

**The webinar will  
start momentarily...**

# Enhancing Resilience Through Utility Partnerships and UESCs

Ethan Epstein (DOE/FEMP) | Chandra Shah (NREL) | Katy Christiansen (NREL) | Jeff Gingrich (NREL)

September 21, 2023



# Notice

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# Webinar Logistics

- Call in for the best audio connection!
- Use of webex app is recommended (better than web version)
- Logistical issues: [bkitchens@nibs.org](mailto:bkitchens@nibs.org)
- Presentation available on [WBDG webinar registration page](#)
- Please mute phone/computer throughout the webinar
- Don't hesitate to ask questions!
  - Send questions to all panelists in the **Q&A window**
  - Feel free to contact us through the [FEMP Assistance Request Portal \(www7.eere.energy.gov/femp/assistance\)](http://www7.eere.energy.gov/femp/assistance)

# To Receive IACET-Certified CEUs

- Attend the training in full—no exceptions
- Within six weeks of the training:
  - Complete the assessment (a minimum score of 80% is required)
  - Complete an evaluation of the training



## Access the UESC Training Assessment and Evaluation

[www.wbdg.org/continuing-education/femp-courses/femplw09212023A](http://www.wbdg.org/continuing-education/femp-courses/femplw09212023A)

*For logistical questions related to the webinar or evaluation,  
email Elena Meehan at [elena.meehan@hq.doe.gov](mailto:elena.meehan@hq.doe.gov).*

# Agenda and Instructors

Agenda	
I.	Overview - Importance of Resilience
II.	Types of Utility Partnerships
III.	Pursuing Resilience through Utility Energy Service Contracts
IV.	Case Studies
V.	FEMP Resources and Q&A

## Instructors



**Ethan Epstein**

Utility & Resilience Program Lead  
FEMP / DOE



**Chandra Shah**

Senior Project Leader  
NREL



**Katy Christiansen**

Project Leader, Resilience  
NREL



**Jeff Gingrich**

Project Manager  
NREL

# FEMP Focuses on Federal Agency Support

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

## Key Stakeholders

-  White House
-  Industry
-  Agencies
-  National Labs
-  Congress
-  MUSH Markets

## Technical Areas

- Facilities 
- Fleets 
- Grid 



### Policy & Planning

Analyzes energy management mandates and helps agencies plan to meet legislative goals.



### Results & Recognition

Guides data reporting and recognizes significant contributions to energy and water efficiency.



### Analysis & Strategy

Works alongside agencies to identify short- and long-term opportunities to cut costs, save energy, and meet goals.



### Optimization & Maintenance

Provides resources to ensure facilities and fleets are at their optimal state.



### Execution & Funding

Offers funding opportunities and performance contracting assistance.

# Federal Agency Energy and Sustainability Goals and Requirements

Agency energy projects will enable progress toward several administration and congressional priorities focused on energy and water efficiency, decarbonization, investment, jobs and American manufacturing.



## Energy Act of 2020

- Agencies to use performance contracting to address at least 50% of ECMs identified
- Agencies to implement all cost-effective ECMs identified within two years
- FEMP to establish a Federal Smart Building Program



## Executive Order 14057

- Government-wide targets for long-term and mid-term GHG reductions
- 100% net zero buildings, zero-emission fleets, 100% carbon pollution-free electricity (50% 24/7) by 2030
- Net zero federal government operations by 2050 or sooner



## Climate Smart Building Initiative (CSBI)

- Agencies to establish emissions reductions targets delivered through performance contracting
- Increase on-site clean electricity generation
- Support plan to reduce emissions from Federal buildings by 50% by 2032



## Federal Building Performance Standard

- Support achievement of net-zero emission for federal building portfolio
- Zero scope 1 emissions from on-site fossil fuel use in 30% of agency's federal buildings (by GSF) by FY 2030
- Applies to federally-owned, EISA-covered facilities in U.S. and U.S territories

*Note: Descriptions are illustrative and not comprehensive.*

**Performance contracting supports all these goals and requirements**





## Importance of Resilience

# What is Resilience?



## 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

# ENERGY & WATER RESILIENCE



## ROBUSTNESS

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



## RECOVERY

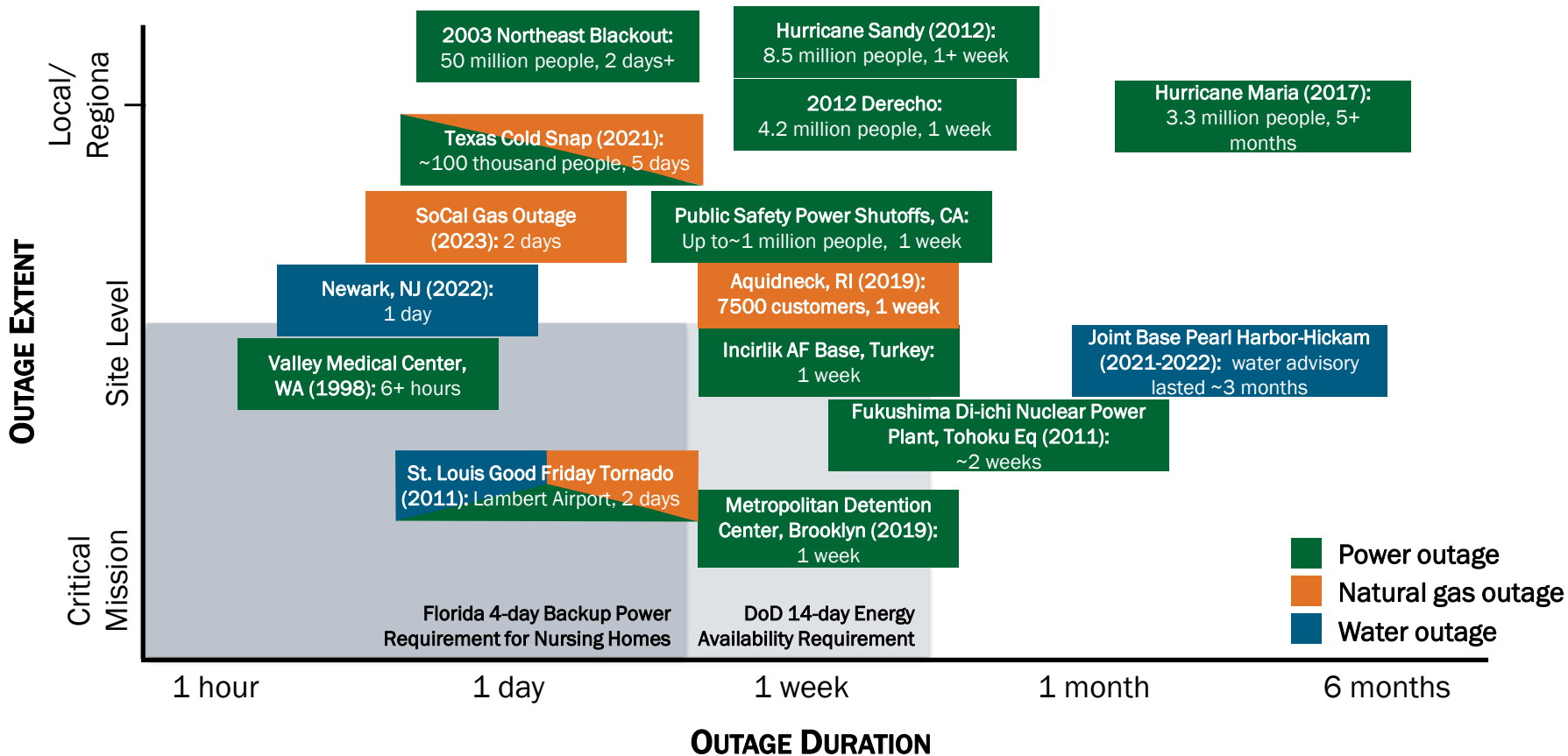
Ability to return to normal operating conditions as quickly and efficiently as possible after a disruption

A dramatic landscape photograph showing a dark, stormy sky with heavy, dark clouds. A bright, golden light breaks through the clouds on the left side, illuminating a vast, flat, golden-brown field. A paved road or path runs along the right edge of the field, leading towards the horizon. The overall mood is one of intense natural power and potential danger.

**Agencies seek to ensure their facilities and operations adapt to and are increasingly resilient to climate change impacts.**

**Actions include climate vulnerability assessments, integrating climate-readiness across missions, and managing and mitigating climate risks.**

# 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

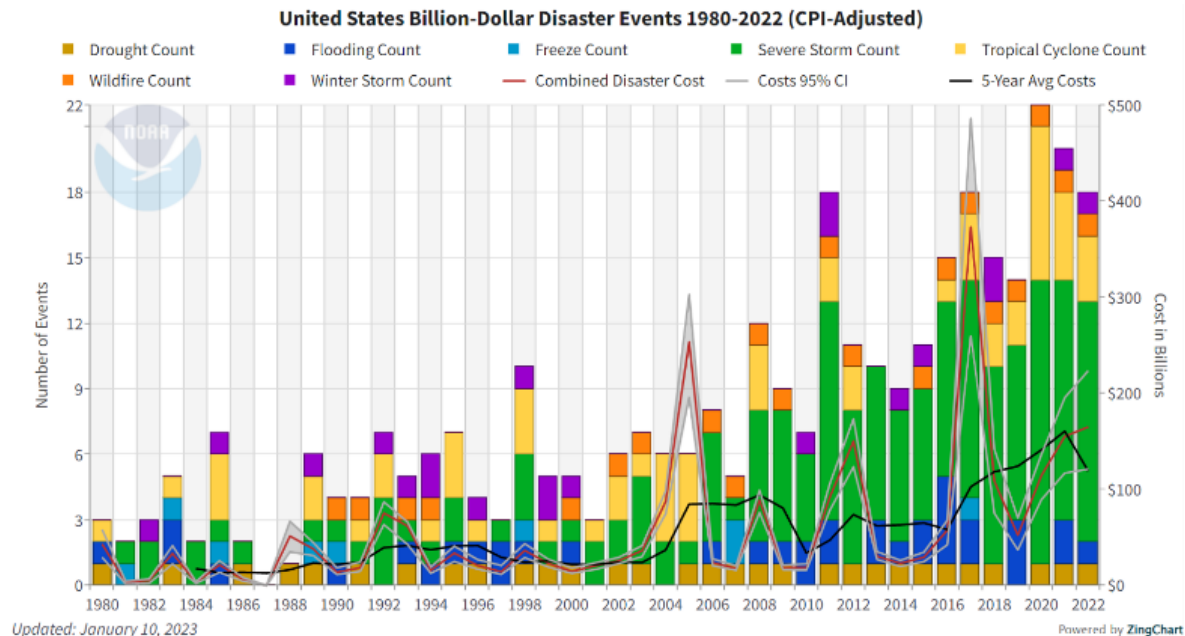


Figure Source: NOAA/NCEI, <https://www.climate.gov/news-features/blogs/2022-us-billion-dollar-weather-and-climate-disasters-historical-context>

# Example Resilience Solutions

Resource Impacted	Solution Description	Solution Type	Resilience Attributes Incorporated
Energy	Microgrid serving critical loads with onsite storage and islanding controls.	Technological	Redundancy Robustness
Energy and Water	Recovery plans in place and exercised.	Operational	Resourcefulness Recovery
Energy	Develop strategic investment plan for critical infrastructure and end-of-life replacement with more resilient infrastructure.	Operational Institutional Technological	Resourcefulness Recovery
Energy and Water	Increase site security, remote monitoring, and/or develop robust fence and gate infrastructure for physical security.	Operational Institutional	Resourcefulness Robustness
Energy and Water	Develop pre-event checklist for site preparation.	Operational	Resourcefulness Robustness
Energy	Develop distributed resources for spatial diversity and grid flexibility, implement redundant transmission and distribution lines, and/or diversify energy supply.	Operational Technological	Redundancy Resourcefulness Robustness Recovery
Water	Develop site appropriate water infrastructure (e.g., redundant supplies; implement water saving/reuse measures, separate combined sewer infrastructure to reduce system stress and reduce treatment energy loads).	Operational Technological	Resourcefulness Robustness Recovery Redundancy

\*Table presents a subset of example solutions included in the **Technical Resilience Navigator**

# Climate Change Mitigation Solutions

Climate mitigation actions focus on reducing greenhouse gas emissions by enhancing energy efficiency and decarbonizing/diversifying energy supply.

## Enhancing Energy Efficiency

- Choose energy-efficient appliances, equipment, and lighting
- Improve insulation sealing duct work to reduce energy loss during heating and cooling
- Install efficient heat pumps
- Modernize HVAC control systems



DOE. "Heat Pump Systems." <https://www.energy.gov/energysaver/heat-pump-systems>

# Climate Change Adaptation Solutions

Climate adaptation actions focus on mitigating the risks of climate change impacts, such as the increasing frequency and severity of natural hazards.

## Climate Adaptation

- Implement flood hardening, such as elevating systems above flood and storm surge levels, installing enclosures or barriers to protect against inundation, and installing drainage
- Use natural infrastructure to control riverine flooding, such as planting trees to control stormwater runoff, building swales, controlling stream bank erosion, and protecting and enhancing riparian buffers and floodplains
- Implement wildfire hardening, such as installing a built-in fire suppression system around systems and managing vegetation



BBC. "Welney flood barrier: Norfolk road disruption for weeks." <https://www.bbc.com/news/uk-england-norfolk-61526512>



# FEMP Resilience Program Offerings

## Resilience Planning

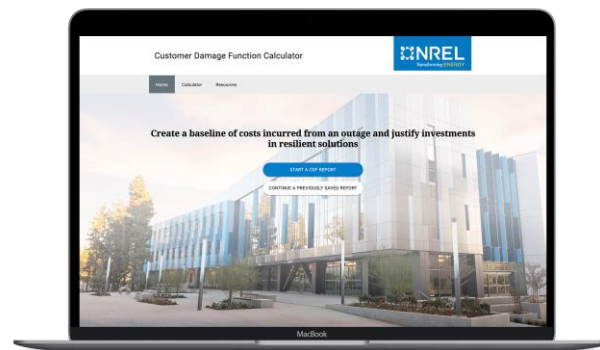
Agency agnostic tools and resources to guide stakeholders through the process of assessing and implementing projects that enhance site resilience



[Technical Resilience Navigator](https://trn.pnnl.gov/)  
<https://trn.pnnl.gov/>

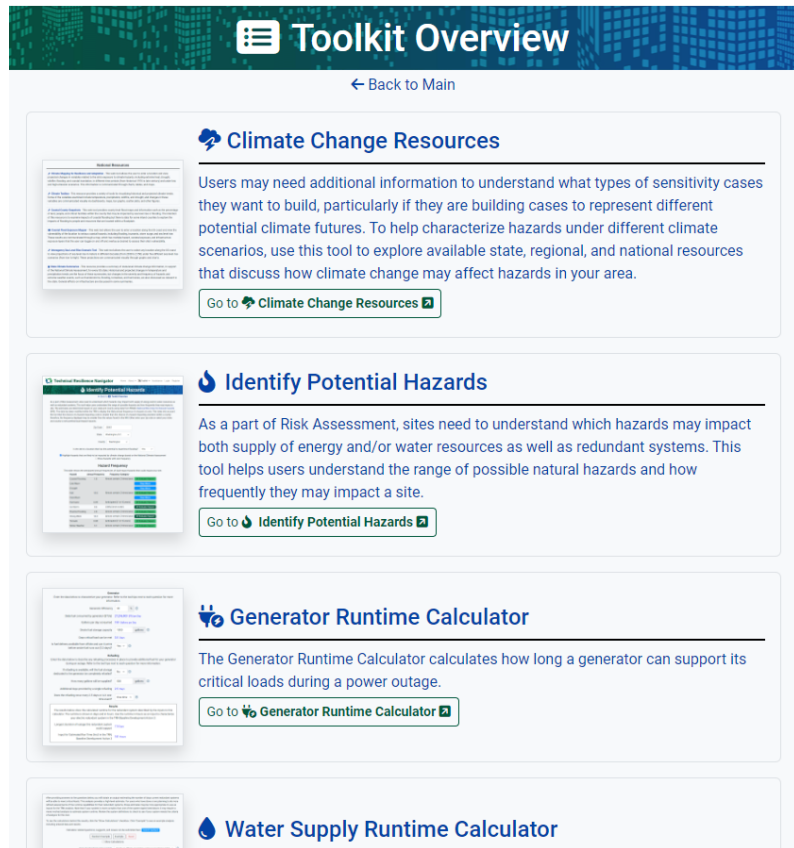
## Resilience Valuation

Tools and frameworks to help stakeholders better quantify the benefits from resilience projects or measures



[Customer Damage Function Calculator](https://cdfc.nrel.gov/)  
<https://cdfc.nrel.gov/>

# TRN Toolkit Provides Resources for Assessing Hazard Exposure



The screenshot shows the 'Toolkit Overview' page with a 'Back to Main' link. It features four tool cards: 'Climate Change Resources' (with a leaf icon), 'Identify Potential Hazards' (with a flame icon), 'Generator Runtime Calculator' (with a plug icon), and 'Water Supply Runtime Calculator' (with a water drop icon). Each card includes a small thumbnail of the tool's interface, a brief description, and a 'Go to' button with an external link icon.

## Toolkit Overview

[← Back to Main](#)

### Climate Change Resources

Users may need additional information to understand what types of sensitivity cases they want to build, particularly if they are building cases to represent different potential climate futures. To help characterize hazards under different climate scenarios, use this tool to explore available state, regional, and national resources that discuss how climate change may affect hazards in your area.

[Go to !\[\]\(92fe6ec8c8b0011d3746d04c5962f469\_img.jpg\) Climate Change Resources](#)

### Identify Potential Hazards

As a part of Risk Assessment, sites need to understand which hazards may impact both supply of energy and/or water resources as well as redundant systems. This tool helps users understand the range of possible natural hazards and how frequently they may impact a site.

[Go to !\[\]\(59a6d1a83fdb24579739802677391c72\_img.jpg\) Identify Potential Hazards](#)

### Generator Runtime Calculator

The Generator Runtime Calculator calculates how long a generator can support its critical loads during a power outage.

[Go to !\[\]\(fbb28cc5380f785062bfa030a99ad597\_img.jpg\) Generator Runtime Calculator](#)

### Water Supply Runtime Calculator



**Technical Resilience Navigator (TRN) Toolkit includes two tools to help users characterize hazards for their risk assessment:**

- **Identify Potential Hazards**
- **Climate Change Resources**

**<https://trn.pnnl.gov/toolkit>**



## Options for Partnering with Your Utility for Resilience

# Federal-Utility Resilience Projects - Funding Approaches\*

- Real property arrangements such as lease, easement or license for onsite 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*



# Real Property Arrangement / EUL

A real property arrangement where an agency contracts with a private company (could be the serving utility) that builds, owns, operates, and maintains a DE project on federal land.

- Most or all of the electricity is sold by the private company to either the utility or another party
- Typical real property instruments include leases, easements and licenses
- Some agencies have an enhanced-use lease (EUL) authority that involves the out-lease of underutilized property for a payment in cash or an in-kind consideration
- Legal authority & maximum contract length - Varies depending upon the agency
- Payment structure - Varies depending upon project and agency authority (payment and/or in-kind consideration)



**Schofield Barracks, HI**

## 50 MW Multi-fuel Plant/30-Day Microgrid

- Hawaiian Electric constructed, owns and operates the generation plant to provide 3 installations with 100% of energy requirements during a grid outage
- Located above the tsunami inundation zone, the plant is equipped with “blackstart” capability; 5 days of fuel storage onsite and 30 days of fuel storage on the island
- Enhances Oahu grid resilience and provides power to the community during an outage

# Utility Service Contracts and GSA Areawide Contracts (AWC)

**40 USC 501 and FAR Part 41 allow agencies to work with their serving utility to address a site's unique needs.**

- Some utilities offer on bill financing to amortize the cost of major capital upgrades over an extended period
- Can be executed under an AWC to leverage standard contract terms and formats
  - Each AWC is a specific agreement having services described for use by federal customers within the utility's franchised service territory
  - Exhibits available for electric service, gas service, or provisions of services under other appropriate regulatory authorities
  - [View GSA's list of utilities with AWCs](#)



## Resilience Considerations

- Utility service contracts can be used to add redundancy or harden electric and natural gas infrastructure
- Utility service contracts do not have a savings requirement
- Agency can fund upgrades completely or partially with appropriations

# Direct Funded Projects/Appropriations

- When other options have been exhausted, appropriations can be used to fill in resilience requirement gaps
- Each agency has different programs and protocols for using appropriated funds
- Common appropriated funding methods:
  - [FEMP AFFECT](#) - Assisting Federal Facilities with Energy Conservation Technologies
  - Sites with well scoped projects that address a mission-based requirement can request end of year funds, if available
  - Excess funds in utility or O&M can be used to fund resilience projects
  - Agency-specific programs such as the Energy Resilience and Conservation Investment Program (ERCIP) for DoD



## Resilience Considerations

- Plan projects well in advance so that funds can be requested/applications submitted
- Consider allowable types of funding and funding expiration
- Payback/life cycle cost requirements

# Funding Opportunities: Grants (AFFECT)

Assisting Federal Facilities with Energy Conservation Technologies (AFFECT)  
Bipartisan Infrastructure Law (BIL) Federal Agency Call (FAC)

## ***Advancing Net-Zero Federal Facilities***

### **Total Funds Available: \$250 million\***

- **Topic Area 1:** Assistance with Net-Zero Buildings Opportunity Development
- **Topic Area 2:** Modify Existing Projects for Net-Zero Buildings
- **Topic Area 3:** New/In Development Net-Zero Buildings Projects

ONLY Federal Agencies are Eligible to Apply

\*FEMP will consider individual awards greater than the historical average but **not in excess of \$10 million**. FEMP does not intend to allocate more than 5% of AFFECT BIL grants for Topic Area 1 projects.

<b>FAC Issue Date:</b>	3/23/2023
<b>Informational Webinar:</b>	4/4/2023
<b>Submission Deadline Options for Applications (all topics):</b>	5/31/2023 11/29/2023 5/29/2024 11/27/2024
<b>Expected Date for Selection Notifications:</b>	3 months following submission date

### ***FAC and Webinar Info:***

<https://infrastructure-exchange.energy.gov>

### ***Questions about this FAC?***

Email [AFFECTBIL@hq.doe.gov](mailto:AFFECTBIL@hq.doe.gov)



# Leveraging Utility Incentives

## Ask your utility about applicable incentives that can be used to enhance your resilience project

- Incentive program funds are limited
- Important to identify incentives early and ask for a letter of commitment to ensure funds are available when you need them (not all utilities can provide the commitment)
- FEMP maintains [information on demand response / time-variable pricing programs](#)
- [www.dsireusa.org](http://www.dsireusa.org) - database includes energy efficiency and renewable incentives



# 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)

## Example - Northern States Power (WI) Wisconsin Resilience Service Pilot *(Tariff RS-1, see p.53-60 of rate book)*

- 30 MW pilot program cap, with 10 MW reserved for gov't and non-profits (must be on eligible tariff)
- Utility installs, operates and maintains new assets
- Minnesota has a similar Resiliency Service Program (*Rate Code A43 - p. 134-139*)



**Check out the  
Fact sheet**



## Leveraging UESCs for Resilience

# Leveraging UESCs for Resilience

**UESCs allow agencies to implement infrastructure upgrades without upfront government costs by making payments through savings over the life of the contract.**

- Agency establishes project objectives – key energy conservation measures (ECMs), critical buildings, electrification and resilience priorities, etc.
- Utility evaluates facility to identify energy/water savings opportunities (efficiency improvements, demand reduction, distributed energy resources)
- Utility and agency agree to Performance Assurance Plan or savings guarantees to ensure savings are sustained
- Utility obtains financing (as needed) and develops and installs measures



## Authorizations

**42 U.S.C. § 8256 (all agencies)  
and 10 U.S.C. § 2913 (DOD)**

- Agencies are authorized and encouraged to participate in utility incentive programs, including UESCs
- Agencies can negotiate with utilities to design cost-effective demand management and conservation incentive programs to address the unique needs of facilities

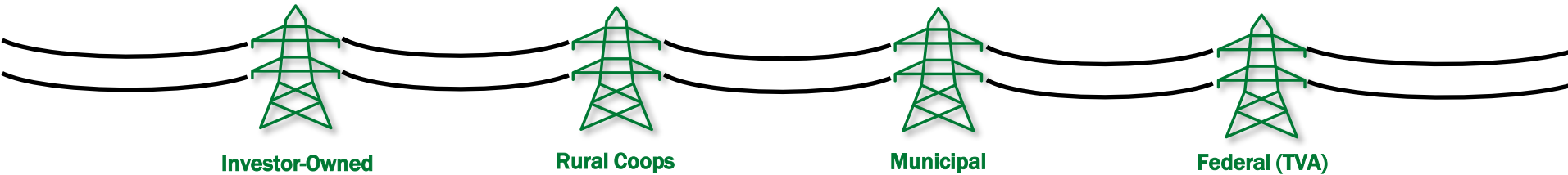
# Key Features of the UESC Contract

## Objective: Achieve energy/water savings & other benefits

- **ECMs must produce measurable energy, water, or demand reduction**
  - Bundling short payback ECMs with longer payback resilience measures can enable the contract to cash flow
- **Appropriations combined with financing enables comprehensive projects**
- **Max contract term is 25 years (starting with contract award)**
  - As a best practice the 25 year starts when a separate task order is issued to start the implementation period
- **Multiple sites served by the same utility may be included in a single task order**
- **Performance Assurance Plan and/or savings guarantee are required to ensure savings are sustained**



# Eligible Utility Contractors



**Eligible utilities are local serving distribution utilities that maintain infrastructure (poles, wires, pipes) for distribution of electricity, natural gas, or water in a specific geographic area**

- Sites must be located within the utility's franchise service territory (current or prospective customer)
- Energy commodity suppliers are not eligible
- Can be investor-owned, coops, public/municipal, federal (TVA)
- Water utilities typically do not have UESC programs, however, they may have incentives and should be considered
- Solutions should be fuel neutral

References: 42 USC 8256 (c) and FAR Part 41

# Measures that Can be Included in a UESC

## *ECM Definition (42 U.S.C. § 8259 (4))*

- Measures that are applied to a Federal building (including leased space)
- Improve energy efficiency and are life cycle cost effective
- Involve energy conservation, cogeneration facilities, renewable energy sources, improvements in O&M efficiencies and retrofit activities
- Includes energy consuming devices and required support structures (EA 2020 update)

**Whatever saves energy (there's no legal minimum)!**

## **ECM Examples**

- Renewable energy systems
- Microgrids
- Building envelope upgrades
- Energy management control systems
- Energy storage (battery, thermal, etc.)
- Boiler and chiller upgrades
- HVAC improvements (e.g. – heat pumps)
- Lighting and lighting control improvements

# Allowable Savings

## Energy and water cost savings

- Efficiency improvements, reduced usage, demand reduction, load management, load shifting, fuel switching, on-site generation, water/wastewater efficiency

## Energy- and water-related cost savings

- Can be one-time or recurring (including rebates, incentives, etc.)
- Reduced O&M costs – contracts, materials
- Avoided costs – obviated need for new equipment, transfer/elimination of OMR&R (may be funded with appropriations, grants, etc.)



**Don't Forget to Leverage  
Incentives and Grants!**

Check the [FEMP Funding Opportunities](#) page for  
information on **AFFECT  
Grants**



# Resilience Considerations for UESCs

## Acquisition Planning - Determine your approach

- Will the project include resilience enhancing ECMs only?
- Will resilience enhancing ECMs be included in a comprehensive project?
  - Do comprehensive energy improvements where possible
  - Efficiency measures will lower the cost of back-up generation

## Utility Selection – Notify utilities of intent to focus on resilience

- Include the following in your Letter of Interest/Sources Sought Notice:
  - Buildings in scope (include all possible - easy to cut buildings, hard to add)
  - Critical loads
  - Resilience technology options of interest, tolerable outage duration(s) and desired duration of available backup power
  - Language that will require utility to demonstrate qualifications for performing energy security studies and experience in implementing energy security solutions

# Resilience Considerations for UESCs (continued)

## Project Development - Identifying savings and selecting ECMs

- **Bundle resilience measures w/short payback ECMs (e.g., lighting)**
  - Total contract term for bundled measures must be 25 years or less
  - Individual measures can have payback of more than 25 years when offset by other shorter payback ECMs or funding
- **Evaluate O&M savings (especially if replacing back-up generators)**
- **Leverage avoided costs when equipment is scheduled for replacement**
- **Consider multiple fuel sources to provide diversity of supply for both electric and thermal loads**

# Army Garrison Ft. Liberty (formerly Bragg) - UESC

## Project Background:

- Site is the largest military installation in the Army by population – over 250,00 (military, DOD civilians, contractors, and families)
- Needed to address energy security challenges caused by frequent power outages
  - site located at end of the power line
  - single electrical feed from nearby town
- Focus of project was a training site where outages could cause disruptions to training scheduled years in advance, impacting Army attrition



For more information, see this [U.S. Army release](#).

# Army Garrison Ft. Liberty (formerly Bragg) - UESC

- **Contract Type:** Utility Energy Service Contract
- **Utility Partner:** Duke Energy
- **Investment Value:** \$36 million
- **Contract Term:** 19 years
- **Grants/Incentives:** Project received \$800,000 grant through the Assisting Federal Facilities with Energy Conservation Technologies (AFFECT) program
- **Key Outcomes:**
  - Save over \$2 million in first year utility costs
  - Reduce site energy use by 7%
  - Reduce water use by 20%
  - Increase energy resilience at mission critical Post



Photo Credit: Ameresco

***Constructed in 2021, the floating solar PV array was the first at a DOD installation and the largest in the U.S. Southeast at the time of award.***

*The project is intended to provide carbon-free on-site generation, supplement power from the local grid, and provide backup power during electricity outages.*

*For more information, see the [U.S. Army release](#).*

# Army Garrison Ft. Liberty (formerly Bragg) - UESC

## Energy Conservation Measures:

- 1.1 MW floating solar PV system
- 2 MW/2 MWh Tesla battery for base-resilience and energy storage
- Replaced 9 oil-fired boilers with highly efficient natural gas-fired condensing boilers
- ~216,000 interior and exterior light fixtures converted to LED
- ~26,000 high efficiency toilet and showerhead replacements
- Three high efficiency dehumidification system (HEDS) units to control indoor relative humidity; AFFECT grant applied to this ECM

[Download](#) the full 2022 FUPWG presentation co-developed by Army, Duke Energy, and D3ENERGY (starting pg 27)



# Fort Bliss - UESC

- **Contract Type:** Utility Energy Service Contract
- **Utility Partner:** New Mexico Gas Company
- **Investment Value:** \$58.3 million
- **Contract Term:** 24 years
- **Grants/Incentives:** \$1M AFFECT Grant
- **Key Outcomes:**
  - ~\$132.8M in estimated cost savings over performance period
  - Projected Energy savings = 30,394 MBtu/year
  - Projected Water Savings = 269,671 Kgal/year
- **Energy Conservation Measures:**
  - Micro-grid serving 142 buildings (102 mission critical)
  - 14 MW Distributed Energy Resources (DERs)
  - 8 MW of battery storage
  - LED lighting upgrades
  - Refurbishment of an existing water well and transmission lines



***Awarded in June 2022, the project is intended to improve resilience, address critical infrastructure needs, and decrease energy and water consumption.***

***Also supports the utility's broader service area by supplying more available capacity to serve utility customers during critical peak load events.***

For more information, see the [ESG press release](#).

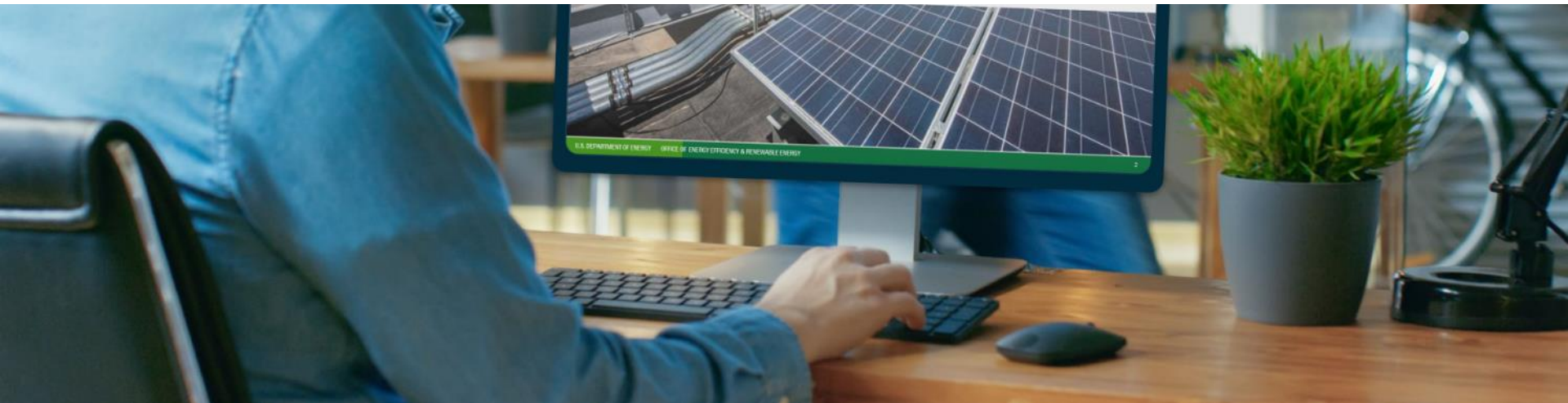


## Q&A





## FEMP Resources



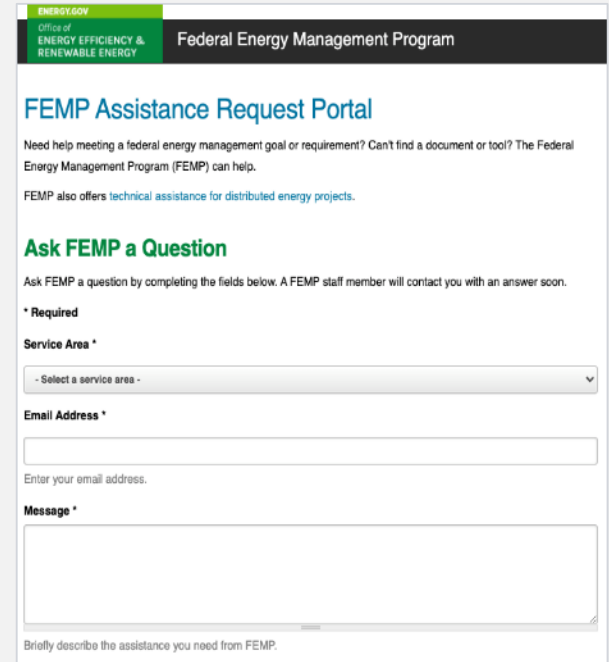


# FEMP Support and Technical Assistance

## FEMP provides training and project support at no cost to federal agencies:

- Project guidance and discussions with [Federal Project Executives \(FPEs\)](#)
- Training for federal agencies
- Technical assistance provided by DOE National Labs
- [Federal Utility Partnership Working Group](#)
- Resilience Roundtable (contact [Ethan Epstein](#) for info)
- Strategic Partnership Meetings with utilities to learn about incentives and program offerings

## FEMP Assistance Request Portal



The screenshot shows the FEMP Assistance Request Portal interface. At the top, there is a header for 'ENERGY.GOV' and 'Office of ENERGY EFFICIENCY & RENEWABLE ENERGY'. Below this, the title 'Federal Energy Management Program' is displayed. The main heading is 'FEMP Assistance Request Portal'. 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 fields: a required 'Service Area' dropdown menu with the placeholder '- Select a service area -', an 'Email Address' text input field with the placeholder 'Enter your email address.', and a 'Message' text area with the placeholder 'Briefly describe the assistance you need from FEMP.'

# Webinars and On-Demand Training

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

- Courses are hosted by the Whole Building Design Guide website
- Continuing Education Units (CEUs) available
- Topics include:
  - 7-part UESC Basics On-Demand Webinar Series
  - Advanced topics such as performance assurance, financing, utility rate analysis, decarbonization considerations, and more!

[Click Here to View the FEMP Training Catalog](#)

The screenshot shows the 'Search FEMP Training' interface. At the top right, there is an 'Advanced Search' link and a status 'Showing results 1 - 10 of 22'. Below the search bar, there are filters for 'CEUs Offered?' and 'Energy Exchange'. A 'TOPIC' sidebar on the left lists various categories with checkboxes, including 'Utility Program and Utility Energy Service Contracts' which is selected. The main content area displays three training results:

- Utility Energy Service Contract (UESC) Advanced Training, Day 1 – Contracting**  
LIVE ONLINE  
Aug 9, 2022  
1:00 PM EDT  
3 hours  
0.4 CEU  
Advanced  
Day one of the Advanced UESC Training presents topics aimed at assisting agency staff, utilities, and energy service companies (ESCO) in the development and execution of UESCs. Major topics in this webinar include legal and contracting considerations, project audit preparedness, and contract risk assessment and mitigation.
- Utility Energy Service Contract (UESC) Advanced Training, Day 2 – Technical Project Development and Implementation**  
LIVE ONLINE  
Aug 11, 2022  
1:00 PM EDT  
3 hours  
0.4 CEU  
Advanced  
This course provides federal agencies and utility partners with higher level training that will help promote successful implementation UESCs for the federal government. UESC training is an important step in promoting and enabling the use of federal performance contracts, implementing energy efficiency projects, and reducing the consumption of energy in federal buildings.
- Decarbonization Considerations: Onsite Distributed Energy Projects and Offsite Purchases**  
ON-DEMAND  
1.5 hours  
0.2 CEU  
Intermediate  
This webinar provides an overview of onsite and offsite energy procurement strategies such as performance contracting, power purchase agreements, and offsite electricity supply arrangements.
- Decarbonization Considerations: Performance Contracting**  
ON-DEMAND  
1.5 hours  
Intermediate



March 26 - 28 2024  
Pittsburgh, Pennsylvania

### **At Energy Exchange 2024, you will:**

- Hear federal leadership's key priorities and insightful solutions
- Attend agency-driven trainings to understand and address dynamic and growing challenges
- Collaborate with peers and agencies during dedicated networking opportunities
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# This Training Offers IACET CEUs

## How to obtain your CEUs:

1. Visit the Whole Building Design Guide (WBDG) at [wbdg.org](http://wbdg.org) to log in or create an account.
2. [Enroll in the training.](#)
3. Attend the training in full (no exceptions).
4. Return to your WBDG account's Enrolled courses.
5. Select the training's "Proceed to Course" button.
6. Complete an assessment demonstrating knowledge of course learning objectives **within six weeks of the training (with a minimum score of 80%.**
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.

*For logistical questions related to CEUs, email Elena Meehan at [elena.meehan@hq.doe.gov](mailto:elena.meehan@hq.doe.gov)*

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