating in DR/TVP programs can help agencies meet federal goals by:

- Lowering the price of energy consumed
- Enabling greater use of on-site storage and generation
- Reducing carbon emissions during periods of peak demand
- Contributing to federal resilience and grid stability through reduced peak energy consumption



Authorizing Law

Both informal (tariff-based) and formal DR Programs are legal

- 10 USC 2913/2919 (DoD) and 42 USC 8256 (civilian)
 - “Agencies are authorized and encouraged to participate in programs to increase energy efficiency and for water conservation or the management of electricity demand conducted by gas, water, or electric utilities and generally available to customers of such utility”
 - “Each agency may accept financial incentives, goods, or services generally available from any such utility, to increase energy efficiency or to conserve water or manage electricity demand.”



Case Studies



Managers of the William S. Moorhead Federal Building enrolled in a TVP rate and **implemented load shifting resulting in \$285k of savings (12%) over the first 3 years.**



VA MD Health Care System enrolled 1-3 MW annually in a demand response program. Using small generators and manual curtailment strategies **they have been able to save over \$490,000 to date.**



GSA Region 9 enrolled 11 facilities in PG&E's northern California territory in the statewide Emergency Load Reduction Program. **Sites enrolled in this program receive \$2/kWh for their reduction when an event is called.**



Resources and Support

- [FEMP's Demand Response and Time-Variable Pricing Website](#)
- [FEMP's Technical Assistance Portal](#)
- [FEMP's On-Demand Training on Demand Response and Time-Variable Pricing](#)



Demand Response and Time-Variable Pricing Programs

Federal Energy Management Program



Federal Energy Management Program » Demand Response and Time-Variable Pricing Programs

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<https://www.energy.gov/femp/demand-response-and-time-variable-pricing-programs>





Commercial Demand Response, Time of Use Rates, and Demand Side Management

Christopher Vick

FPL Senior Customer Advisor for Federal Accounts

5/8/2024



Grid-Interactive Buildings (GEB) / Demand Response and Time Variable Pricing Programs



Agenda

- **CDR – Commercial Demand Response Program**
 - Overview
 - Case Study
- **Time of Use Rates**
 - Options
- **Demand Side Management Incentives and Programs**
 - HVAC
 - Lighting
 - Business Energy Audits



FPL Commercial / Industrial

Commercial Demand Response Program Overview

CDR Credit/Eligibility



C/I load control programs provide significant monthly bill savings to business customers

- **2024 - \$8.70/kW* credit based on average kW used during controllable period each billing cycle less firm demand**
 - Typically, 10-20% savings (primarily dependent on “Firm Demand” level and customer’s on-peak usage pattern)
- **Eligibility Criteria**
 - Available to Commercial & Industrial customers with on peak demands of 200 kW or greater, who can control at least 200 kW of their load
 - Customer must execute CDR Agreement to enroll
 - Customer must install and maintain their own equipment that allows FPL electronic signal to automatically control their load
- **Annual Test**
 - If no actual load control events in a given year, customers must successfully pass a one-hour annual test by November

* Current credit level, subject to change periodically

CDR Enrollment Steps

CDR Enrollment Timeline (7-16 months)

- Initial meeting / discussion - Customer initiates interest / FPL Customer Advisor determines general eligibility and reviews program with customer
- Customer verifies their generators are US EPA NESHAP/NSPS- compliant (if using generator) and they will be able to meet all the terms of the CDR program (typically 1-2 months)
- Customer and FPL execute CDR agreement (typically 1-3 months)
- FPL installs special interval data meter (typically 1-2 months) to verify account can meet program requirements (PB ACCT) - Utility Controlled Demand threshold (>200kW) minimum 3 months during Apr-Oct period (typically 4-8 months)
- FPL and customer participate in design meeting (typically 1-2 months) on site to review FPL and customer equipment installation requirements.
- FPL and customer install required equipment / wiring (typically 2-3 months)
- Qualification testing and processing onto CDR (typically 1-2 months)

Key CDR Program Provisions

C/I load control programs were designed for medium to large customers

- **Customer Equipment**
 - Must install and maintain their own equipment that allows FPL electronic signal to automatically control their load
- **Monthly bill credits**
 - Are paid even if load control system is not used
- **Load Control Notifications**
 - Customer event notification is typically via email
- **Exit requirements**
 - 5 years notice to exit the Agreement
 - Early Termination carries significant penalties
 - Recovery of 5 years of savings plus incremental penalty amount
- **Firm Demand**
 - Firm = the customer's load that is not subject to control
 - Non-firm = the customer's load that is subject to being controlled

CDR Tariff Restrictions

Use of FPL's Commercial/Industrial load control programs is bound by tariff restrictions

- **Normal interruption periods**
 - Notice-1 hour in advance. Typically, 4 hours in advance (or more, if possible).
Emergency condition 15 minutes
 - Frequency-typically less than 15 control periods per year, not to exceed 25
 - Duration-typically 3 hours, not to exceed 6 hours
 - In the event of an emergency, greater frequency, less notice, or longer duration than listed above may occur
- **Failure to comply may result in penalty**
 - FPL recovers credits for excess kW above the customer's contracted firm demand for up to 5 years, or since the time customer began participation; with additional penalty of \$1.13/kW
 - If no actual load control events during the year, customers must successfully pass a one-hour annual test by November

Historical C/I Load Control Events

Past load control event history cannot be used to predict future load control event frequency/duration



Date of Event *	Year	Start		End	Duration (hrs)
6/23/1998	1998	4:30 PM	-	5:45 PM	1.25
8/15/1998	1998	12:00 PM	-	6:00 PM	6.00
4/6/1999	1999	4:00 PM	-	7:00 PM	3.00
4/15/1999	1999	4:00 PM	-	7:00 PM	3.00
7/30/1999	1999	3:00 PM	-	6:00 PM	3.00
5/26/2000	2000	3:20 PM	-	4:55 PM	1.50
10/5/2000	2000	4:30 PM	-	5:30 PM	1.00
None	2001				0.00
None	2002				0.00
1/25/2003	2003	6:00 AM	-	8:15 AM	2.25
9/27/2004	2004	12:00 PM	-	6:00 PM	6.00
10/1/2004	2004	12:00 PM	-	6:00 PM	6.00
8/30/2005	2005	4:45 PM	-	8:00 PM	3.25
None	2006				0.00
None	2007				0.00
2/26/2008	2008	2:55 PM	-	6:55 PM	4.00
None	2009				0.00
1/10/2010	2010	6:00 AM	-	10:00 AM	4.00
1/11/2010	2010	5:00 AM	-	9:00 AM	4.00
12/15/2010	2010	5:00 AM	-	8:00 AM	3.00
None	2011-2022				N/A

Load Control Case Study - Example

Federal agencies in FPL service territory have a total of 11 electric service accounts taking advantage of the CDR program

Customer X

- 6 total substations serving this customer
- Primary metered locations
- 3 of the 6 Substations are on CILC
- Customer-owned and operated backup generators at these substations
- Average aggregated annual savings for the three substations/accounts is \$600,000 - \$650,000

Time of Use Rates (TOU)

Maximize savings by using electricity during off-peak hours

- Options will depend on the load profile of the account (Peak Demand)
- On-Peak and Off-Peak rates
- Customer maximizes savings by using more electricity in the off-peak hours
- Seasonal TOU rates¹ – adjust based on summer and winter months
 - Summer Months: 1 April – 31 October – Excludes some holidays
 - On-Peak Hours: 1200 ET – 2100 ET – Monday – Friday
 - Off-Peak Hours: All other hours
 - Winter Months: 1 November – 31 March – Excludes some holidays
 - On-Peak Hours: 0600 ET – 1000 ET and 1800 ET – 2000 ET – Monday – Friday
 - Off-Peak Hours: All other hours

¹GST-1, GSDT-1, GSLDT-1, GSLDT-2, GSLDT-3, HLFT

FPL Legacy

- **HVAC**
 - Chillers Upgrades
 - Energy Recovery Ventilation
 - Demand Control Ventilation
 - Direct Expansion
 - Thermal Energy Storage
- **Commercial/Industrial Indoor Lighting**
- **Business On Call**
- **Business Energy Evaluations**
- **Business Energy Manager**

FPL NW (Panhandle)

- **HVAC**
 - Chillers
 - Energy Recovery Ventilation
 - Demand Control Ventilation
 - Direct Expansion
 - Thermal Energy Storage
- **Commercial/Industrial Indoor Lighting**
- **Business Energy Evaluations**
- **Business Energy Checkup**

Thank you!



Christopher Vick

FPL Senior Customer Advisor for Federal Accounts

christopher.vick@fpl.com

Fleet Electrification and Electric Vehicle Supply Equipment (EVSE)

Jason Koman

Energy Technology Program Specialist
DOE FEMP

Electric Vehicles as an Administration Priority

WH.GOV



Executive Order on Tackling the Climate Crisis at Home and Abroad

January 27, 2021

GSA, Council on Environmental Quality, and Office of Management and Budget in coordination with DOE, Department of Labor, and Department of Commerce to develop a plan to convert Federal, state, local, and Tribal fleets to zero-emission vehicles (ZEVs)



WH.GOV



Executive Order on Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability

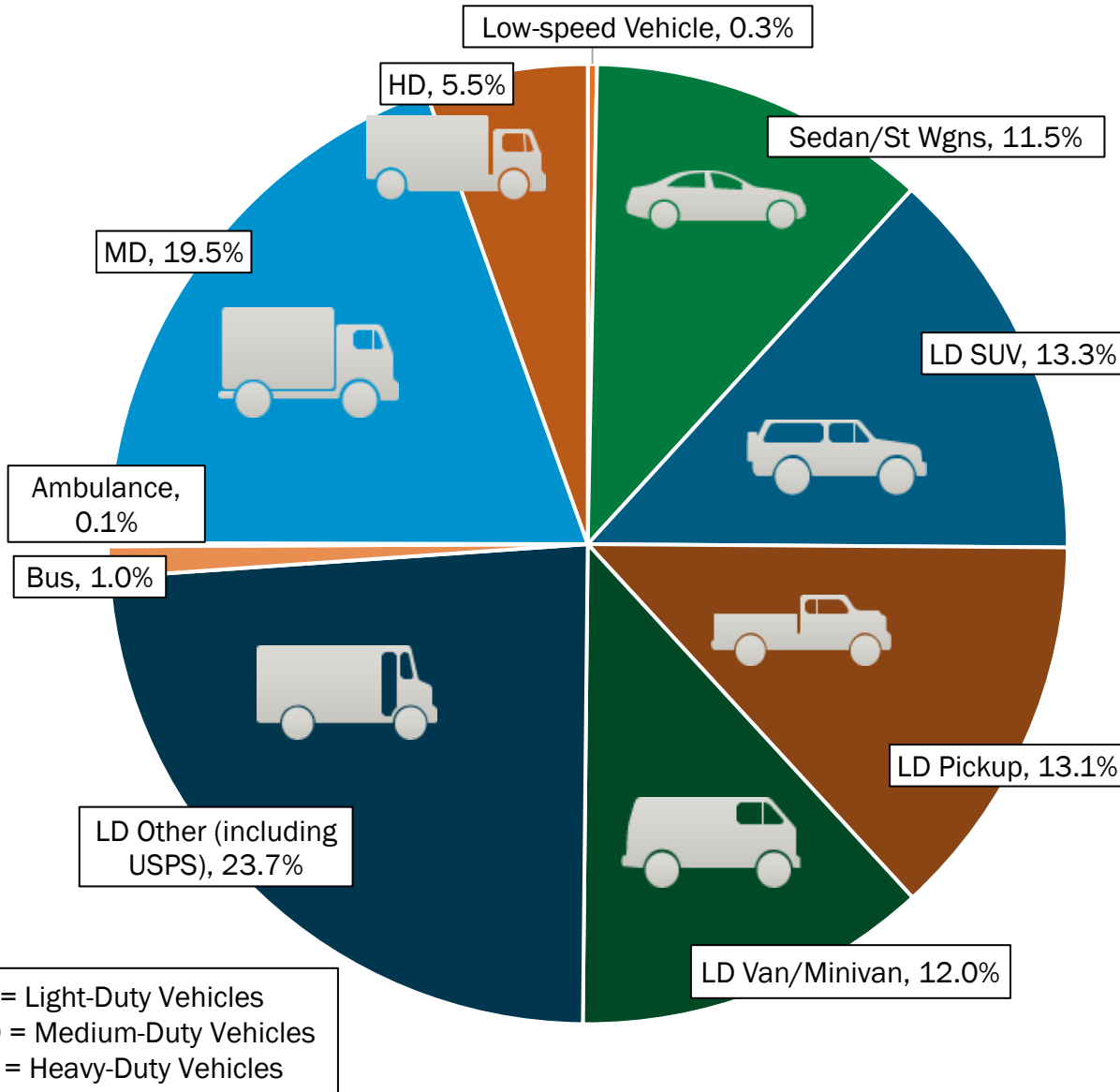
December 8, 2021

Transition to a zero-emission federal fleet

- Annual targets for ZEVs by agency
- 100% light-duty (LD) acquisitions by 2027
- 100% medium-duty (MD)/heavy-duty (HD) acquisitions by 2035



Federal Fleet Electrification is Accelerating (FY23 FAST)

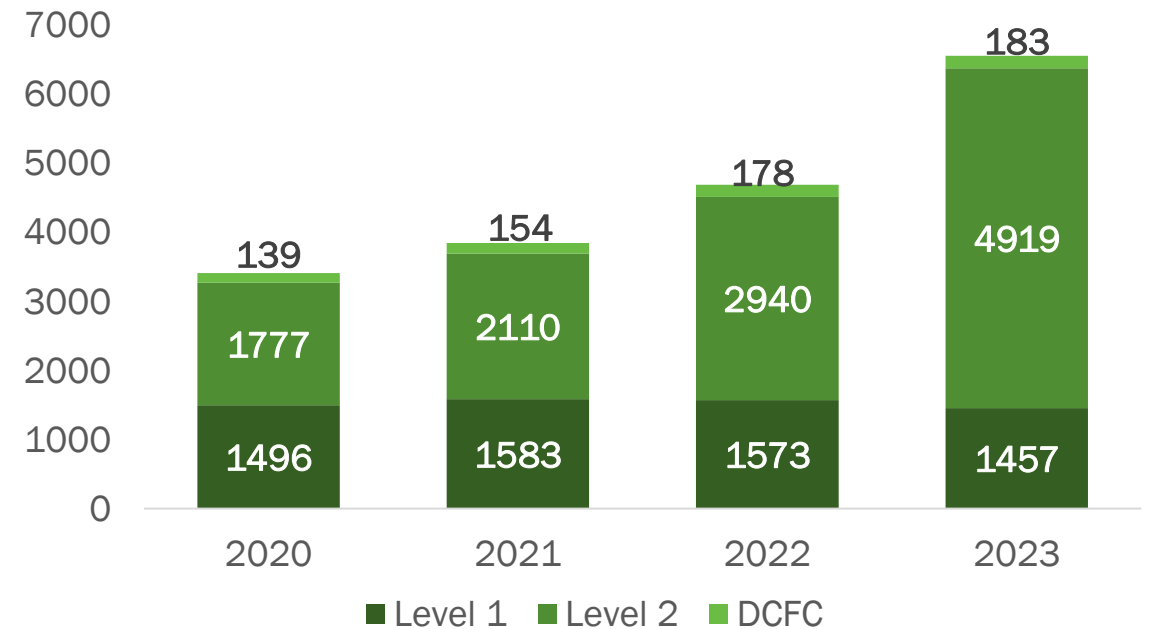


3.6k FY22 ZEV orders
(9% of Federal Fleet Purchases)

5.8k FY23 ZEV orders
(14% of Federal Fleet Purchases)

5.1k FY24 ZEV orders as of 2/29/24
(18% of Federal Fleet Purchases)

Source: GSA, Excludes USPS



ZEV Ready Framework

FEMP's recommended site-level fleet electrification planning process consists of 15 process steps organized into 3 phases.



Step 9 – Identify Utility Point of Contacts and Incentives

FEMP's EV Utility Finder (EV U-Finder)

Database that helps federal agencies connect to EVSE utility partners and incentives available by ZIP Code.

Enter ZIP Code to identify local utilities, electric vehicle support programs, and Clean Cities Coalitions.

72863 Powered by the U.S. Utility Rate Database (<https://openei.org/apps/USURDB/>)
Utility territories last updated February 2021.

See Introduction worksheet for notes on using EV U-Finder.

Identified active utilities in 72863

***Customer Types:**
G: Government or Public; C: Commercial; R: Residential

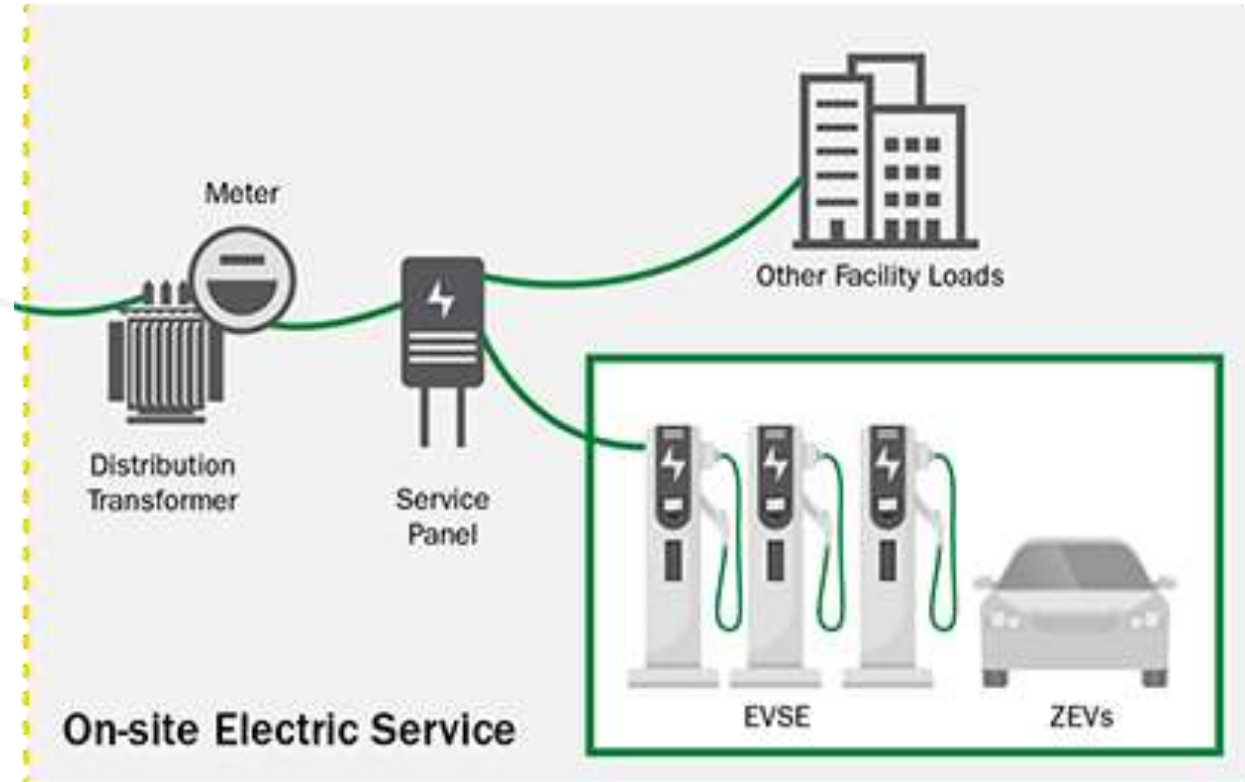
Utility	Utility Name	Utility Ownership	Known EVSE Funding Eligibility?*	Known Advisory Services Eligibility?*	Known Federal EVSE Incentives?	GS
1	Entergy Arkansas Inc	INVESTOR	GCR		Y	
2	Arkansas Valley Elec Coop Corp	COOPERATIVE				
3	Village of Brainard, Nebraska (Utility Company)	PUBLIC				

<https://www.energy.gov/femp/articles/ev-utility-finder-ev-u-finder>



Step 9 – Coordinate with Local Utility Service

- **Evaluating EVSE impacts on electrical service equipment**
 - Facility versus utility equipment ownership
- **Evaluating EVSE impacts on power requirements**
 - Power Capacity
 - Power Load at the Service Panel Level
 - Power Load at the Facility Level
- **Utility Equipment Upgrades**
 - Plan for the future.
 - Scale back when practical.
 - Use managed charging.





Energizing the **EV Revolution**

Christina Zabala, Florida Power & Light Company

Project Director, Development

Florida's rapid EV expansion

Florida
#2 in nation
for EVs

EVs expected
to grow in FL
+1,000%
by 2030

280,000+
EVs in FL

1 of every 3
vehicles sold in the
U.S. will be **electric**
by 2027

3.1+ MM
EVs on the road
1.1% of vehicles in
the U.S.



Accelerating electrification by providing holistic charging solutions

Fast Charging

FPL EVolution® public fast charging network is positioned to significantly enhance Florida's public charging ecosystem

Public Charging Rates

Available to 3rd parties with public charging equipment on a dedicated meter; keeps energy costs low when usage is low

Commercial

FPL EVolution® Commercial offers tailored turnkey solutions for fleet, workplace and destination

Home

FPL EVolution® Home offers unlimited at-home charging for a low, flat monthly price – \$38/month

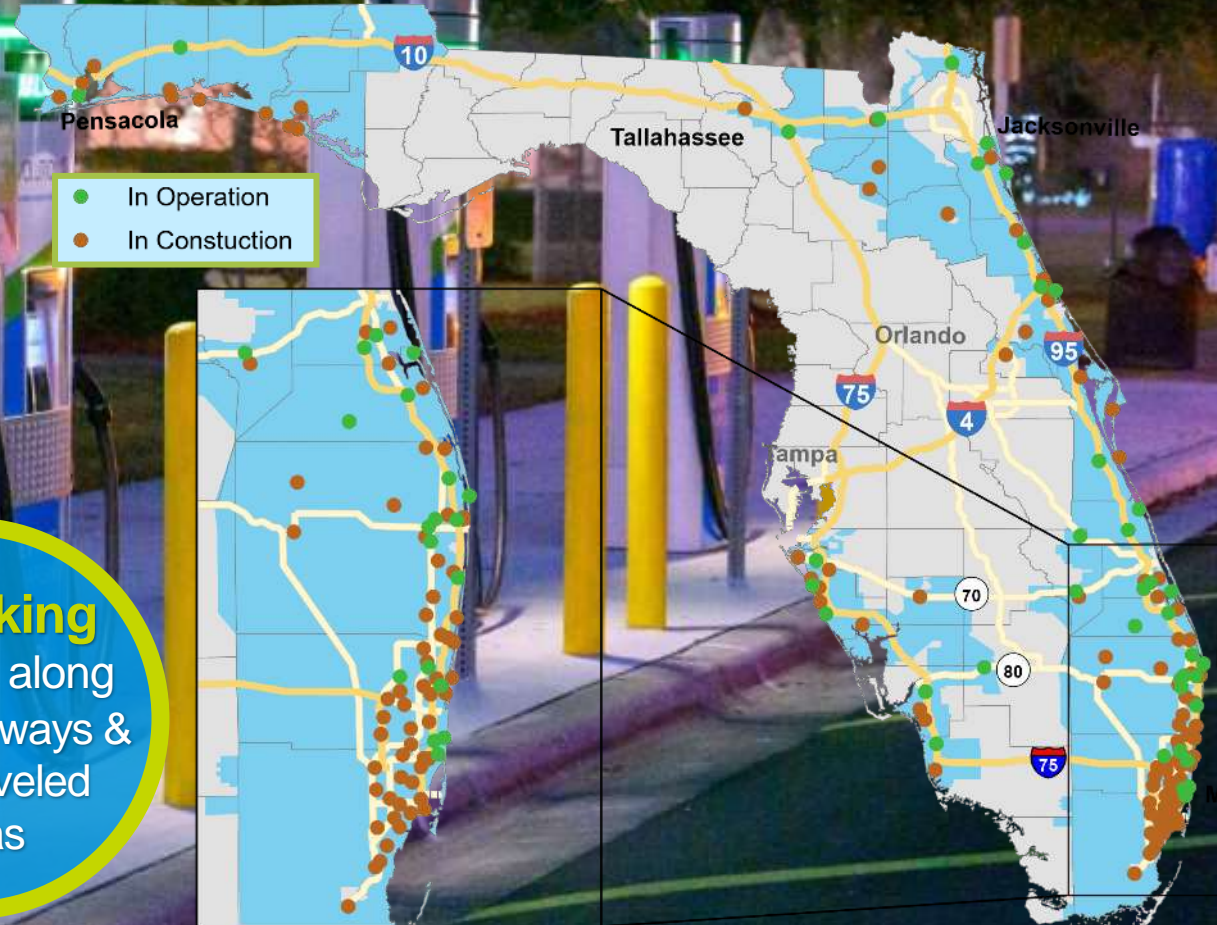


The FPL EVolution® fast charging network is positioned to significantly enhance Florida's public charging ecosystem

5,000+
charging ports
needed by 2026

500+
EVolution® public
fast charging ports
by end of 2024

Unlocking
charging along
main highways &
less-traveled
areas



FPL EVolution® commercial charging made easy

Roadmap & Planning

- EV charger selection and right-sizing for fleets, workplaces and destinations
- Site design, optimization
- Pricing rules and access control available

Equipment, Installation & Maintenance

- Seamless end-to-end installation, upkeep
- Includes charging equipment, permitting, construction
- Preventative and emergency maintenance

On-Bill Payments

- Convenient, easy on-bill solution
- Fixed monthly service charge
- 10-year term

Turnkey Solutions



Electrifying is a complex process. We can help.

Bus depots
in-service
11 sites, 122
ports, 4.6 MW*

*300 kW – 1.2 MW
per site

Government,
destination and
business
partnerships

Level 2
and
fast charging
solutions

Over 1,000
charging ports
operational
**restricted or
public access**

12V BATTERY
DISCONNECT
SWITCH
INSIDE



FPL EVOLUTION®
PUBLIC • FLEET • HOME
CHARGING SOLUTIONS

Christina Zabala

Project Director, Development for EV/Mobility



FPL.com/EV

Carbon Pollution-Free Electricity (CFE) Discussion

Tracy Niro

Utility Program Manager

DOE FEMP

Executive Order 14057 CFE Goals

Catalyzing Clean Energy Industries and Jobs through Federal Sustainability

(12/8/2021)



[Implementing Instructions for Federal Agencies](#)



100% carbon pollution-free electricity (CFE) by 2030, including 50 percent 24/7 CFE



A net-zero emissions building portfolio by 2045, including a 50% emissions reduction by 2032; and



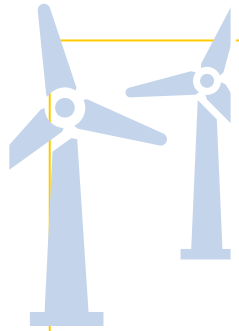
100% zero-emission vehicle (ZEV) acquisitions by 2035, including 100% zero-emission light-duty vehicle acquisitions by 2027



Net-zero emissions from overall federal operations by 2050



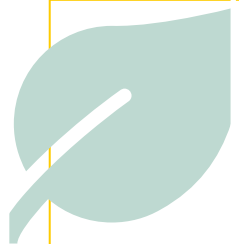
What Qualifies as CFE?



CFE Technology



Placed in service
10/1/2021 or newer



EACs delivered or
retired

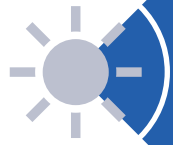


Delivered to
balancing area



What Technologies are Considered CFE?

Per [E.O. 14057](#) Section 603(d):



Solar



Geothermal



Wind



Renewably-sourced
hydrogen



Hydroelectric



Generation from fossil resources with
active carbon capture and storage



Nuclear



Marine and hydrokinetic

Other technologies may also be eligible with carbon capture and storage



CFE Resources on the FEMP Website

Learn more: [CFE Resources for Federal Agencies](#)

Assess

Assess the options available to your site based on the utility regulatory environment in which it is located. Available options will differ depending upon the market structure.

- UNDERSTAND AGENCY ELECTRIC UTILITY REGULATORY ENVIRONMENT
- IDENTIFY BALANCING AUTHORITIES
- REVIEW AVAILABLE DATA RELATED TO IDENTIFIED ECMS FOR EFFICIENCY OPPORTUNITIES
- CONSIDER FUTURE LOAD

Strategize

Identify feasible, impactful pathways to increase CFE.

- UNDERSTAND POTENTIAL FOR ADDITIONAL ON-SITE CFE GENERATION CAPACITY
- IDENTIFY CURRENT ELECTRICITY PROCUREMENT STRATEGY
- UNDERSTAND OPTIONS FOR OFF-SITE CFE PROCUREMENT

Implement

Implement energy efficiency measures, off-site CFE procurement, and on-site CFE generation and/or energy storage projects.

- EXECUTE STRATEGIES TO INCREASE ON-SITE CFE GENERATION
- EXECUTE STRATEGY TO INCREASE CFE FOR SITES IN VERTICALLY INTEGRATED MARKETS
- EXECUTE STRATEGY TO INCREASE CFE FOR SITES IN RETAIL ELECTRIC CHOICE MARKETS
- REPORT CFE USAGE
- MEASURE PROGRESS

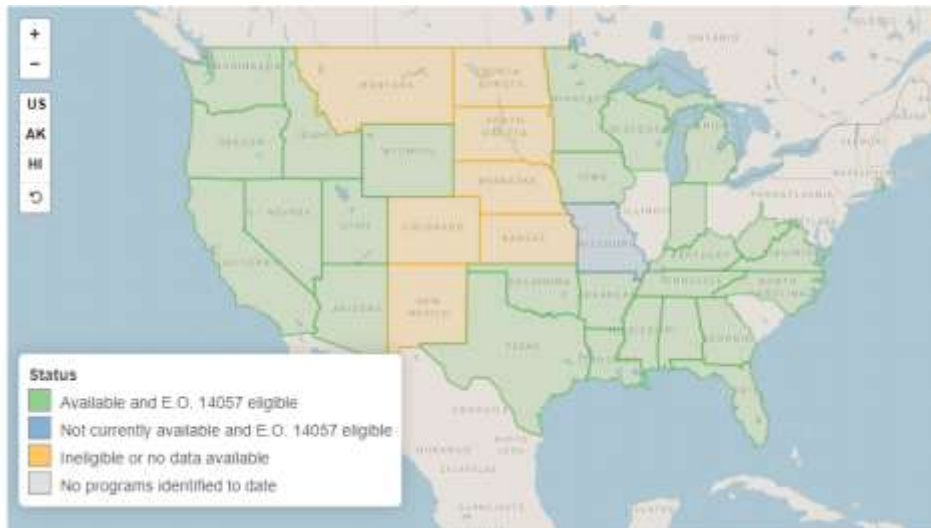


Tools for CFE Planning

Utility CFE Program Availability Map Tool

- Identify clean energy purchasing programs offered by vertically integrated utilities.
- Filter by state, program availability, E.O. 14057 eligibility, and existing areawide contract to identify programs of interest.

New programs/utility offerings added quarterly!



Balancing Authority Lookup Tool

- Identify a site's balancing authority by entering its ZIP code.

REopt (Renewable Energy Optimization Tool)

- Evaluate economic viability of on-site technologies at a given site.
- Perform single- or multi-site analysis.
- Set clean energy goals (i.e., can specify % of load to be met by on-site CFE).



Request Follow-Up to be Informed About Your CFE Options

- DoD is the Utility Lead Agency for FP&L and if you are interested in understanding your CFE options, please check the Carbon Pollution-Free Electricity box for follow-up!

Request Follow-Up!

Use this [*linked form*](#) or scan the QR code below and click the *“Carbon Pollution-Free Electricity”* box



5. Please select the program areas that you are interested in learning more about:

- Demand Response, Time-Variable Pricing Programs, and Demand Side Management Programs
- EV Fleet and Electric Vehicle Supply Equipment (EVSE) Incentives and Rebates
- Carbon Pollution-Free Electricity





THE NATION'S LARGEST COMMUNITY SOLAR PROGRAM

Amanda Gittens

FPL Director of Development for Solar Programs





ACHIEVE YOUR
SUSTAINABILITY
GOALS
AND SAVE MONEY

FPL SolarTogether provides the benefits of a diversified solar energy portfolio with **44 energy centers** and **3,278 MW capacity**



36
FPL SolarTogether
operating sites



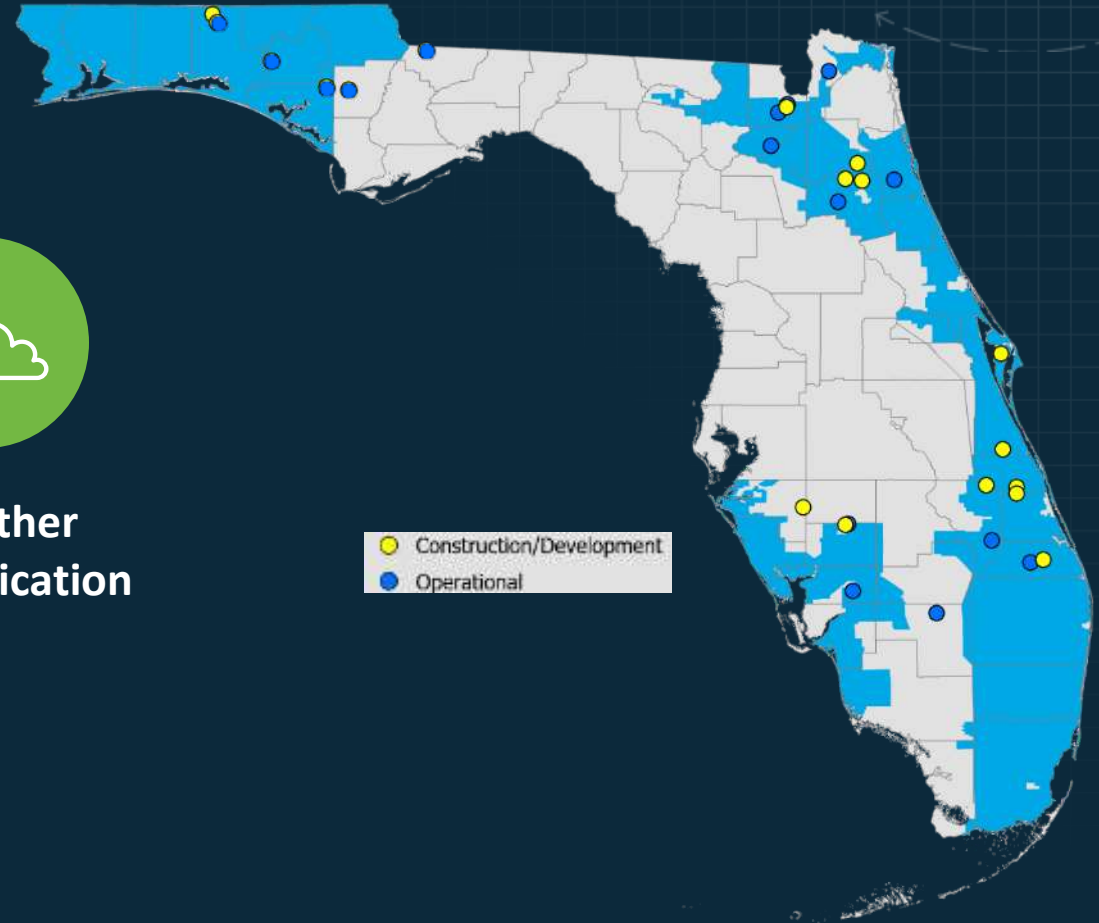
8 sites under construction
(operational
2024 – 2025)¹



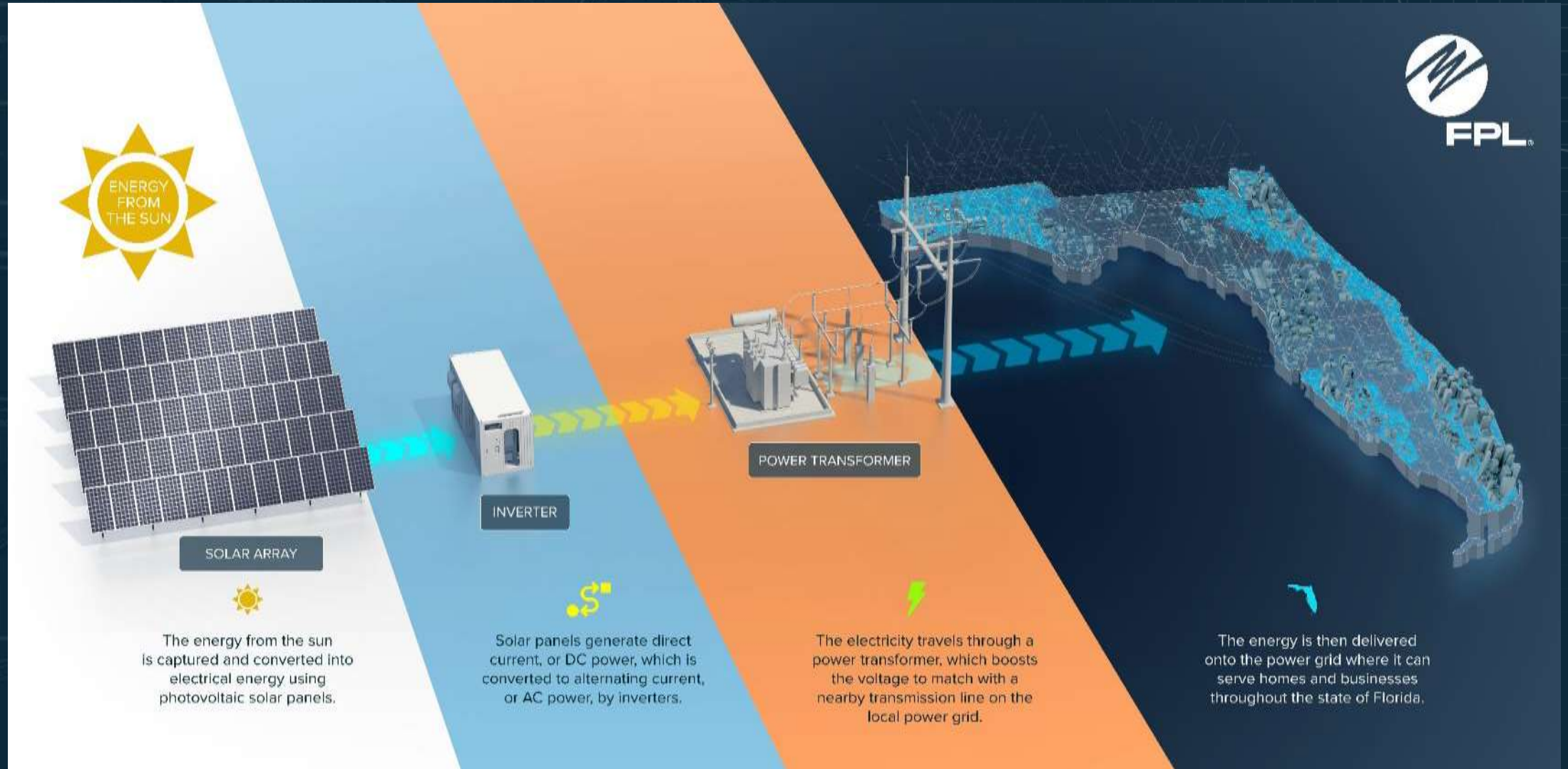
Sites are exclusively for this program



Weather diversification



How does solar generation work under this program?



Offset your carbon footprint with **renewable energy credits (RECS)**

- RECs are certificates that represent the clean energy attributes of renewable electricity
- 1 REC = 1 megawatt-hour (MWh) of renewable electricity
- They are transferrable to customers who purchase them
- RECs are an immediate and simple product used to offset carbon footprints and/or meet regulatory requirements



FPL SolarTogether offers an **easy, affordable, and convenient** option to participate in the environmental and financial benefits of solar



BENEFITS

- » Offset up to 100 percent of your energy usage
- » Renewable Energy Certificates (RECs) are retired on your behalf
- » Receive bill credits immediately



ECONOMICS

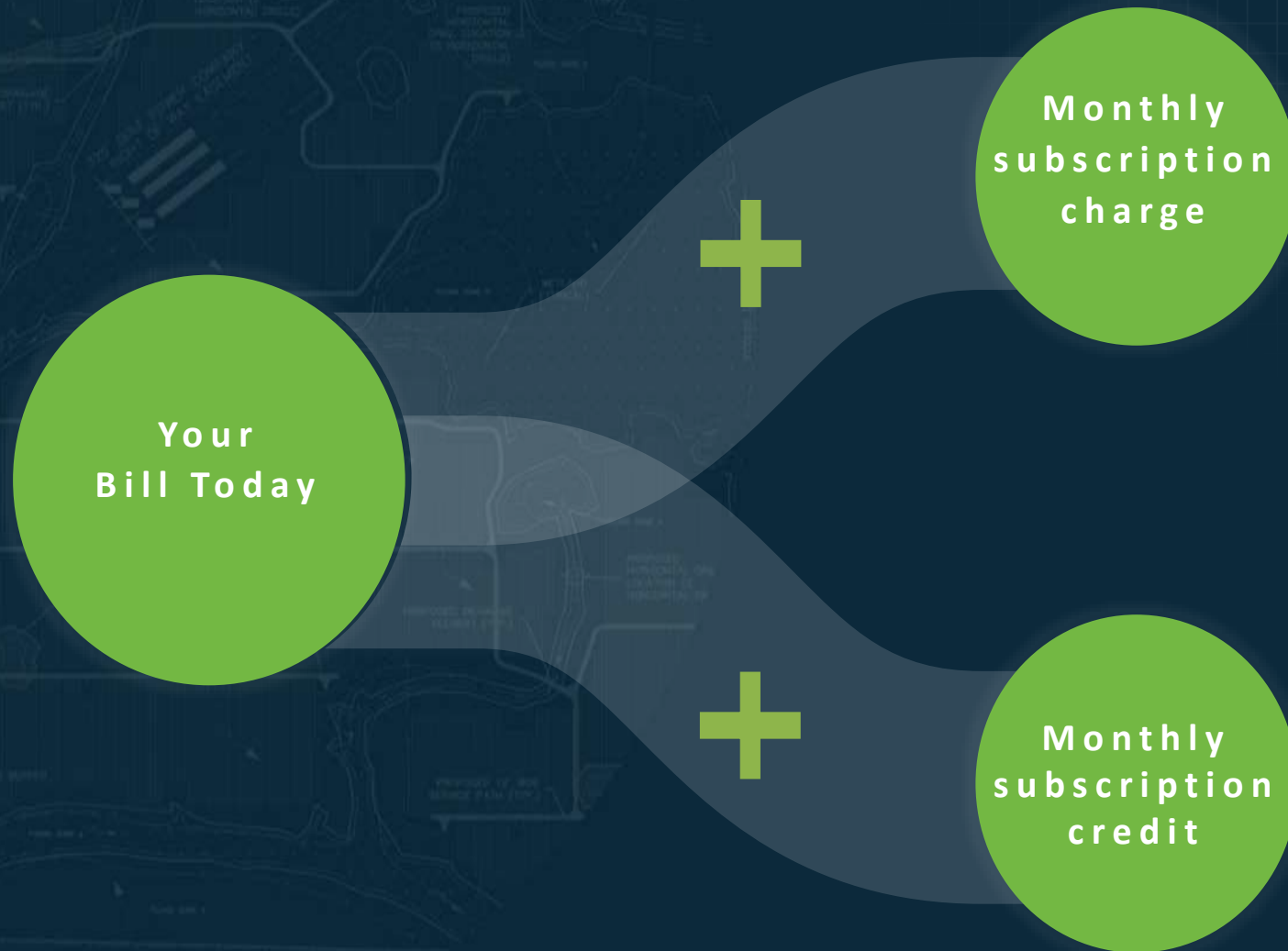
- » Escalating bill credits
- » Fixed monthly subscription rate
- » Simple payback ~7 years
- » No maintenance, operational or insurance costs



TERMS

- » No upfront cost
- » No long-term contract
- » Subscription is transferable within FPL territory
- » Subscription cannot be sold or transferred to another customer

Your participation in the program will be billed separately from **your monthly usage**



HOW THE FPL SOLARTOGETHER PROGRAM WORKS



FPL SolarTogether – 10 kW subscription example

SUBSCRIPTION CHARGE



10 kW subscription level
X \$6.76 fixed subscription rate

\$68 Monthly Charge



Remains fixed

SOLAR ENERGY PRODUCED



180 energy hours generated
x 10 kW subscription level

1,800 kWh solar energy

SUBSCRIPTION CREDIT



1,800 kWh solar energy produced
x \$0.036 credit rate (year one)

\$65 Monthly Bill Credit

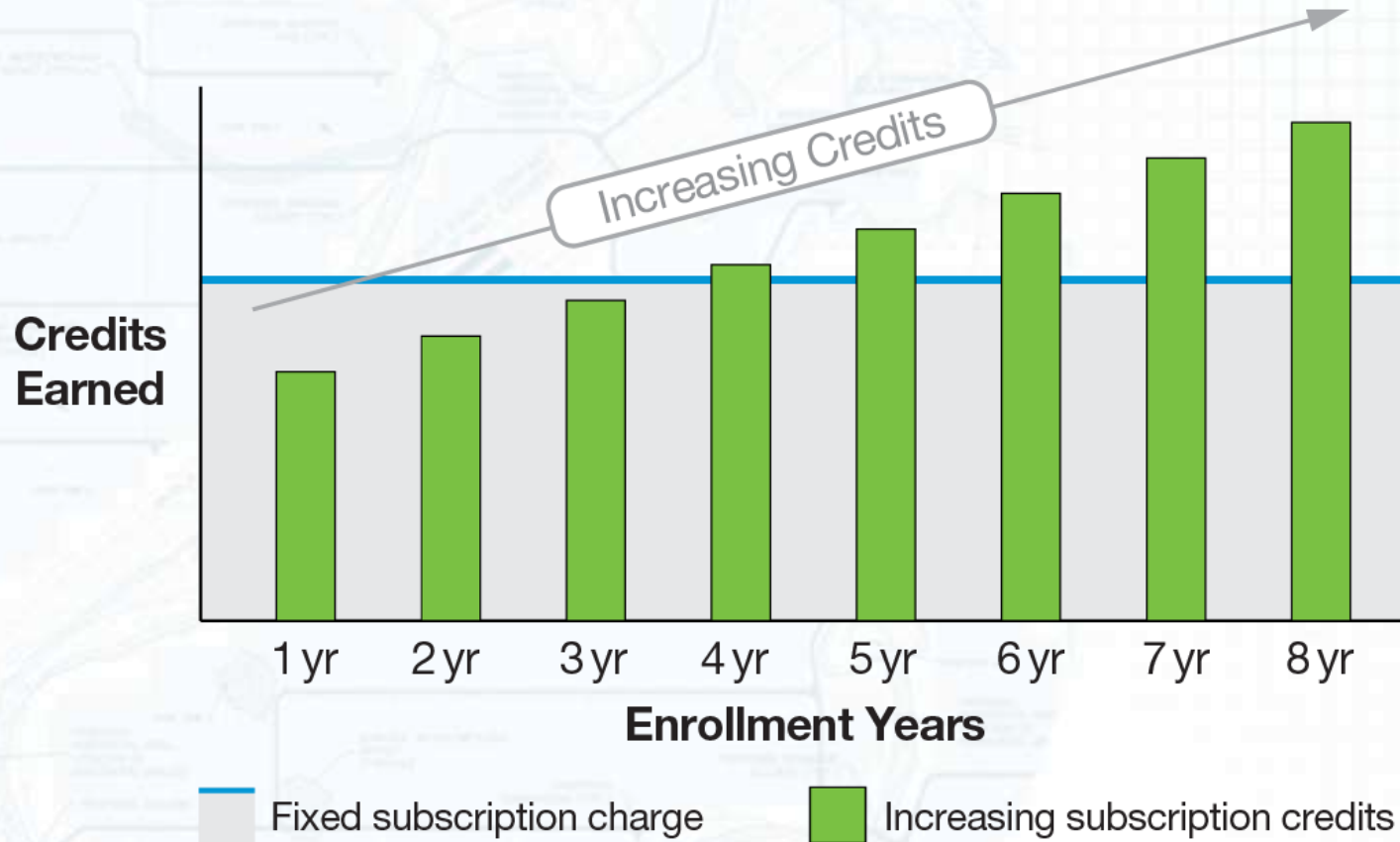


Grows over time
to lower your bill

That means you get solar energy for just \$3 for the month

The graphic above is an estimate based on historical data from satellite and ground-based measurements averaged over two decades. While this data is useful in estimating average program credits over the life of the program, it is important to understand that in any given month, season or year, actual credits may be higher or lower than the average. Actual solar generation is influenced by varying weather conditions, such as cloudiness, temperature, the angle of the sun, rainfall and other factors. Due to this weather variability, it is expected that actual subscription credits will vary from the estimate month-to-month, year-to-year or over multi-year periods.

FPL SolarTogether – 10 kW subscription example




Celebrate and promote your commitment to renewable energy

U.S. Navy reposted

Assistant Secretary of the Navy (E&E)
@ASNEIE

So proud that @USNavy installations are participating in the @insideFPL SolarTogether program. This emissions-free solar energy provides energy security for mission success!



DoD Announces Participation in Florida Power & Light's SolarTogether P

From defense.gov

4:34 PM · Mar 8, 2024 · 3,983 Views

Cheney Brothers, Inc. Headquarters
April 15, 2021 · 🌐

With 30 million new solar panels by 2030, Florida is lighting and leading the way. Cheney Brothers Riviera Beach and Punta Gorda are part of the FPL Solar Together program. Since last year, we've purchased a portion of our power from FPL's solar farms, which will continue to increase every year. The Solar Together program will create a cleaner environment - lowering carbon footprints, saving money over time, and producing more affordable energy.

#CheneyBrothers #TheCheneyWay #FPLSolarTogether




28 5 Shares

Cape Marina
September 14, 2020 · 🌐

Cape Marina is proud to announce that we are participating in the FPL SolarTogether™ program. The SolarTogether™ program gives everyone the opportunity to participate in the benefits of solar no matter where you live, or whether you rent or own your home. FPL will build, operate and maintain 20 solar power plants dedicated to the program – the first six solar power plants that are up and operational are fully subscribed.

When the program was proposed to us in January of 2019, we immediately jumped on board and sent our support to the Florida Public Service Commission to get the program approved! Cape Marina's energy usage and carbon footprint will largely be offset (if not close to net-zero) with our participation in the program!



FPL.COM

FPL | Energy My Way | SolarTogether
The FPL SolarTogether program is designed to provide customers who may ...

Learn more

9 3 Comments

Questions & more information

- ▶ Program is currently open for residential and small/medium business customers in Legacy and NWFL areas
- ▶ Subscriptions will be filled on a first-come, first-served basis
- ▶ Next steps – reach out to your customer advisor to enroll

The image shows three solar panels mounted on white, tree-like structures in front of a brick building. The solar panels are tilted towards the sun. The building is made of red brick and has several windows and columns. The sky is clear and blue.

FPL SolarVantage Solar Made Simple

Florida Power & Light Company



FPL®

FPL SolarVantage enables simple and hassle free installation of customized solar solutions



Customized solar solutions for your needs



Design, procure, permit, construct, and maintenance for solar asset



No Upfront capital required;
Convenient, on-bill payment each month



Enjoy benefits of on-site solar energy while meeting your energy goals

FPL SolarVantage enables customers to decarbonize their operations by investing in a wide range of customer-centric, on-site solar assets

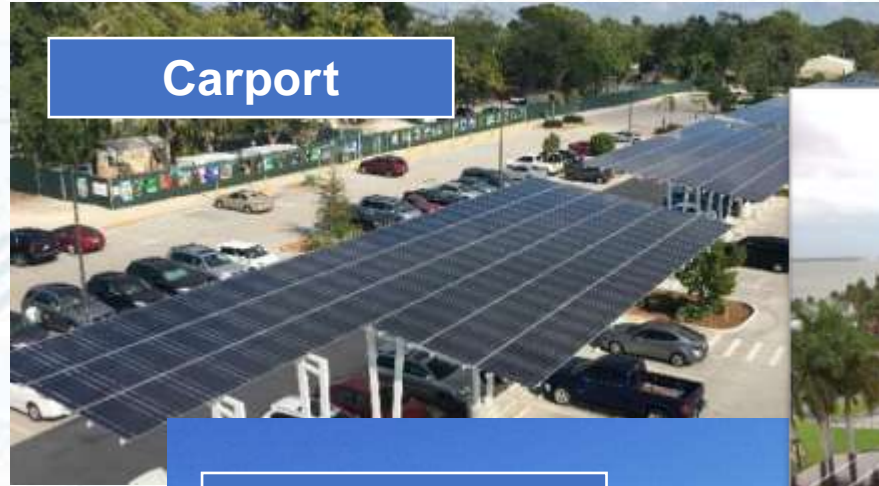


- Open to customers on non-residential rate code
- Offset energy consumption with on-site electrical generation
- No upfront capital; 10 Year Term, fixed on-bill monthly charge
- FPL provides all maintenance for the term
- Claim valuable tax incentives
- Earn all Renewable Energy Certificates (RECs)

FPL SolarVantage makes it easy to add the benefits of solar energy through a wide range of solar asset types



Rooftop



Carport



Cantilever



Canopy

FPL SolarVantage customers can invest in both grid-tied and non-grid tied assets



Solar Trees



SolarStop

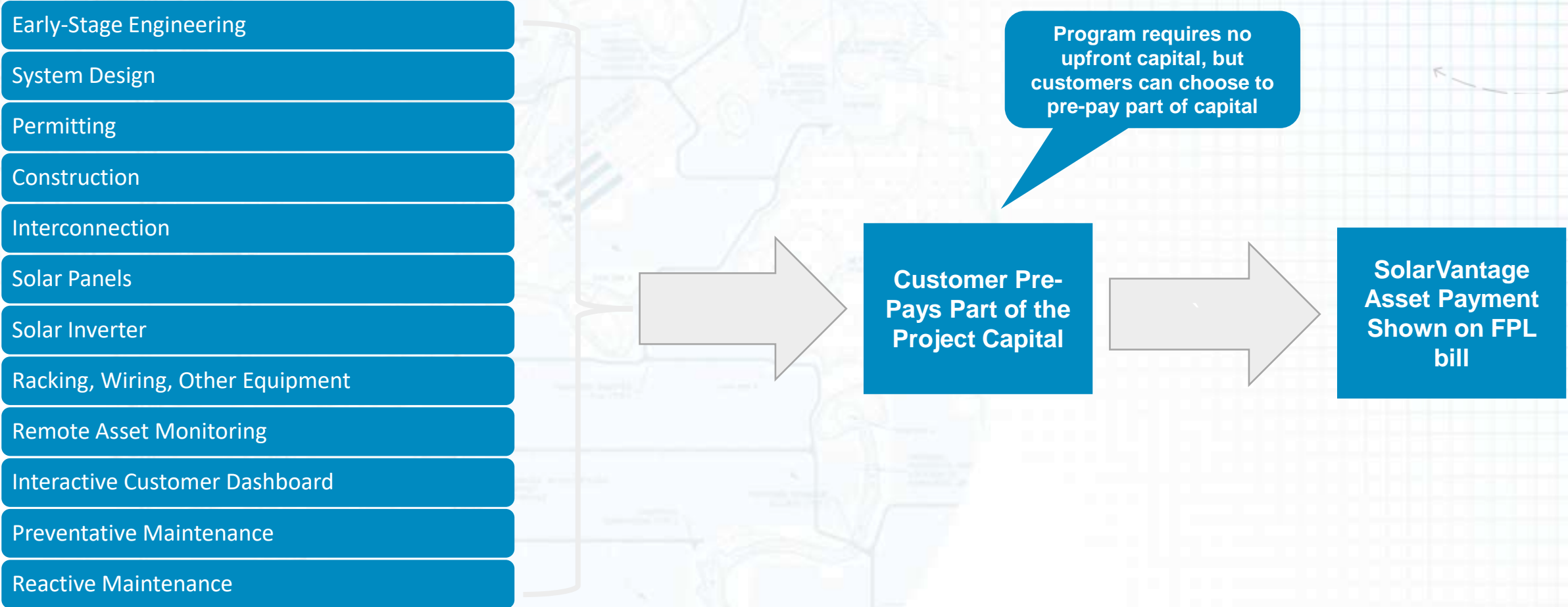


Solar Haven



SolarZone

Flat, on-bill rate includes all work needed to strategically design, safely construct, and efficiently monitor the solar asset



Thank You!



Amanda Gittens
FPL Director of Development for Solar Programs
amanda.gittens@fpl.com

Break until 1:35 PM

Resilience

Ethan Epstein

Resilience Program Manager
DOE FEMP

What is Resilience?

The ability to anticipate, prepare for, and adapt to changing conditions and to withstand, respond to, and recover rapidly from disruptions.



RESOURCEFULNESS

Preparedness with optimized performance of energy and water systems and adequate planning, personnel training, and testing to manage through a disruption



REDUNDANCY

Availability of back-up resources and islandable onsite generation systems that enable continuity to critical loads during primary system disruptions



ROBUSTNESS

Ability to maintain critical operations during a disruptive event through building, infrastructure, and redundant system design, as well as system substitution capability



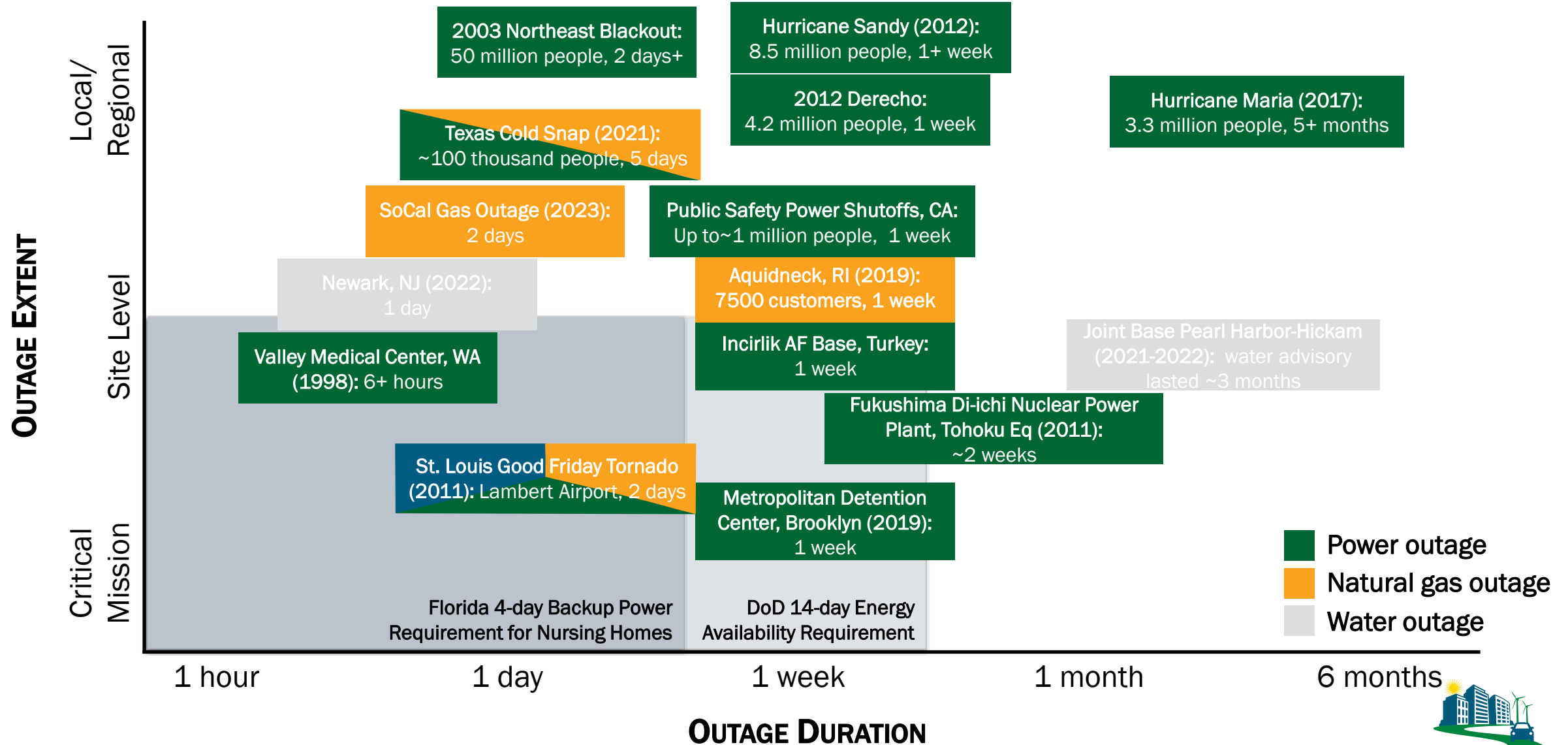
RECOVERY

Ability to return to normal operating conditions as quickly and efficiently as possible after a disruption

ENERGY & WATER RESILIENCE



Energy and Water Resilience is Increasingly Important



High Impact Hazards Occurring More Frequently Over Time

- NOAA analysis of “billion-dollar disasters” demonstrates an increase in hazards that are likely to be impacted by climate change over time
- Increasing cost of natural hazards is likely a combination of increasing population and climate change effects

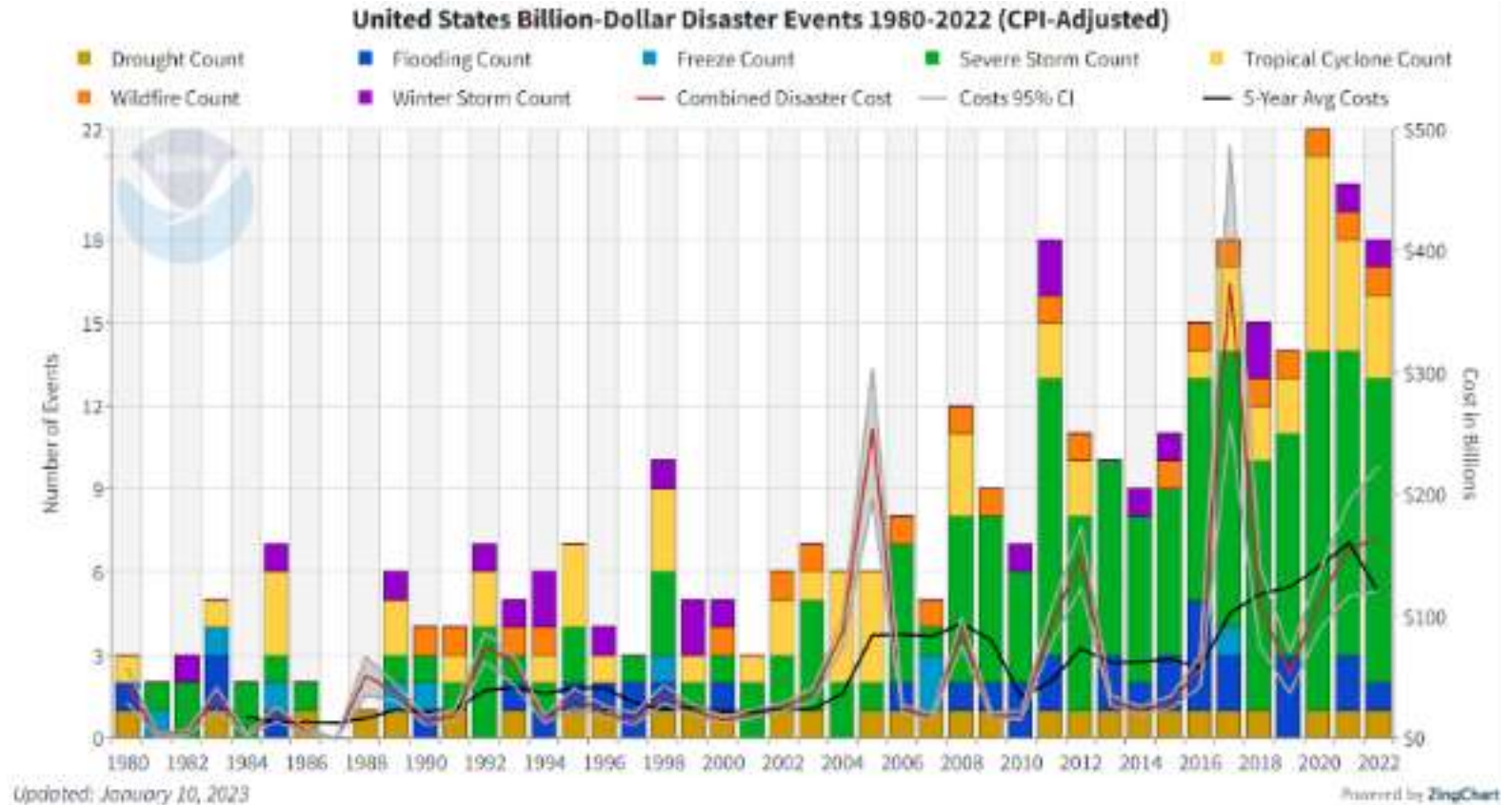


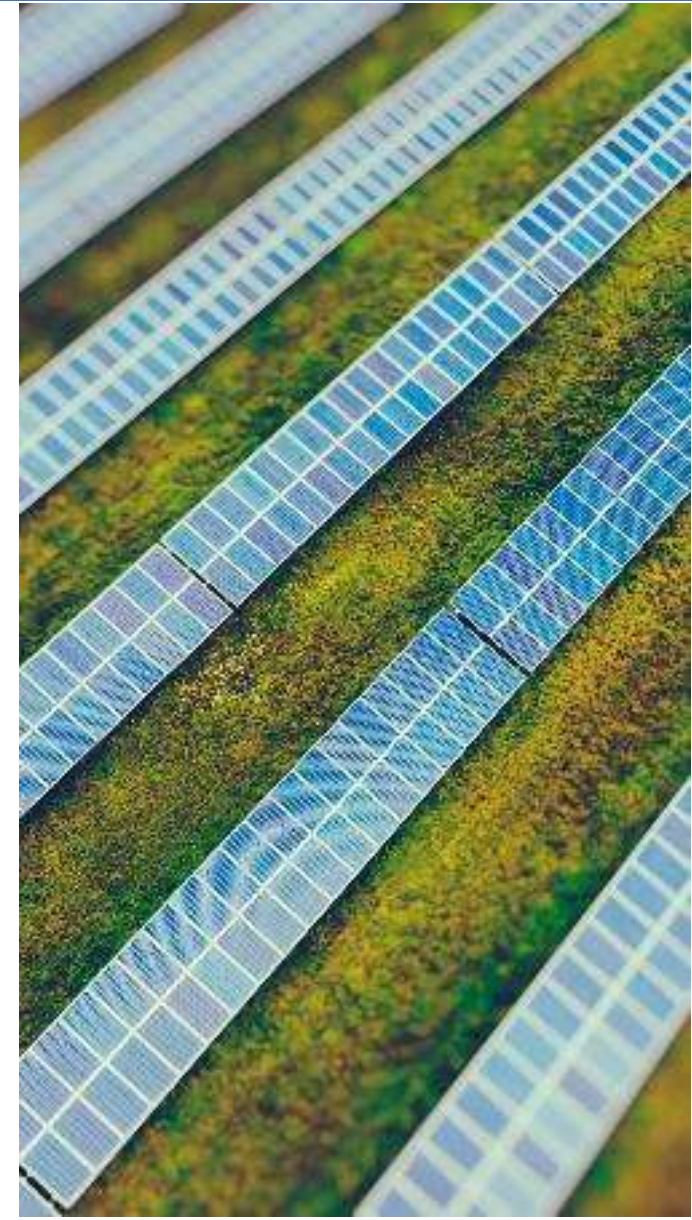
Figure Source: NOAA/NCEI, <https://www.climate.gov/news-features/blogs/2022-us-billion-dollar-weather-and-climate-disasters-historical-context>



Federal Utility Resilience Projects - Funding Approaches*

- Real property arrangements such as lease, easement or license for on-site generation/storage
- Utility Service Contracts (using GSA Areawide Contracts)
- Direct Funded Projects/Appropriations
- Utility Incentives
- Utility Resilience Tariffs
- Utility Energy Service Contracts (UESCs)

* *There are other options for achieving resilience goals, such as using [ESPCs](#), that will not be covered in this webinar.*



Utility Resilience Tariffs

- New offering from a limited number of utilities in vertically-integrated markets
- Generation/storage systems designed, built, paid for, owned and operated by the utility; operates during a grid outage
- Typically require state PUC approval
- Important considerations:
 - Resilience uptime guarantee
 - Cost
 - Contract length
 - Terms/conditions
 - REC ownership (if applicable)



2024

Resilience as a Service

Optional Supplemental Power Services (OSPS)

Sustainable Energy Security | Florida Power and Light

Darrell Sanford

FPL Lead Project Manager for OSPS



Regulated Generator Program



Background

- Approved by the Public Service Commission in 2018
- Installed first generator system in 2020
 - 2.5MW Tier 4 Final Diesel
- Replacements of customer owned MV distribution equipment was added to OSPS offerings in addition to back up generation



Mission

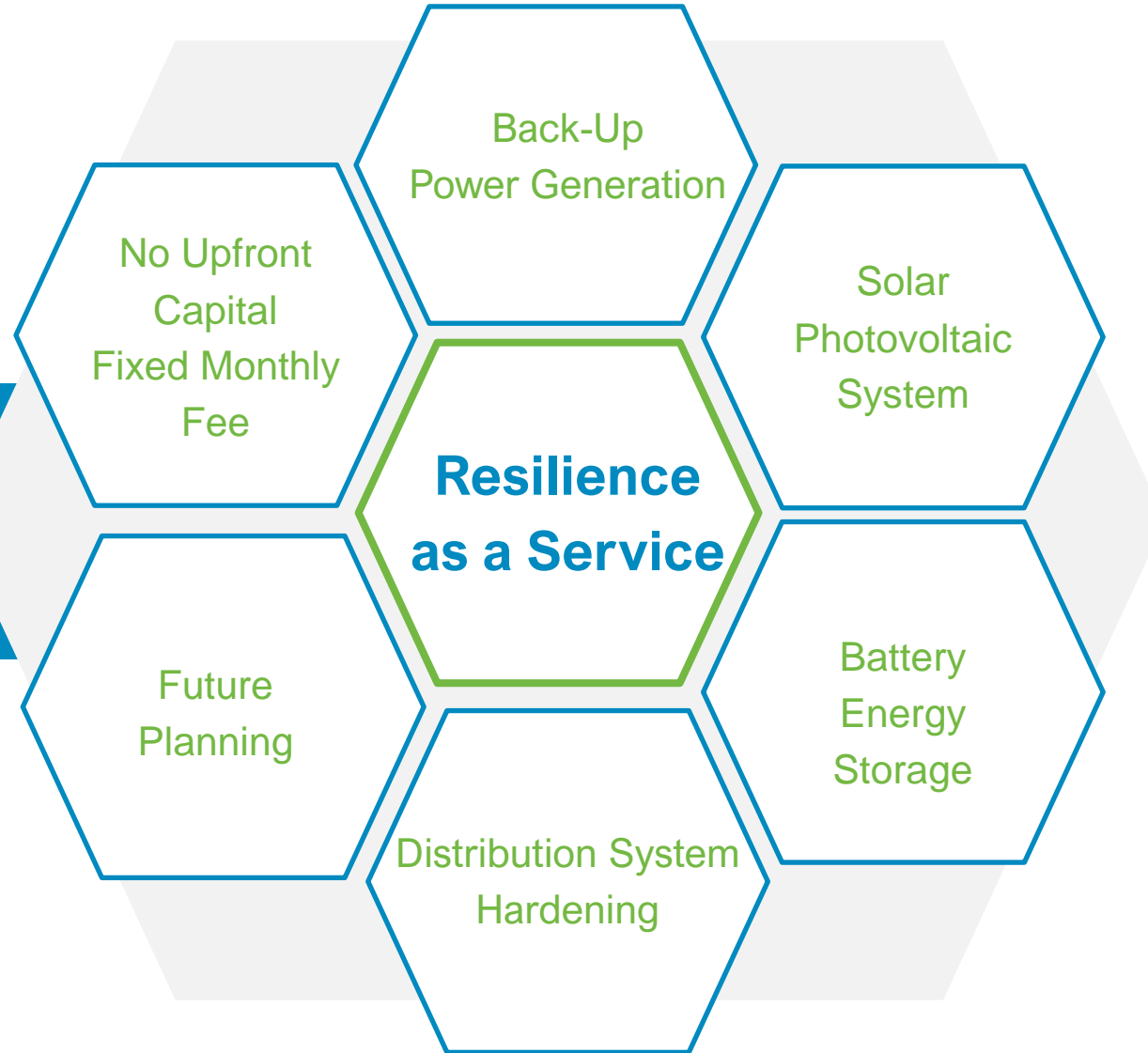
- To be a resource for Governmental Agencies in the implementation and ownership of resilient electrical infrastructure
- Provide cost-effective solutions



Value

- Deferral of capital
- Deferral of risk
- Avoided costly and time-consuming RFP process
- Utility grade equipment and service
- 20-year warranty and budget neutrality

Solution





What If's...

- Timeline of cost of the RFP process
- Employee's time for Project Management
- Missteps lead to change orders and lost time

Benefits...

- Budget neutrality
- Stronger utility partnership
- Deferred capital
- Deferred risk of implementation and ownership
- Economic impacts



Custom-Designed Energy Infrastructure

- Services
 - Energy design expertise
 - Custom built installation
 - Utility owns and operates
 - Maintenance
 - » Repairs and replacements – past manufacturer warranty
- Monitoring
 - » Single point of contact
 - » Integrated digital platform
 - » Network Operations Center
 - » 24/7/365 monitoring
- 20-year term

Utility Energy Security

- Unparalleled Turnkey Service
 - » Peace-of-mind power protection
 - » Utility delivers grid and back-up power



C&I Project Examples



	Project	Capital Avoided	COD	County	KW / Fuel	Contract (Yrs)
In Service	State Hospital	\$1.8M	10/20	Baker	2.5MW Diesel Tier 4	20
	Hospice Facility	\$791K	6/22	Palm Beach	800 kW Diesel Tier 2	20
	State Correctional Facility	\$1.8M \$1.6M	1/24	Volusia	1250 Diesel T4 Distribution System	20
Under Construction	State Correctional Facility	\$2.9M	2/24	Miami Dade	1.7MW Natural Gas	20
	State Correctional Facility	\$6.9 M	2/ 25	Jackson	2.5MW Natural Gas Distribution system	20
Development	State Correctional Facility	\$6.9 M	2/ 25	Holmes	2MW Natural Gas Distribution system	20
	State University	\$11.6M	2025	Sarasota	1.5 MW Multiple Systems	20
	State University	\$4.8M	2025	Bay	1.5 MW Multiple Systems	20
	International Airport	\$1MM	2025		6 MW, Expandable to 10 MW Solar PV & EV Chargers	20
	International Airport	>\$100M	2026		~60MW Solar PV & EV Chargers	20

Program Overview



Economics

- Zero Up-front Capital
 - » Preserve capital for core public services
- Budget neutral prospective with consideration of all savings



Budget

- FPL Fixed On-Bill Monthly Fee for the Term of the Contract
 - » Budget with accuracy
 - » Recognized as operational expense
 - Reserve debt capacity



Financial Savings

- Full Back-Up Generation Savings
 - » FPL Load Control Rates
 - Approximately 20% savings
- Solar Photovoltaic (PV) Savings
 - » Solar PV excess energy
 - Monthly credit on-bill for energy sold to FPL
- Battery supply support system
 - Offset critical peak load
- Capital Improvement Avoidance Savings
 - » Replacement/Repeat capital deployment

MORNING / EVENING



Power
when it's
needed

MID-DAY / NIGHT-TIME





Reliability

- All new infrastructure
- Appropriate redundancy
- Integrated digital platform
 - » Network Operations Center Dashboard
- Educational injection to our world-class systems



Environmental Impacts

- Design to appropriate carbon intensity
- Contribute to resiliency initiatives
- Reduce carbon footprint
- Support federal EPA energy transition goals
 - » **Natural Gas Generator System**
 - » **Clean burning Tier 4 Final Diesel Generator System**



Mitigate Liability

- Responsibility of financing, designing, installing, owning, maintaining and managing energy system
- Storm event impacts and system failures
- Minimize performance risks – 20-year confidence



Engagement Plan

- Educate community
 - » Communication plan on initiatives
 - » United branding for public awareness
- Multimedia marketing campaign
 - » Landing page on website
 - » Static and dynamic videos
 - » Social media
 - » Apps and augmented reality platforms
 - » Bring residents and the public along on the journey
 - Incorporate customer staff in the process
 - Solicit creative ideas from customer staff
 - Participate with marketing agency



Procurement

- Tariff product allows to contract directly with utility
- Florida Public Service Commission
 - » Reviewed, negotiated and approved



Community Participation

- Social equity
 - » Local and small business participation
 - » Support local economy
- Local participation – good business sense
 - » Building a balanced team
 - » Reduce learning curve
 - Understand the local process
 - Navigate permitting requirements
 - » Improve deliverable
 - Passing savings on to the customer

Thank You



Next Step!

- Enter into agreement for Resilience Action Plan
- Action Item
 - » Provide resilience needs
 - » System operation annual cost options

Darrell Sanford

FPL Lead Project Manager for OSPS

darrell.sanford@fpl.com





We are committed to excellence

By establishing high standards of **quality**, driving continuous improvement, making fact-based decisions, working safety, and holding ourselves **accountable**, we cultivate the expertise and passion to deliver the best for our shareholders, customers, employees and stakeholders.



We do the right thing

By acting with **integrity** and humanity in everything we do, living up to our commitments and being forthright and honest in our communications we create an environment of openness and **trust**.



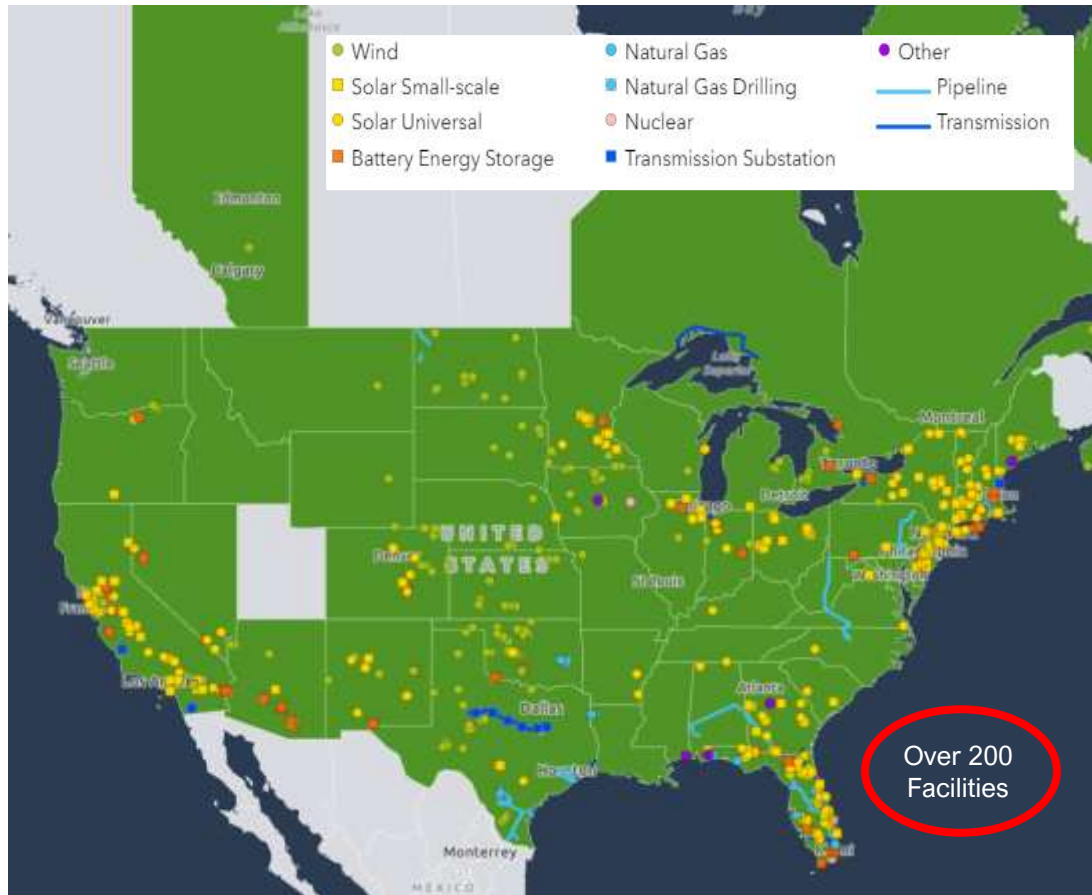
We treat people with respect

By leading **respectfully**, promoting **teamwork**, building a diverse and inclusive team, and investing in development we strengthen and engage our greatest asset – our people.

Appendices



Building Sustainable Energy Security... It's What We Do!



~\$110 B
infrastructure capital
deployed since 2012



99%
reduction in our dependency
on foreign oil since 2001



~61,800 MW
net generating
capital



Thousands
high-paying American jobs
created through our
investments

Utility Energy Service Contracts (UESCs)

Jeff Gingrich

Project Manager, FEMP Utility Program
National Renewable Energy Lab

What are Utility Energy Service Contracts (UESCs)?

Performance contracts that allow agencies to do energy and water projects with little to no up-front costs and appropriations from Congress.

- Savings from reduced consumption and improved efficiency used to pay for a variety of measures
 - Infrastructure upgrades
 - Replacement of aging, inefficient equipment
 - Renewable energy systems
- Capital costs paid for through financing and available agency funds



Federal Drivers: EA 2020 and Energy Management Requirements

42 U.S.C. § 8253 Energy and Water Management Requirements

- Annual requirements for evaluation of 25% of covered facilities (EISA audits)
 - UESC Preliminary Assessment or Investment Grade Audit can fulfill audit requirement
- **EA 2020** - Requires installation of life-cycle cost (LCC) effective energy conservation measures within 2 years of audit
- **EA 2020** – Requires use of performance contracting to address at least 50% of LCC ECMs
 - Applies to measures identified in evaluations completed on or after **December 27, 2020**



FEMP Guidance

Performance Contracting Requirements Related to the Energy Act of 2020



How do UESCs work?



Select contractor

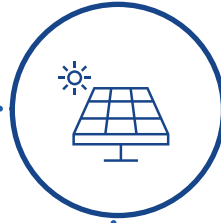
Competition limited to serving distribution utilities



Conduct assessments to evaluate energy/water savings opportunities

Contractor identifies cost effective energy conservation measures (ECMs)

No-cost Preliminary Assessment



Implement ECMs

Utility secures financing and installs measures



Make payments from cost savings

Contract term of up to 25-years to pay for ECMs



Implement Performance Assurance Plan to monitor and sustain savings

Via operations & maintenance / savings verification/other



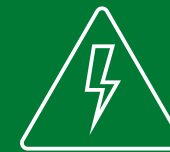
Authorizing Law: UESC

Authorized and encouraged under the Energy Policy Act of 1992 (42 U.S.C. § 8256 and 10 U.S.C. § 2913 for DOD)

- Agencies are authorized to participate in utility incentive programs and accept any financial incentives, goods, or services generally available.
- Defined as a limited-source acquisition between a federal agency and serving utility for energy management services, including:
 - Energy efficiency improvements
 - Water efficiency improvements
 - Demand reduction services
 - Distributed energy

UESCs are Limited Source Acquisitions

Competition is limited to serving distribution utilities (electricity, natural gas, and water).



Key Advantages of UESCs

- **Intended to achieve savings or be budget neutral**
 - Paid for through energy/water savings and/or available agency funds
 - Utility is responsible for obtaining financing
- **Contract term up to 25 years**
- **Multiple sites/facilities within the utility's service territory may be included in a single task order**
- **Performance Assurance Plan and/or savings guarantee is required**
 - Utility can perform operations & maintenance, repair/replacement, measurement and verification
- **Contracts are firm-fixed-price**
- **Utility is single point of contact for entire project – evaluation, design, installation, post-installation services**



Energy Conservation Measures

Common Examples

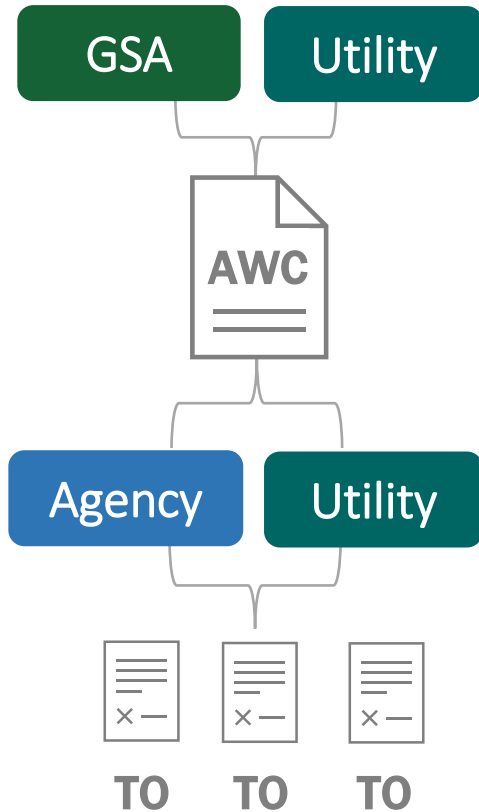
(not exhaustive)

- Boiler and chiller upgrades
- Energy management control systems
- Commissioning/Retro-commissioning
- Building envelope
- HVAC
- Chilled/hot water, steam distribution
- Lighting and lighting control improvements
- Electric motors/drives
- Refrigeration
- Renewable Power Generation Systems
- Electrical peak shaving/load shifting
- Rate adjustments
- Appliance/plug load reductions
- Energy consuming devices and support structures
- Water and wastewater

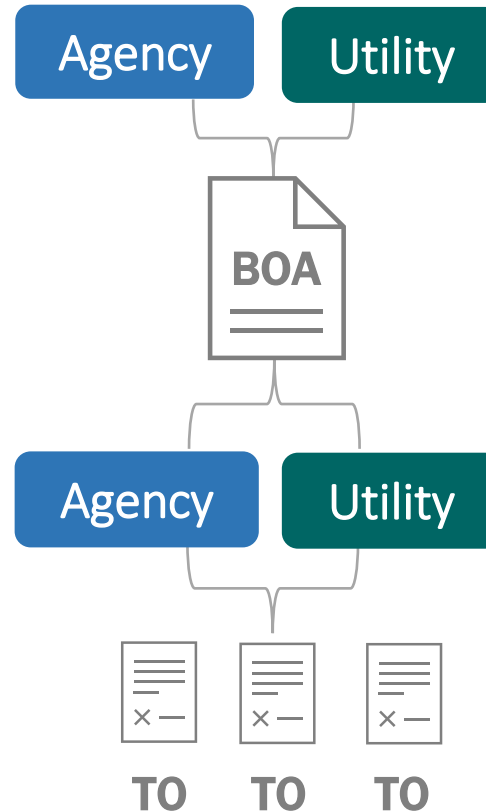


UESC Contracting Options

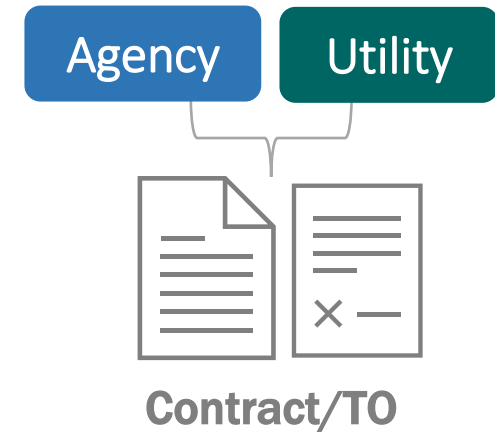
Areawide Contract (AWC)



Basic Ordering Agreement (BOA)



Separate Contract



Getting Started with a UESC

- **Set goals for your project.**
 - Energy/water efficiency, equipment replacement, decarbonization and electrification, resilience, etc.
- **Review facility/energy consumption data and identify known ECM opportunities.**
 - Leverage existing audits, multi-year site plans, and facility data
- **Identify eligible utility providers.**
 - Contact your serving utilities (electricity, natural gas, water) learn about program availability and experience
- **Evaluate funding options.**
 - Identify available appropriations, grants, and incentives that may help expand scope or shorten contract term
- **Contact FEMP for training and technical support.**



UESC Support and Resources

FEMP offers various types of support to set projects up for success:

- General consultations with [Federal Project Executives](#)
- [Project Facilitators \(PF\)](#) to act as advisors through the Preliminary Assessment
- [Project support](#) provide by technical and contracting SMEs through DOE National Labs
- [Training](#) on contracting and technical topics for agency teams
- [Online templates and other resources](#)
- [Peer-to-Peer working groups and seminars](#)



How much does FEMP support cost?

Nothing!

Most support can be provided at no cost*

[Visit the FEMP UESC website to learn more](#)



FPL Utility Energy Service Contract Program

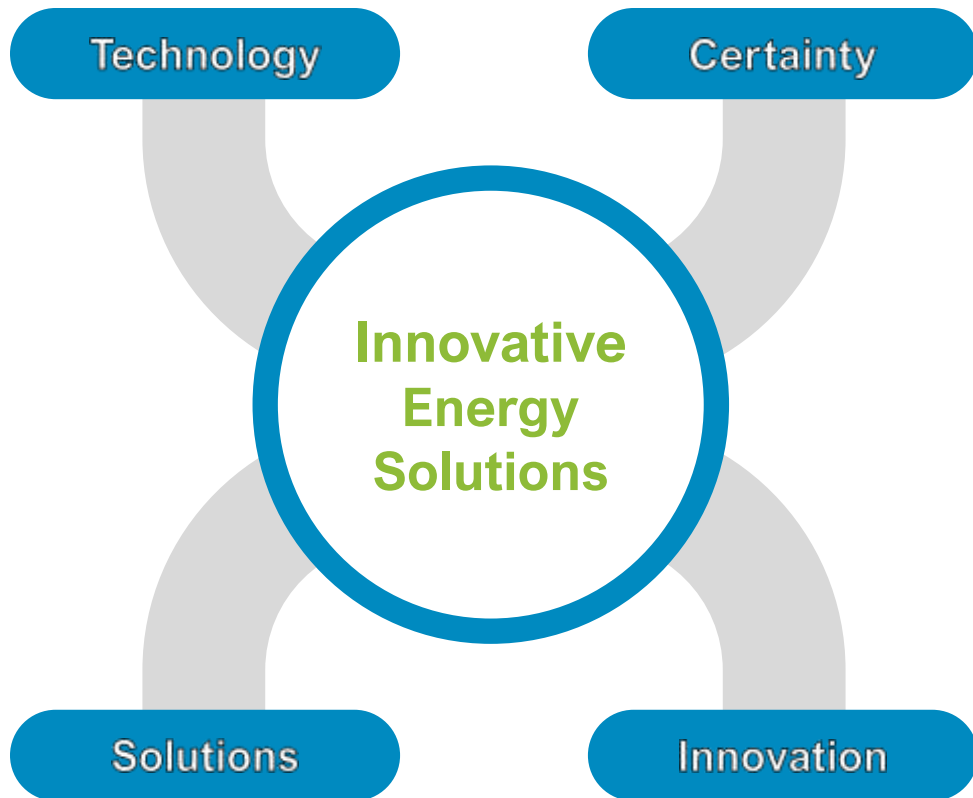
Eric Myers – FPL Manager of Energy Services

Madonna Rykken – FPL Senior Business Manager for UESC

5/8/2024



Our Mission and Experience



Mission

- Work with Federal Agencies to develop, install, and finance turnkey projects that improve energy efficiency, reliability, sustainably, and resilience
- Serve as a long-term business partner for our federal agencies

Experience

- 35 years a utility-based ESCO
- More than 500 projects executed, generated over \$2 billion in customer savings
- More than 60% of our customers implement multiple phase of work
- Zero-savings shortfalls in 35-years, because we believe results matter

Federal Government Experience



- 35+ year history working with Federal Government
- Turnkey solutions includes development, contracting, engineering project/construction management, procurement, finance, M&V, etc.
- Projects include energy conservation measures (ECMs), such as lighting, water, mechanical, renewable energy, electrical infrastructure, etc.
- **In 35+ years no annual savings shortfalls**

Project/Customer	Year Completed	Category 1 – Electrical Systems	Category 2- HVAC Systems	Category 3 – Water and Recycling Systems	Category 4 – Building Commissioning	Category 5 – Energy Data Collection Hardware, Software and Analysis	Category 6 - Other
Miami Veterans Affairs Hospital – Utility Energy Service Contract (UESC)	2020	✓	✓	✓	✓	✓	✓
Drug Enforcement Agency – UESC	2023	✓	✓		✓	✓	
U.S. Department of Agriculture - UESC	2023	✓	✓		✓	✓	✓
National Aeronautics and Space Administration (NASA) – UESC	Current	✓	✓	✓	✓	✓	
Naval Air Station Pensacola – UESC	Current	✓	✓	✓	✓	✓	
Hurlburt Field Substation Control Houses	2023	✓	✓		✓	✓	

Case Study: Naval Air Station Pensacola, UESC



UESC Facts:

- Location: Pensacola, Florida
- Contract Term: 18 years
- Investment Value: \$7.6 million
- Square footage: 1.7 million SF

Energy Conservation Measures:

- Retrofit over 14,000 lighting fixtures
- Retrofit over 400 plumbing fixtures
- Improve mechanical systems (chiller upgrade)
- Replace 44 transformers
- Upgrade medium voltage cable, transformer, and switchgear



Case Study: NASA, Kennedy Space Center (KSC), UESC



UESC Facts:

- Location: NASA KSC, Florida
- Contract Term: 14 years
- Investment Value: \$19.4 million
- Avoided Cost: \$1.4 million
- Square footage: 4.4 million SF

Energy Conservation Measures:

- Retrofit/re-lamp/replace over 13,000 lighting fixtures (high bay, low bay, office, wall packs, exterior street/parking)
- Improve mechanical systems (air handling units, chillers, boilers and controls)
- Construct 2-MW ground mounted PV system
- Replace 74 transformers
- Retrofit over 500 plumbing fixtures



Case Study: Veteran's Affairs Medical Center, UESC



UESC Facts:

- Location: Miami, Florida
- Contract Term: 16 years
- Investment Value: \$14.1 million
- Square footage: 1.1 million SF

Energy Conservation Measures:

- Interior and Exterior Lighting and controls
- Advanced metering
- Repair Solar PV system
- Water efficiency improvements
- Improve mechanical systems (boiler plant, air handler unit controls, and demand control ventilation)
- Replace transformers
- Roof insulation and reflective coating



Specific Challenges developing UESCs

Lower utility rates:

- FPL rates are 30% lower than national average

Higher project costs:

- Material cost, Labor Cost, Interest Rates, etc.

Fewer ECMs with low simple pay back (SPB) to bundle:

- Lower SPB ECMs already deployed in a previous projects, 80/20 rule

Long approval time:

- Negative impacts to project financials

Feedback from agencies:

- Timely and open feedback is invaluable, as we want to continuously improve our UESC offering



The future of our UESC program at FPL



How can we make our UESC better over next 25 years?

Fully understand agency challenges

- Our offerings should closely align to agency needs

Combine utility tariff programs (where feasible)

- SolarTogether, SolarVantage, OSPS, EVSE, etc.

Deploy Utility Owned/Operated Assets

- On-site Solar PV, Geothermal, EVSE, etc.

Leverage and bundle other funding options

- AFFECT grants, ESTCP, EUL, EAL, etc.

Streamline UESC process

- Work with agencies to make the process more streamlined for everyone



Developing a recipe for UESC success



What do we need to have better success with agency?

Agency UESC forecasting

- Your agency plans to do how many UESCs next 5-10yrs?

Communication

- Open communication to discuss challenges, priorities, gaps, etc. at the agency's site

Leadership Engagement and Support

- UESCs should solve a problem that is important to the agency's leadership

Strategic Project Planning

- If appropriate, consider multiphase smaller projects vs single-massive project
- Utilize UESCs as tool to support previously planned projects



Q&A

Eric Myers

FPL Manager of Energy Services
eric.myers@fpl.com

Madonna Rykken

FPL Senior Business Manager for UESC;
madonna.rykken@fpl.com

Our Values

We Are Committed to Excellence

By establishing high standards of quality, driving continuous improvement, making fact-based decisions, working safely and holding ourselves accountable, we cultivate the expertise and passion to deliver the best for our shareholders, customers, employees and stakeholders.

We Do the Right Thing

By acting with integrity and humility in everything we do, living up to our commitments, and being forthright and honest in our communications, we create an environment of openness and trust.

We Treat People With Respect

By leading respectfully, promoting teamwork, building a diverse and inclusive team, and investing in development, we strengthen and engage our greatest asset – our people.

Leveraging GSA Areawide Contracts (AWCs)

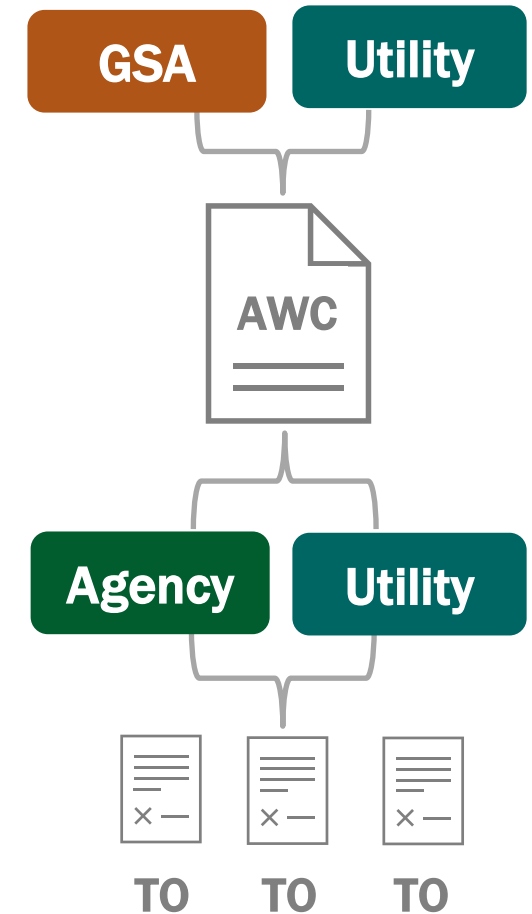
Ebony Atkinson

Chief, Public Utility Branch | Senior Contracting Officer
GSA

Areawide Contracts for Utility Services

GSA negotiates AWCs with public utilities on behalf of the Federal Government to streamline procurement of utility services.

- GSA has Statutory Authority under 40 U.S.C 501
 - DOD and DOE have permanent delegations
 - Veterans Affairs has authority for interconnection charges
- Contract Term - 10 years (25 years for UESCs)
- FAR Part 41 requires agency use available AWC unless head of contracting authority (HCA) determines otherwise
- AWC bilaterally signed by GSA and utility
- Exhibits for services signed by agency and utility
- Delegation required when there is no AWC



AWC Exhibits/Authorizations

Authorization for Electric Service

Nature of Service

- Connect
- Change
- DSM Work
- Line Extension, Alteration, Relocation or Reinforcement
- Special Facilities

Examples: EV Infrastructure, Advanced Meters

Authorization for Natural Gas Service

Nature of Service

- Connect
- Change
- Continue service
- Line Extension, Alteration, Relocation or Reinforcement
- Transportation
- Billing & Ancillary Services

Example: Installation of gas line

Authorization for Energy Management Services

Nature of Service

- Preliminary Energy Audit
- Investment Grade Audit
- Engineering & Design Study
- Energy Conservation Project Installation
- Demand Side Management Project

Examples: Lighting and Chiller Retrofits, Recommissioning, HVAC

Authorization for Provisions of Services Under (insert appropriate Regulatory Authority)

Nature of Service

- _____ Interconnection of the Ordering Agency's renewable energy project

Examples: Interconnection of PV System



Authorizations for Electric or Natural Gas Service

Used to obtain utility service and implement infrastructure projects that don't typically result in savings.

Authorization for Electric Service

Nature of Service

- Connect
- Change
- DSM Work
- Line Extension, Alteration, Relocation or Reinforcement
- Special Facilities*

Authorization for Natural Gas Service

Nature of Service

- Connect
- Change
- Continue service
- Line Extension, Alteration, Relocation or Reinforcement
- Transportation
- Billing & Ancillary Services

* *Special Facilities includes a variety of measures not otherwise listed in the Exhibit*



Authorization for Electric Service: Project Examples

- EV Infrastructure
- Advanced Meters
- Solar Arrays
- Conversion of overhead lines to underground
- Utilities hardening
- Emergency & back-up generation
- Customer-owned substation and distribution system upgrades
- Distribution system mapping
- Osmose pole inspections/replacements
- Emergency restoration/repairs
- Redundant/alternate feeder
- Infrared scan
- Line extensions
- Lightning protection



Using the EMSA for UESCs

The Authorization for Energy Management Services (EMSA) is used to award UESCs under an AWC.

- **UESC services include:**
 - Project development - preliminary assessment, investment grade audit
 - Task order award - engineering and design, ECM installation
- **How does it work?**
 - Agency and utility agree upon the scope, deliverables, and cost for the service
 - Agency completes EMSA form and attaches task order
 - Agency sends EMSA and customer agreement form to Utility for signature



EMSA Example - FPL

EXHIBIT "B"

Contractor's ID NO. _____ {Optional}
Ordering Agency's ID NO. _____ {Optional}

FLORIDA POWER & LIGHT COMPANY
AUTHORIZATION FOR, OR TERMINATION OF, ENERGY MANAGEMENT SERVICES
CONTRACT NO. GS-OOP-15-BSD-1124

Ordering Agency: _____
Address: _____

Pursuant to Contract No. GS-OOP-15-BSD-1124 between the Contractor and the United States Government and subject to all the provisions thereof, service to the United States Government under such contract shall be rendered or modified as hereinafter stated. Contract Articles 2 and 4 shall be followed for the initiation of service under this contract.

PREMISES TO BE SERVED: _____
SERVICE ADDRESS: _____

NATURE OF SERVICE: Preliminary Energy Audit ECP Feasibility Study ECP Engineering & Design Study
 Energy Conservation Project (ECP) Installation Demand Side Management (DSM) Project
 Other (See Remarks Below)

SERVICE HEREUNDER shall be provided consistent with the Contractor's applicable tariffs, rates, rules, regulations, riders, practices, and/or terms and conditions of service, as modified, amended or supplemented by the Contractor and approved, to the extent required, by the Commission. (See Article 5 of this contract.)

POINT OF DELIVERY: _____

ESTIMATED PROJECT COST: \$ _____
ACCOUNTING AND APPROPRIATION DATA: _____

LIST OF ATTACHMENTS:

- | | | | |
|--|--|--|--|
| <input type="checkbox"/> General Conditions | <input type="checkbox"/> Payment Provisions | <input type="checkbox"/> Special Requirements | <input type="checkbox"/> Economic Analysis |
| <input type="checkbox"/> Facility/Site Plans | <input type="checkbox"/> Historical Data | <input type="checkbox"/> Utility Usage History | <input type="checkbox"/> ECP Feasibility Study |
| <input type="checkbox"/> Design Drawings | <input type="checkbox"/> Design Specifications | <input type="checkbox"/> Certifications | <input type="checkbox"/> Commission Schedules |

[View and Download FPL's AWC](#)



Leveraging the AWC

Steps for using AWCs for obtaining utility services:

- Obtain copy of AWC
 - AWC List: [Download Contracts/ Modifications | GSA](#)
- Complete applicable authorization form for utility services
 - Ensure applicable clauses are incorporated
- Complete necessary standard forms (SF) and customer agreement
 - Include applicable rate schedule and tariff options
- Send Authorization and customer agreement form to Utility for signature/Agency should fully execute documentation

KEY REQUIREMENT

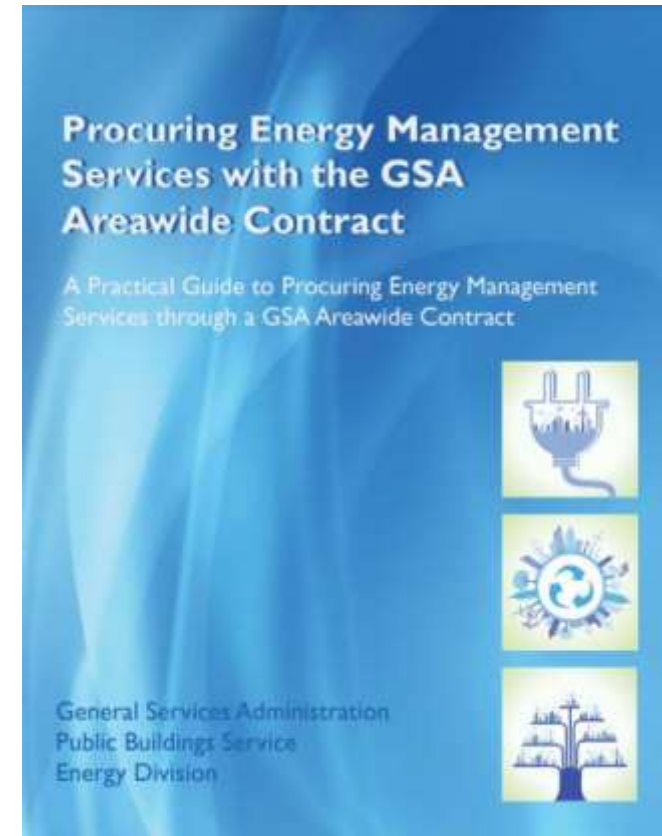
- Send signed forms to GSA for archiving
- FAR 41 requirement and important part of the process
- Copies of all agreements should be sent to GSA (energy@gsa.gov)



GSA AWC Resources

GSA Energy Library - Utility Areawide Contracts

- Utility AWC Listing
- Procurement Guide for Public Utility Services
- Utility Areawide Guide
- Procuring Energy Management Services with the GSA AWC
- Sample EV Charging Infrastructure Exhibits (coming soon)



GSA Areawide Contract Services

Eric Myers – FPL Manager of Energy Services

5/8/2024



FPL's GSA Areawide Experience



- Turnkey solutions includes development, contracting, engineering project/construction management, procurement, finance, etc.
- Projects include line extensions, underground conversions, electrical infrastructure upgrades, electrical studies, metering, special facilities, etc.
- **Leverages utility subject matter expertise**

Project	Customer	Location	Contract Vehicle
Overhead Line Extension	U.S. Navy	Pensacola, FL	GSA Areawide Exhibit A
Comprehensive Electrical Study	U.S. Navy	Pensacola, FL	GSA Areawide Exhibit A
Switchgear Replacement	U.S. Navy	Panama City, FL	GSA Areawide Exhibit A
Utility Pole & Hardware Replacement	U.S. Navy	Panama City, FL	GSA Areawide Exhibit A
Comprehensive Electrical Study	U.S. Navy	Panama City, FL	GSA Areawide Exhibit A
Comprehensive Electrical Study	U.S. Navy	Milton, FL	GSA Areawide Exhibit A
Metering Services	U.S. Air Force	Eglin AFB, FL	GSA Areawide Exhibit A
Special Facilities	U.S. Air Force	Hurlburt Field, FL	GSA Areawide Exhibit A
Electrical Study	U.S. Air Force	Hurlburt Field, FL	GSA Areawide Exhibit A
Ancillary Services/Rooftop Solar PV	National Parks	Gulf Breeze, FL	GSA Areawide Exhibit A

Case Study: Comprehensive Electrical Studies



Various studies performed for Federal Agencies in FL

Scope:

- Condition Assessment
- Short Circuit (Fault Current) Analysis
- Protective Device Coordination
- Load Flow, including voltage drop, demand loading, and power factor
- Arc Flash
- Infrared Study of Critical nodes
- Update GIS mapping
- Recommendations to resolve identified infrastructure deficiencies and gaps
- **Allows agencies to prioritize deficiencies and impact to mission**



Case Study: Electrical Infrastructure Upgrades



Various projects at agency owned sites

Scope:

- Wood Pole Condition Assessments
- Upgraded overhead and underground equipment
- Convert overhead equipment to underground
- Upgrade overhead and underground conductor, switching devices, reclosers, pad mount transformers, switch gear, capacitors banks, voltage regulators, etc.
- Emergency replacement of equipment during unplanned outages
- Storm response following major storms to repair agency owned infrastructure
- **Eliminate single points of failure**



Final Q&A, Resources, and Next Steps

FPL Closing Remarks

Emily Krasnicki, Executive Director Customer Success

5/8/2024



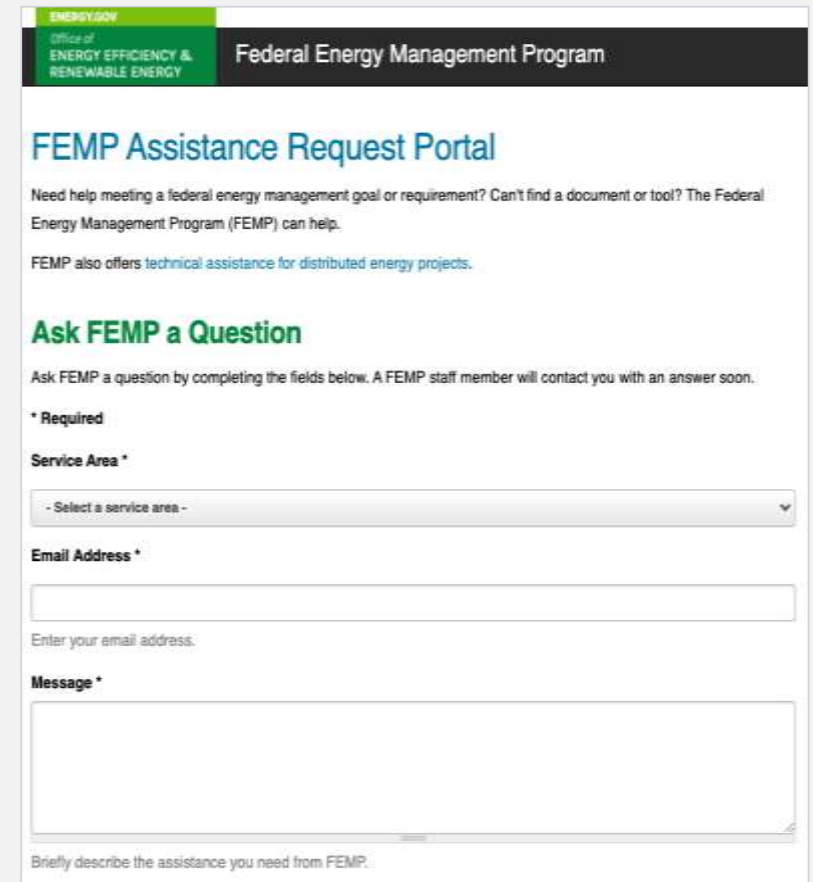
FEMP Technical Assistance

FEMP offers support to federal agencies at no cost via the Technical Assistance Request Portal:

- Staff training
- Project assistance
- Analysis* (utility rates, renewable energy optimization, resilience, etc.)
- Resources (guides, templates, etc.)

* Subject to available funding and scope of request

FEMP Assistance Request Portal



The screenshot shows the FEMP Assistance Request Portal interface. At the top, there is a header with the logo for the Office of Energy Efficiency & Renewable Energy and the text "Federal Energy Management Program". Below the header, the title "FEMP Assistance Request Portal" is displayed. A brief introduction states: "Need help meeting a federal energy management goal or requirement? Can't find a document or tool? The Federal Energy Management Program (FEMP) can help. FEMP also offers technical assistance for distributed energy projects." A section titled "Ask FEMP a Question" follows, with the instruction: "Ask FEMP a question by completing the fields below. A FEMP staff member will contact you with an answer soon." The form includes several required fields: "Service Area" (a dropdown menu with the placeholder text "- Select a service area -"), "Email Address" (a text input field with the placeholder text "Enter your email address."), and "Message" (a large text area with the placeholder text "Briefly describe the assistance you need from FEMP.").



AFFECT BIL FAC: \$250 Million to Advance Net-Zero Facilities



Assisting Federal Facilities with Energy Conservation Technologies (AFFECT)
Bipartisan Infrastructure Law (BIL) Federal Agency Call (FAC)
Advancing Net-Zero Federal Facilities (DE-FOA-0003026)

Topic Areas (updated March 22, 2024)

Topic Area 1A	Assistance with Net-Zero Buildings Project Development
Topic Area 1B	Assistance with Net-Zero Buildings Program and/or Procedures Development
Topic Area 2	Modify Existing Projects for Net-Zero Buildings
Topic Area 3	New and/or In Development Net-Zero Buildings Projects

Resources

- [FAC and Application Forms](#)
- [FAC Informational Webinar Recording and Slides](#)
- [Slides Summarizing Recent FAC Modifications](#)
- [Applicant Questions and Answers](#)
- [Upcoming Training and Guidance Information](#)

Only Federal Agencies May Apply for AFFECT

Application Submission Deadlines

Phase 1	May 31, 2023 (closed)
Phase 2	June 27, 2024 (now open)
Phase 3	April 18, 2025 (forthcoming)

Selected projects announced approximately 6 months following the submission deadline.

Questions? Email AFFECTBIL@hq.doe.gov.



FEMP Webinars and On-Demand Training

Live and on-demand webinars can be accessed through the FEMP Training Catalog

- Continuing Education Units available
- Curriculums include:
 - [UESC and Performance Contracts](#)
 - [Distributed Energy Procurement](#)
 - [Resilience Planning and Integration](#)
 - [Facility and Fleet Optimized Design](#)
 - [Legislative and Mandate Guidance](#)
 - [Energy and Cyber Security Integration](#)

ESPC, UESC, and Appropriations Project Development

This curriculum offers courses related to financing the implementation of energy and water efficiency projects. These courses help to pair available specific project situations in an effort to prevent stalled, unfunded projects.

Energy and Water Efficiency Project Financing				
Title	Level	Length	CEUs	
Energy Savings Performance Contracts (ESPC) Comprehensive Training: Phase 1 and 2	Introductory	3 hours	0.4	
Energy Savings Performance Contracts (ESPC) Comprehensive Training: Phase 3	Introductory	3 hours	0.4	
Energy Savings Performance Contracts (ESPC) Comprehensive Training: Phases 4 and 5	Introductory	3 hours	0.4	
Energy Savings Performance Contracts (ESPC) Five Phases to Success	Introductory	3.5 hours	0.4	
Project Facilitator: Fundamentals	Introductory	4 hours	0.4	
Using Task Order (TO) Schedules in eProject Builder (ePB)	Introductory	1 hour	0.2	
Advanced Measurement and Verification for ESPC	Intermediate	2.5 hours	0.30	
Decarbonization Considerations: Performance Contracting	Intermediate	1.5 hours	0.2	
Federal On-Site Carbon Pollution-Free Electricity (CFE) Purchase Contracts	Intermediate	1 hour	0.2	
Financing and Financial Proposal Review for Performance Contracting	Intermediate	1.5 hours	0.2	

[Click here to view all courses!](#)



Next Steps: Schedule a Follow-Up Meeting

Request a consultation with FEMP or your utility to:

- *Discuss your site's energy goals, challenges, and priorities*
- *Identify program offerings that align with your needs*
- *Sign up for incentives*
- *Connect with subject matter experts to learn more about any of the topics discussed today*

Consultation Request Form

Fill out this [*linked form*](#) or scan the QR code below.

FEMP will connect you with the appropriate party for follow-up, which may include FEMP technical experts, utility POCS, and/or the relevant Utility Lead Agency.



Contact Information

FEMP / DOE

Name	Program
Tracy Niro	UESC & CFE
Ethan Epstein	Resilience
Jason Koman	GEB and Fleet/EVSE
Billie Holecek (LBL)	Demand Response and TVP
Jeff Gingrich (NREL)	UESC
Ebony Atkinson (GSA – energy@gsa.gov)	Areawide Contracts

Contact FEMP SMEs via the
[FEMP Assistance Request Portal](#)

FPL

Name	Program
Christopher Vick christopher.vick@fpl.com	GEB / Demand Response / TVP
Amanda Gittens amanda.gittens@fpl.com	CFE (SolarTogether and SolarVantage)
Christina Zabala christina.zabala@fpl.com	EV Fleet/Mobility
Darrell Sanford darrell.sanford@fpl.com	Resilience (Optional Supplemental Power Services)
Eric Myers eric.myers@fpl.com	UESC and AWC Projects
Madonna Rykken madonna.rykken@fpl.com	UESC Projects



This Training Offers IACET CEUs

How to obtain your CEUs:

1. Visit the Whole Building Design Guide (WBDG) at wbdg.org to log in or create an account
2. Enroll in the training
3. Attend the training in full
4. Return to your WBDG account's Enrolled courses
5. Select the training's "Proceed to Course" button
6. Complete an assessment
7. Submit a training evaluation
8. Download your certificate.

What's an IACET CEU?

An International Association for Continuing Education and Training (IACET) continuing education unit (CEU) is a unit of credit equal to 10 hours of participation in an accredited program designed for professionals with certificates or licenses to practice various professions.



Stay in Touch

Ask Questions

Visit FEMP's [Technical Assistance Portal](#) to ask questions ranging from general to project-specific.

Find More Trainings

Search the [FEMP Training Catalog](#) to find upcoming live trainings, events, and on-demand courses.

Sign Up for FEMP Updates

Receive periodic emails to [stay informed](#) of FEMP news, trainings, tools, resources, and more.

Follow FEMP

[Follow FEMP on LinkedIn](#) for event announcements, examples of agency success, and of-the-moment news.



Thank You!



Ethan Epstein

FEMP Resilience Program Manager |
Utility Program Lead



Eric Myers

FPL Manager of Energy Services
eric.myers@fpl.com

