Utility Open House for Federal Customers: Dominion Energy (VA)

August 7, 2024 | 10:00 AM – 2:15 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

10:00 PM (ET)	Welcome and Opening Remarks
10:20 AM	Energy Conservation and Time Variable Pricing Programs
10:55 AM	Fleet and Electric Vehicle Supply Equipment Programs
11:30 AM	Carbon Pollution-Free Electricity (CFE)
11:50 AM	Break
12:20 PM	Resilience
12:55 PM	Leveraging GSA Areawide Contracts (AWC)
1:30 PM	Utility Energy Service Contracts (UESC)
2:05 PM	Final Q&A, Resources and Next Steps
2:15 PM	Adjourn

FEMP Welcome

Anna Siefken
Deputy 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

Utility Partnerships

Federal Building Performance Standard

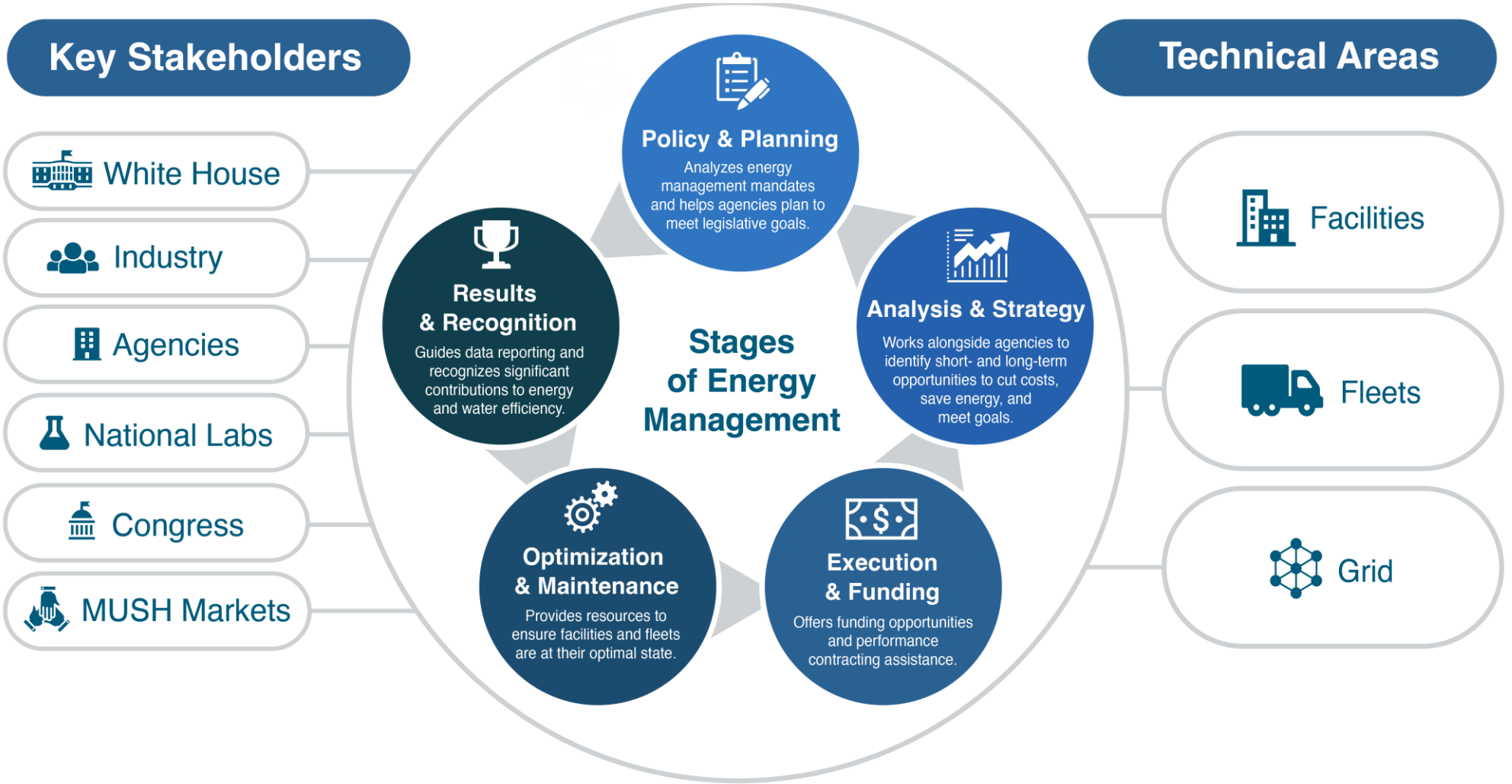
- Support achievement of net-zero emissions for federal building portfolio
- Zero scope 1 emissions from on-site fossil fuel use in 30% of federal buildings by 2030

Climate Smart Building Initiative

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

FEMP Focuses on Federal Agency Support

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 AFFECT 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
- AFFECT 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:

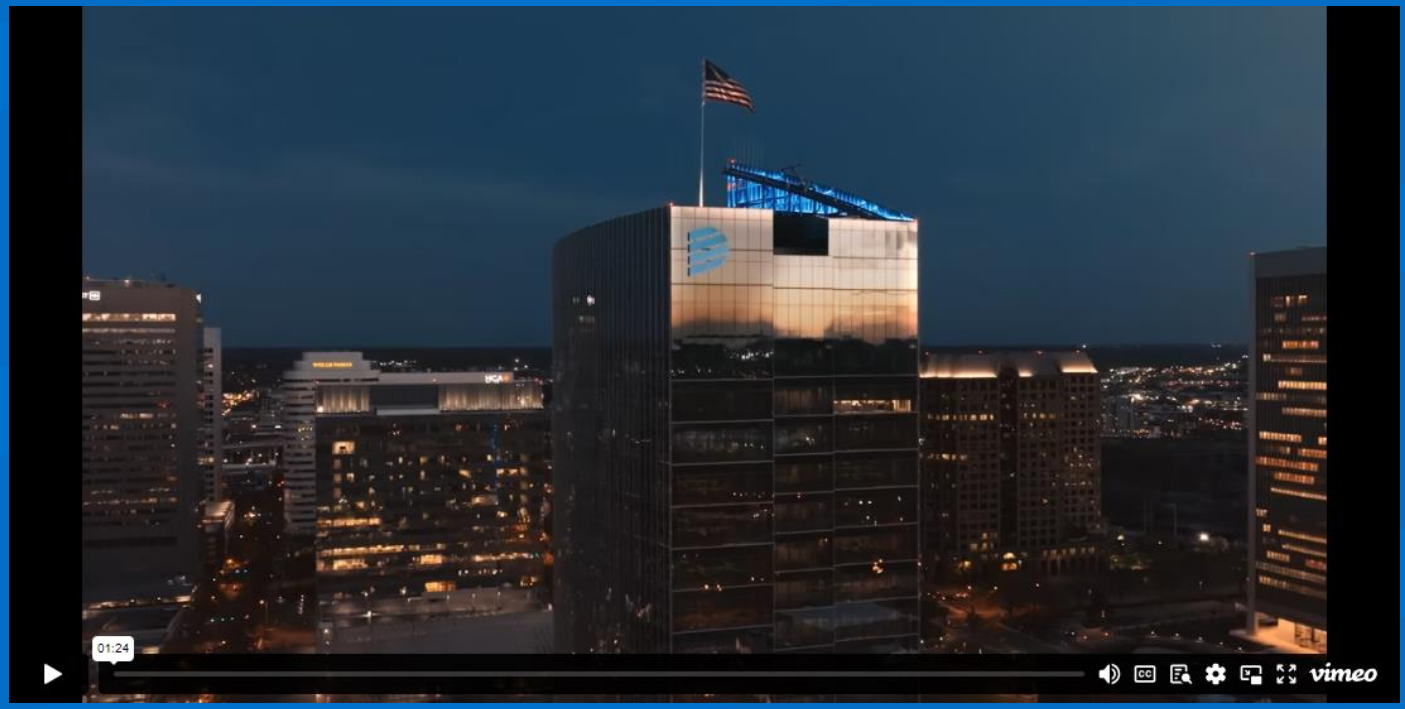
- *Discuss your site's energy goals, challenges, and priorities*
- *Identify program offerings that align with your needs*
- *Sign up for incentives*
- *Connect with subject matter experts to learn more about any of the topics discussed today*

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.

What Powers Us



https://vimeo.com/954597596/5b771e5e64?share=copy%20%5bvimeo.com%5d

Dominion Energy Virginia Opening Remarks

Robert Locke – SVP Electric Distribution

8/7/2024

Dominion Energy®

Powering Your Every Day.℠

Safety Brief

Emergency Preparedness – Hurricanes

Travis Yount – FES Business Development Manager

Before:

- Know your zone: Do you live near the Gulf or Atlantic Coasts? Identify evacuation procedures if so
- Put together and emergency kit: check for items such as flashlights, generators, etc.
- Write or review your family emergency plan: include important details of what to do in an emergency – keep the plan in a safe place
- Have a plan to evacuate or shelter safely, if necessary

During:

- If advised to evacuate, do so right away – follow evac routes as shortcuts may be blocked
- If staying at home, take shelter in an interior room away from glass and windows

After:

- AVOID DAMAGED OR FALLEN POWER LINES AND POLES, AS WELL AS OTHER DOWNED WIRES
- If power is out, be mindful of carbon monoxide risk – make sure generators and other CO producing devices are used outdoors and away from open windows
- Use care when cleaning up: be sure to have proper training on use of chainsaws and other equipment
- Heart attacks are a leading cause of death after a Hurricane – be mindful of overworking

SAFETY IS DOMINION ENERGY'S #1 CORE VALUE

American Red Cross

Time Variable Pricing (TVP)

Tracy Niro
Program Manager
DOE FEMP

What is Demand Response?

Demand response 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)

What is Time Variable Pricing?

A type of price-based demand response, time variable pricing refers to rates that change depending on the time of day (and often the season). Examples include:

- Time-of-use (TOU) rates
- Real-time rates
- Day-ahead hourly rates
- Block-and-index rates

GENERAL SERVICE TIME-OF-USE

RATE PER MONTH

I. Basic Facilities Charge:	$ 25.65	
II. Energy Charge:		
A. On-Peak kWh		
1. Months of June-September	$ 0.22174	per kWh
2. Months of October-May	$ 0.17079	per kWh
B. Off-Peak kWh		
First 1,000 off-peak kWh @	$ 0.09446	per kWh
Excess over 1,000 off-peak kWh @	$ 0.09913	per kWh

A. On-Peak Hours:

June-September:

The on-peak summer hours are defined as the hours between 1:00 p.m.-9:00 p.m., Monday-Friday, excluding holidays.*

October-May:

The on-peak non-summer hours are defined as those hours between 6:00 a.m.-10:00 a.m. and 6:00 p.m.-10:00 p.m. Monday-Friday, excluding holidays.*

B. Off-Peak Hours:

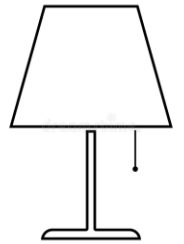
The off-peak hours in any month are defined as all hours not specified as on-peak hours.

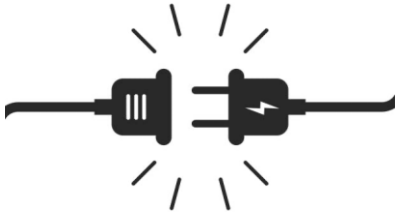
*Holidays are: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

Image Source: Dominion Energy (https://www.dominionenergy.com/south-carolina/rates-and-tariffs)

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





TVP Programs Benefits

Participating in TVP rates 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 TVP 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 Study

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

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

The Federal Energy Management Program developed profiles of demand response programs and time-variable rates throughout the United States. These profiles are available via a downloadable spreadsheet.

Download the DR/TVP Programs and Rates spreadsheet.

The spreadsheet includes the following information:

Header	Description
State	Identifies the state where the utility, ISO (Independent System Operator), or RTO (Regional Transmission Organization) operates and where the program is applicable.
Utility/ISO/RTO	Identifies the entity responsible for administering the rate or program.
Program Name	The official name of the given program or rate.
Link	The web address where more information about the program can be found.
Open to new customers?	Specifies whether the program is currently accepting new participants. "Open" indicates new customers can join, while "Closed" means enrollment is not currently available. Some closed programs may reopen for enrollment in subsequent seasons; check the provided link for updates.
Program or Rate?	Indicates whether the offering is a specific program (e.g., a load control program) or a rate (e.g., time-of-use pricing).
Area wide contract?	If yes, this means that agencies can take electric service using a Task Order under a GSA Areawide Contract (AWC). See GSA's Utility Areawide Guide for more information on procuring utility services through AWCs.
Description	Provides a concise overview of the program's purpose, eligibility criteria, benefits, and other relevant details. Proceed to the link for more details.

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

Energy Efficiency

Ethan Epstein
Program Manager
DOE FEMP

Federal Facility Energy Efficiency: Goals & Statutory Requirements

Executive Order 14057

- Agencies shall:
  - Increase facility energy and water efficiency.
  - Establish targets for FY2030 for agency-wide energy use intensity (EUI) and potable water use intensity.

Energy Act of 2020

- Agencies are required to:
  - Install all life cycle cost-effective energy and water conservation measures in owned buildings to the maximum extent practicable, as soon as practicable after October 1, 2022.
  - Report non-compliance to Congress every two years, beginning January 1, 2022.

EISA 2007 & EPAct 2005

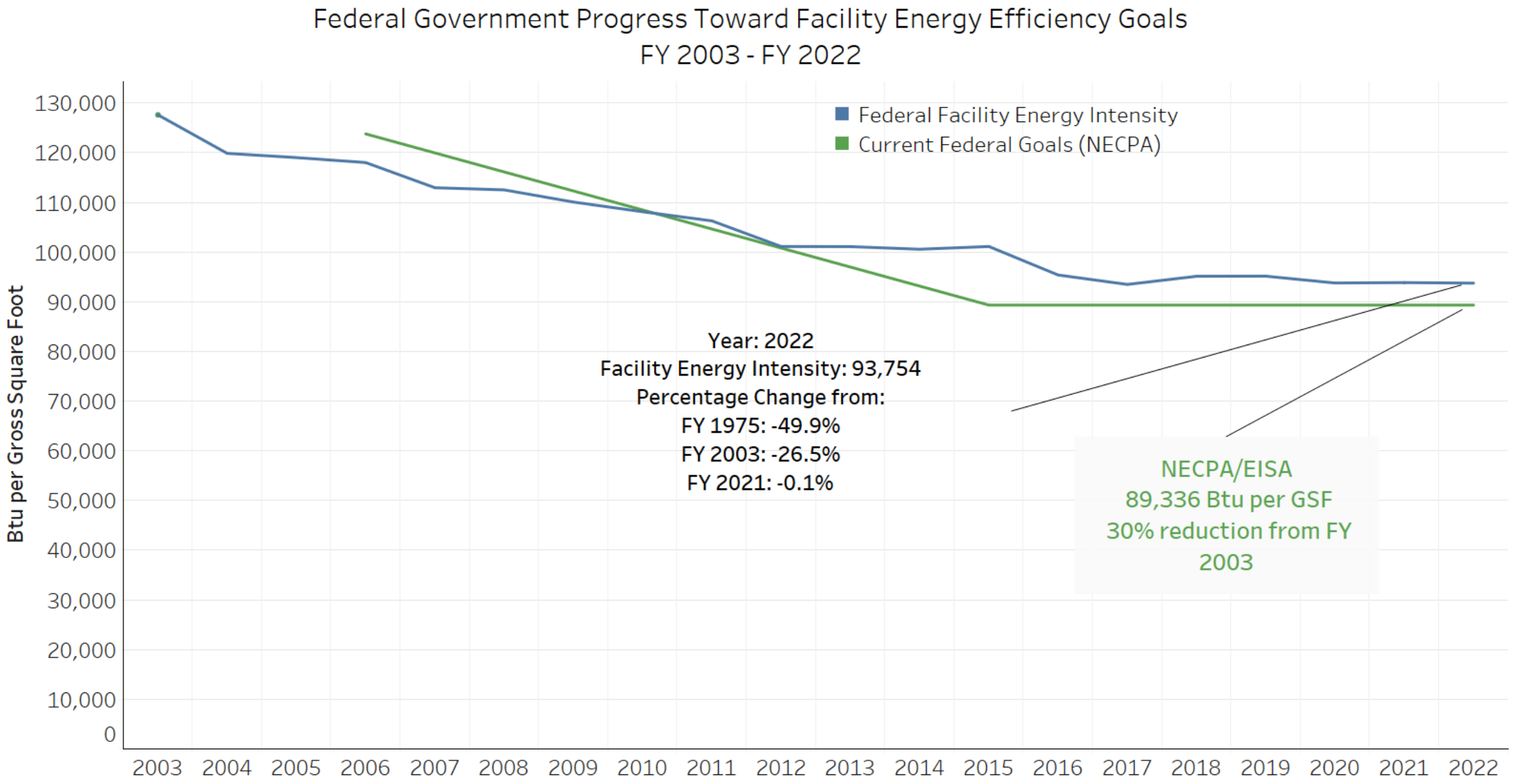
- Agencies must reduce energy consumption per gross square foot of Federal buildings relative to a FY2003 baseline by:
  - 27% by FY2014
  - 30% by FY2015

EISA = Energy Independence & Security Act

EPAct = Energy Policy Act

[Facility Energy Efficiency | Federal Laws and Requirements Search]

Federal facility energy use intensity (Btu/GSF)



Energy Conservation Programs

Federal Customers

Morgan DeHaven
Energy Conservation Program Manager, Dominion Energy

Tim Stuller
Manager – Regulation, Dominion Energy

Energy Conservation Programs for Federal Customers

I. Dominion Energy maintains a portfolio of **13** Energy Conservation programs for our commercial and industrial customers in our Virginia service territory

II. Approximately **$1.5MM** in incentives were available in 2023 for Dominion Energy Virginia federal customers
   - Anticipate a similar level of incentives in 2024 (VA federal customers)

III. These incentives are in the form of rebates of up to 75% of your contractor's invoice for the purchase and installation of energy efficient goods, equipment, and services

Who's Eligible to Participate in DE's Programs?

I. Eligible:

A. Virginia Jurisdictional Commercial & Industrial Customers

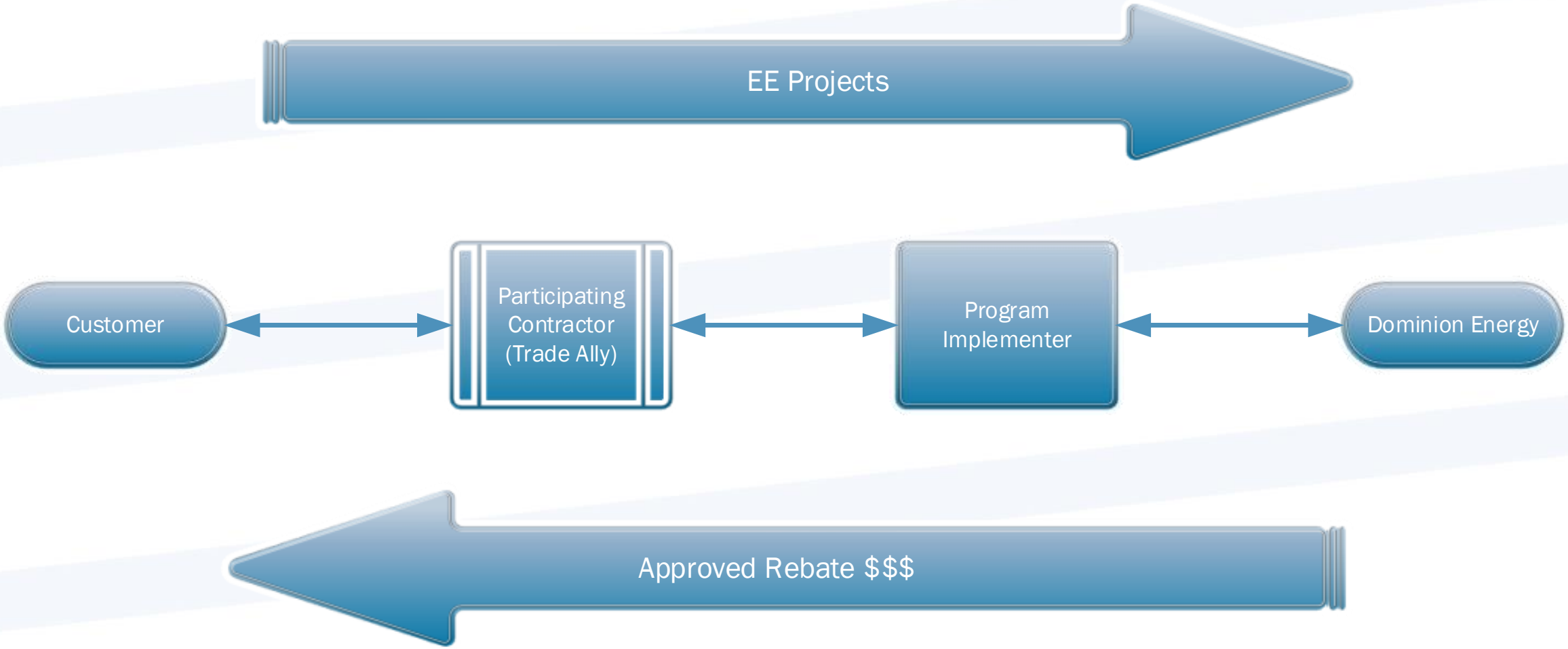
B. Virginia Federal Government Customers

II. Ineligible:

A. Virginia State & Local Government Customers

B. Virginia Customers who have applied for and been granted a Large General Service Exemption

How Does it Work?



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Energy Conservation Programs for Federal Customers

I. Best program fit depends on your project and facility. Consider the following for optimal value:

A. Lighting Systems & Controls Program – LED lighting upgrades for interior and exterior applications

B. Prescriptive Enhanced Program Bundle – HVAC system upgrades, HVAC tune-ups, duct testing & sealing, compressed air, appliances, and other measures

C. Building Automation & Controls Programs – for the installation of new, or optimization of existing, building controls systems

D. New Construction – Customized recommendations and incentives for installing EE measures in new commercial construction or major renovation projects, must not have advanced past design phase of project

E. C&I Custom Energy Solutions – Project not covered by existing programs may be eligible for reimbursement under the Custom program at $0.12/kWh estimated energy savings over first 12 months of operation

Typical Customer Journey

I. For programs implemented by Honeywell, the following is what to expect:

1) Customer submits an **Eligibility Form** and an **Initial Assessment**
2) Honeywell provides **Authorization to Proceed**
3) Customer engages **Participating Contractor** in measure installation, or performs a **self-install**
4) Customer submits **Rebate Application** with final project information and supporting documentation, including relevant invoice(s)
5) Final energy savings and rebate incentive amount are calculated
6) Customer receives **rebate incentive check** from Dominion Energy (unless rebate has been assigned to Contractor, and discount was received instantaneously via Contractor's invoice)

How to Get Started

I. Contact Non-ResidentialEnergyConservation@dominionenergy.com
or Morgan DeHaven at 804.356.7487

- OR -

II. Visit domsavings.com (or the links on the previous Energy Conservation Programs for Federal Customers slide) and click “Contact Program Coordinator” for the program of interest
   - Once complete, Honeywell will contact you to discuss projects, facilities, needs, etc. and potentially schedule an on-site evaluation conducted by their program experts to identify energy savings opportunities

Summary of Available Base Rates

	GS Rate Schedules (Standard Tariff)	Schedule 10 (Time of Use)	Market Based Rate
Stability in Price	√		
Eligible for CRC	√	√	
(3-year commit)			
Curtailment Benefits		√	√
Pair with Renewables	√	√	√
Term	1 year	1 year	3 years
Market Risk	Low	Low	Med

* CRC is Rider CRC – Manufacturing and Commercial Competitiveness Retention Credit Rider

Detail of Available TOU Rate (Schedule 10)

Schedule 10 – Non-Residential Time of Use Rate

- 500kW Minimum Demand

Primarily kWh-based cost recovery

Smaller Distribution and Transmission Demand Charges

- TOU Function based on A,B, and C day On/Off Peak Structure

Day classification is called by 5pm the day before and posted on our website.

Max 28 High-cost A days per year

Min 60 Low-cost C days per year

Appx. 275 B days

30 years of history on the website.

- May not also participate in PJM Demand response Programs

Questions?

Morgan DeHaven
Energy Conservation Program Manager
morgan.a.dehaven@dominionenergy.com
m: 804.356.7487

Fleet and Electric Vehicle Supply Equipment (EVSE) Programs

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

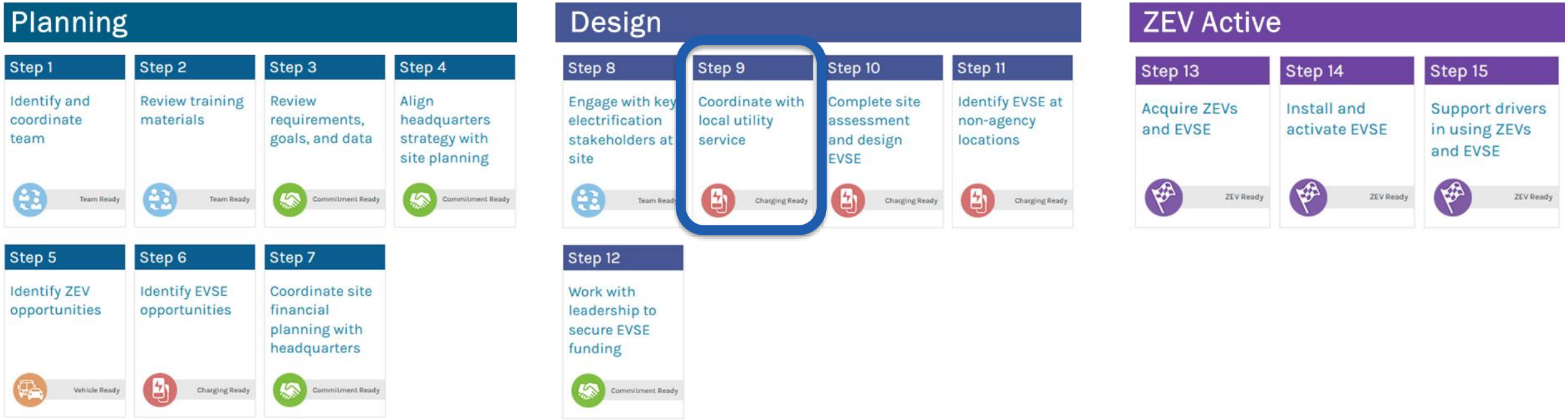
December 8, 2021

Transition to a zero-emission federal fleet

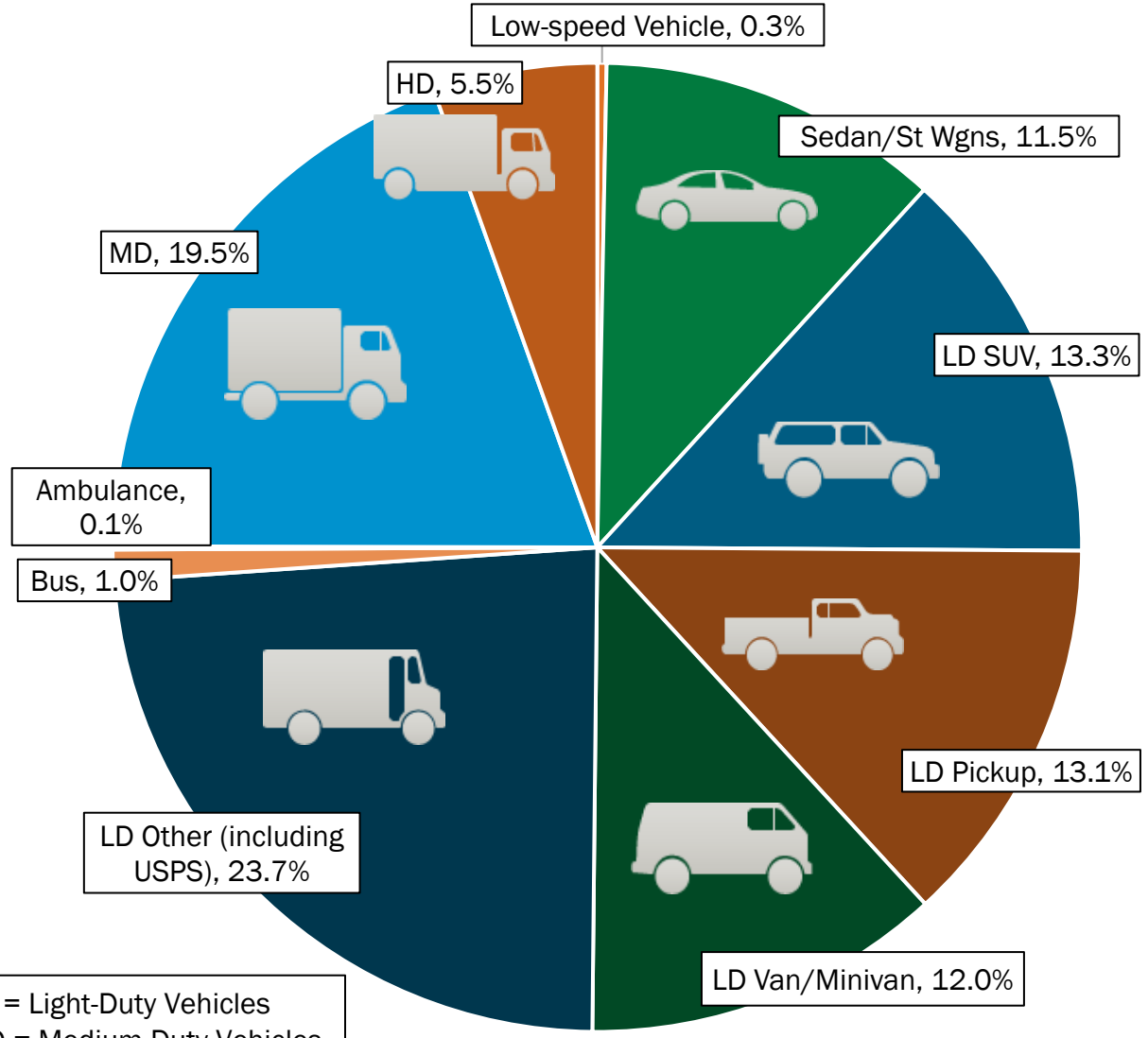
- Annual targets for ZEVs by agency
- 100% light-duty (LD) acquisitions by 2027
- 100% medium-duty (MD)/heavy-duty (HD) acquisitions by 2035

ZEV Ready Framework

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



Federal Fleet Electrification is Accelerating (FY23 FAST)



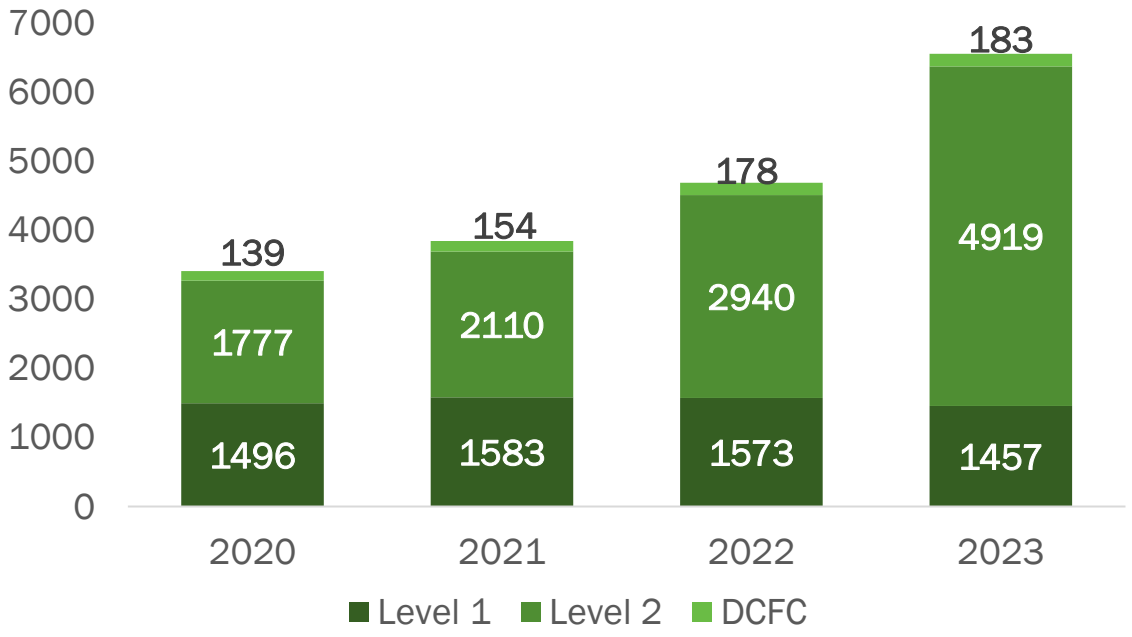
LD = Light-Duty Vehicles
MD = Medium-Duty Vehicles
HD = Heavy-Duty Vehicles

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



Step 9 – Identify Utility Point of Contacts and Incentives

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

Database that helps federal agencies connect to electric vehicle supply equipment (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.

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

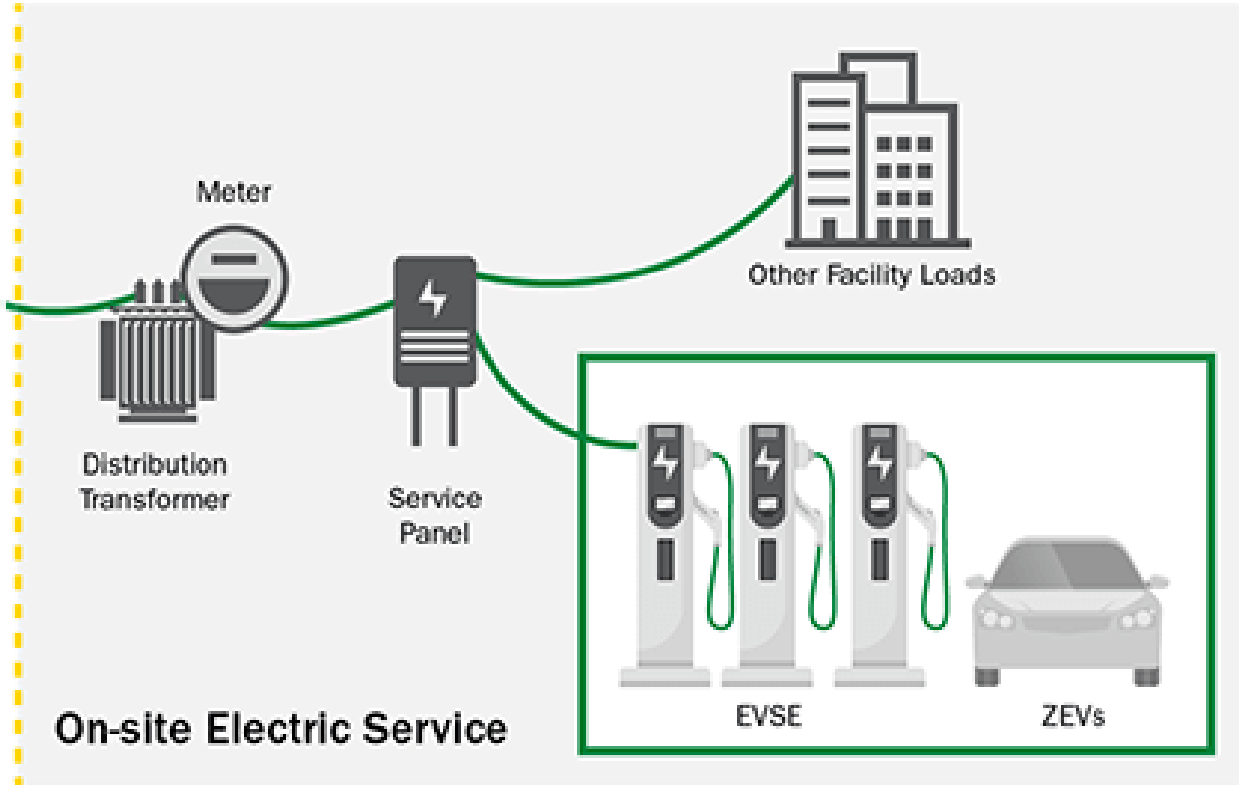
Identified active utilities in 72863

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



Electrification Strategy

Adam Birdsong
Manager – Customer Energy Solutions, Dominion Energy

Josh Martinez
Electric Distribution Program Manager, Dominion Energy

Adam Birdsong
Manager Customer Energy Solutions
Dominion Energy

Customer Electrification Programs

Customer EV Programs

Charging at Home	Charging on the Go	Charging your Fleet	Charging for Everyone
Turnkey charging infrastructure programs with **on-bill payment** options, **incentives**, and **maintenance**			No cost EV charging for qualifying customers
Personalized online tools and calculators	Hosting capacity map and resources	Fleet advisory tools and services	DEV public charging
Why? 80% of charging happens at home	**Why?** Charging availability is #1 consumer concern	**Why?** EVs cost less to fuel and maintain	**Why?** Poor air quality disproportionately impacts low-income communities

Joshua Martinez
Electric Distribution Program Manager
Dominion Energy – Federal Energy Solutions

Dominion Energy Federal Energy Solutions Electrification Strategy

Dominion Energy Federal Energy Solutions Electrification Strategy

Consulting, Design-Build, Delivery, and O&M Solutions through the Areawide Agreement

Consult

- Fleet Electrification Feasibility
- Fleet Conversion
- Recommendations
- Energy Forecasting
- Infrastructure Assessments
- Resiliency Offerings
- Renewable Energy & Battery Storage Add-Ons
- Customized Consulting for DOD customers

Design-Build Services

- Site Feasibility
- Electrical Engineering and Design
- Utility Design & Coordination
- Project Management
- Logistics
- Procurement, Construction, and Installation

Delivery

- Commissioning EV Charging Stations
- Dashboards and Data - Real Time Performance
- Payment options - Pay for energy usage by way of either a government charge card or a personal credit card for Privately Owned Vehicles (POVs)

Operate & Maintain

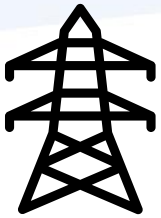
- Preventative Maintenance
- Corrective Maintenance
- Spare Parts
- Call Centers/Support
- Local Technicians
- 24/7 support
- Site support in as little as 4-hours

Why Choose Dominion Energy Federal Energy Solutions?

✓ Enhance **Readiness**

✓ Increase **Resiliency** and **Reliability**

✓ **Seamless** Integration of a New Technology



Grid and Electrification Expertise

Strategic Partnerships in Place

Lowest Total Cost of Ownership

Infrastructure as a Service Model

Support Future Benefits

Questions?

Adam Birdsong
Manager – Customer Energy Solutions,
Dominion Energy

Josh Martinez
Electric Distribution Program Manager,
Dominion Energy

Carbon Pollution-Free Energy (CFE) Purchasing Programs

Tracy Niro
Program Manager
DOE FEMP

Executive Order 14057 CFE Goals

Catalyzing Clean Energy Industries and Jobs through Federal Sustainability
(12/8/2021)

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

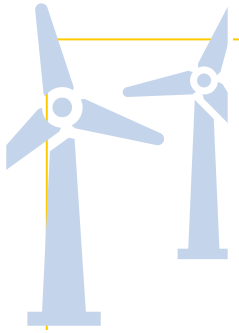
A **net-zero emissions building** portfolio by 2045, including a 50% emissions reduction by 2032; and

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

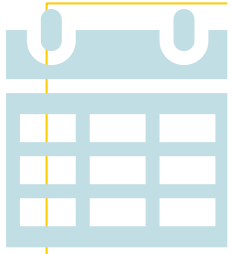
Net-zero emissions from overall federal operations by 2050

Implementing Instructions for Federal Agencies

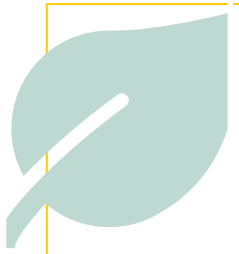
What Qualifies as CFE?



CFE Technology



Placed in service 10/1/2021 or newer



EACs delivered or retired

Delivered to balancing area

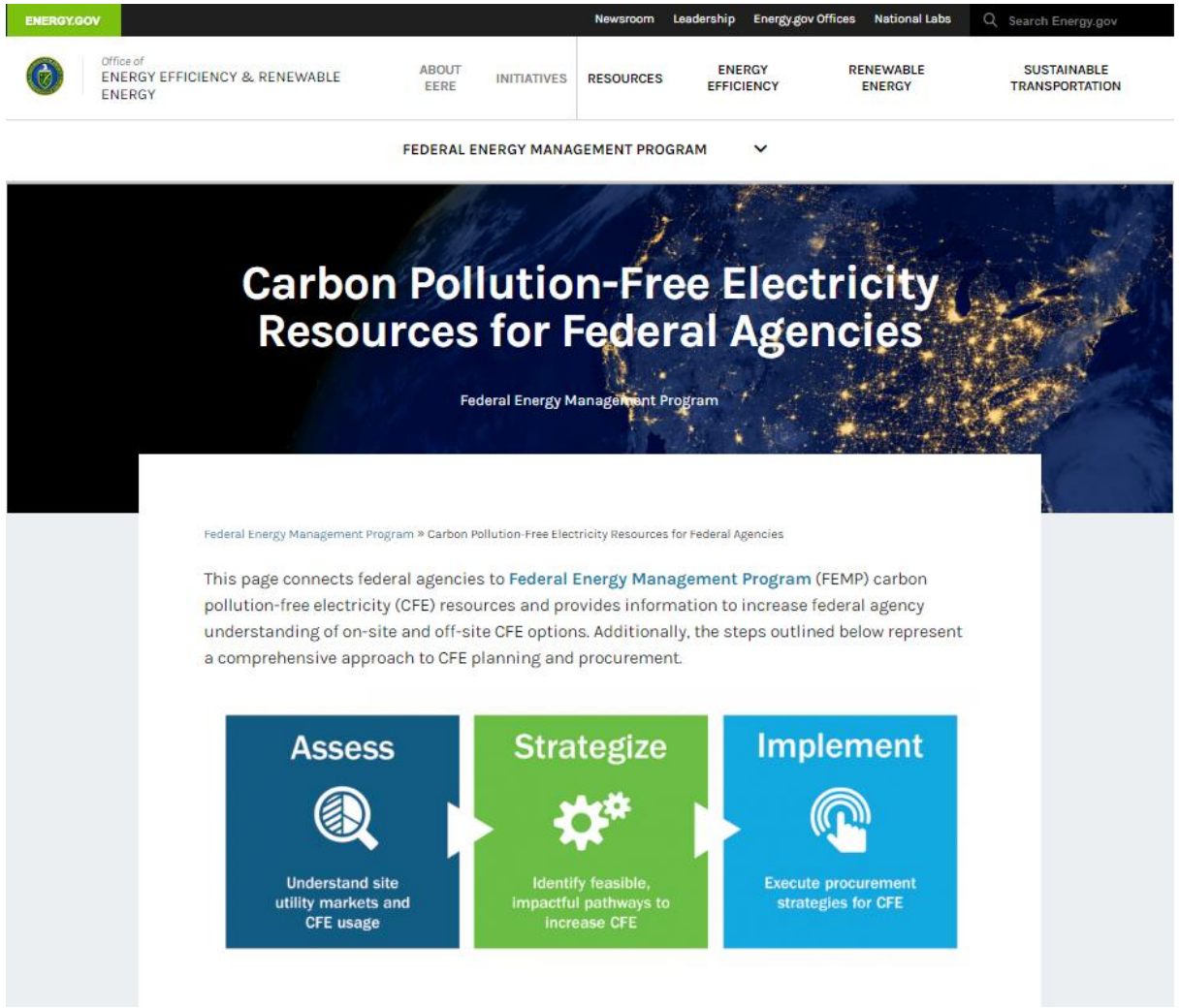
What Technologies Are Considered CFE?

Per E.O. 14057 Section 603(d):

- Solar
- Wind
- Hydroelectric
- Nuclear
- Geothermal
- Renewably-sourced hydrogen
- Generation from fossil resources with active carbon capture and storage
- Marine and hydrokinetic

Other technologies may also be eligible with carbon capture and storage

CFE Resources on the FEMP Website



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 +

Learn more: CFE Resources for Federal Agencies

Where to Start to Purchase Qualifying CFE?

- **Identify the regulatory environment:**
  - In Virginia, electricity is a vertically integrated market—except in certain circumstances, such as over 5MW load
- **Identify the balancing area:**
  - Your balancing area is PJM

Evaluate Options to Determine What Qualifies as CFE

CFE Technology

solar/wind/non carbon emitting, etc.

Placed in service 10/1/2021 or newer

EACs delivered or retired

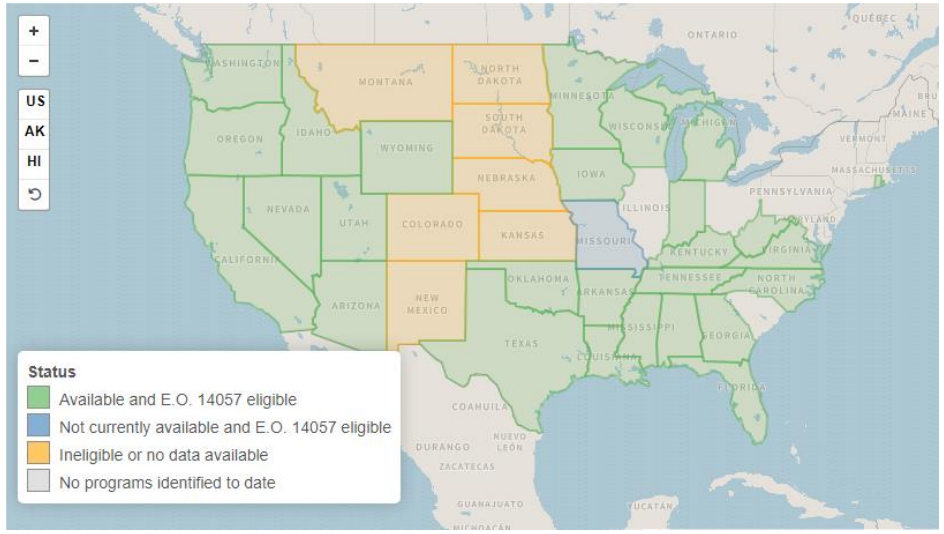
Delivered to *PJM* balancing area

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

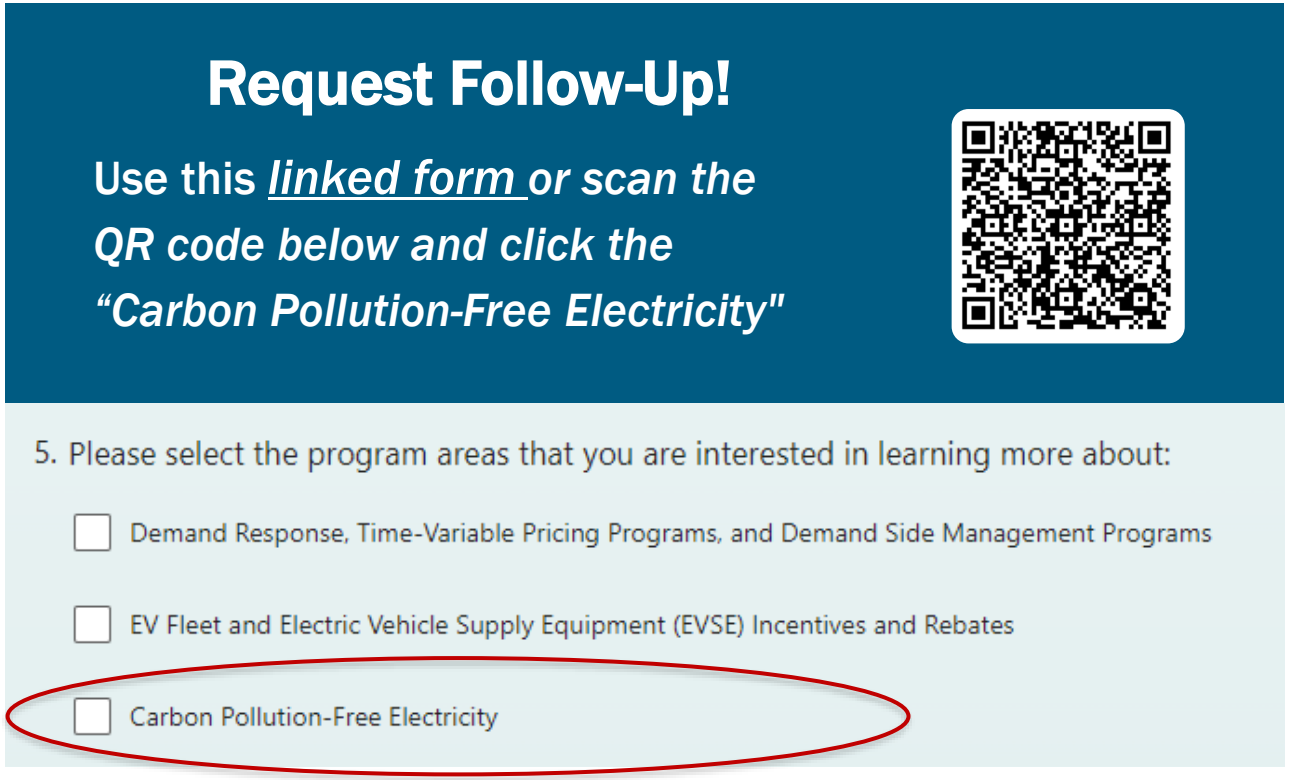
- Identify a site's balancing authority by entering its ZIP code.

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 the First to Know About New Options

- Reach out to FEMP if interested in learning more about the Whole of Government approach to CFE



Carbon Pollution-Free Electricity (CFE)

Tim Stuller

Manager – Regulation, Dominion Energy

Experimental Schedule CFG Tariff Offering

- Enables Purchase of Carbon Free Generation via Utility Electric Bill
  - Companion tariff concept
    - » Customer billed under principal tariff, CFG Settlement (Credit or Charge) on customer's normal bill
  - 1,000 kW min facility size, no minimum Account size
- "Contract for differences" settlement methodology
- Available as Companion tariff to Non-Residential tariffs including Market Based Rate offering

CFG Product - Contract for Differences

Contract for Differences

- Electric Generation / Output from a dedicated Carbon Free Generating facility
- RECs are transferred from Dominion Energy to the dedicated counterparty – DEV retires on customer's behalf.
- Participating Customer pays contract price (CFG Charge) and receives Hourly Market Price($/MWh) for each MWh of physical power sold into the PJM market from the facility (CFG Adjustment).

Summary of Available Optional Tariffs for Renewable Purchases

Program Name	Dominion Energy REC Select℠	Dominion Energy 100% Renewable Energy®	Dominion Energy Green Power® (Residential and Commercial Customers)	Dominion Energy Green Power® (Federal Customers)
Match a portion	✓		✓	✓
Match 100%	✓	✓ [1]	✓	✓
Cost	$2.69/MWh	$3.98/MWh	$12/MWh	$5.95/MWh
Energy & RECs [2]		✓		
Green-e® Energy Certified			✓	✓
Renewable Resources	☼ ✈ 🌡 💧 ≋ 🌱 🗑	☼ 💧 🌱	☼ ✈	🌱 ✈
Location	National RECs	VA and NC	VA and surrounding region [3]	VA and surrounding region [3]

Key

☼ = Solar
✈ = Wind
🌡 = Geothermal
💧 = Hydropower
≋ = Wave or Tidal
🌱 = Biomass
🗑 = Landfill Gas

1. Available to customers with a peak demand of 5 MW or less.
2. When you purchase from these programs, you purchase the energy and RECs from a portfolio of renewable resources owned or contracted by Dominion Energy.
3. Generation locations include AL, FL, GA, IA, MN, MO, MS, NC, SC, VA.

Questions?

Tim Stuller

Manager – Regulation, Dominion Energy

Break until 12:20 PM ET

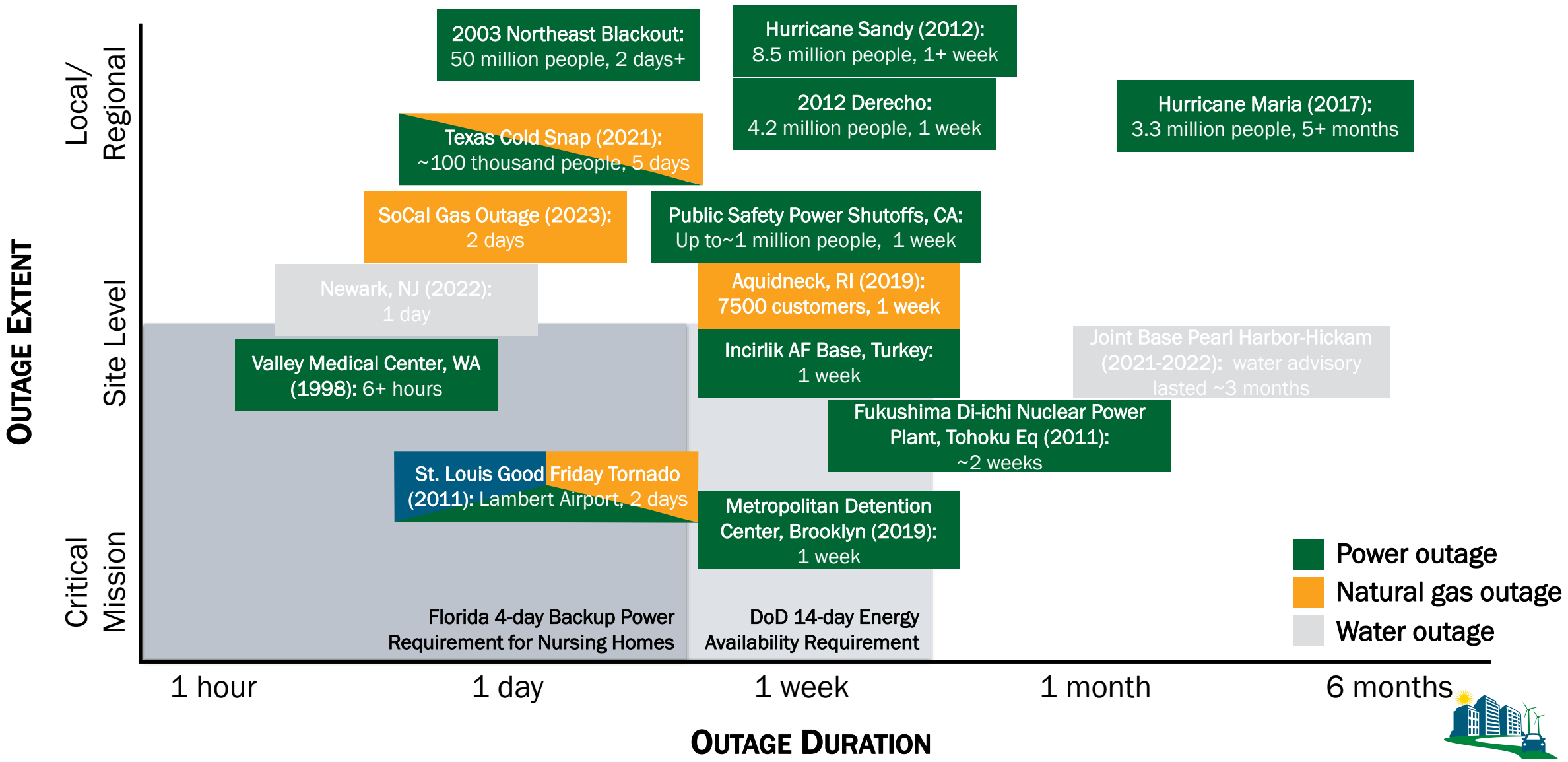
Resilience

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.

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

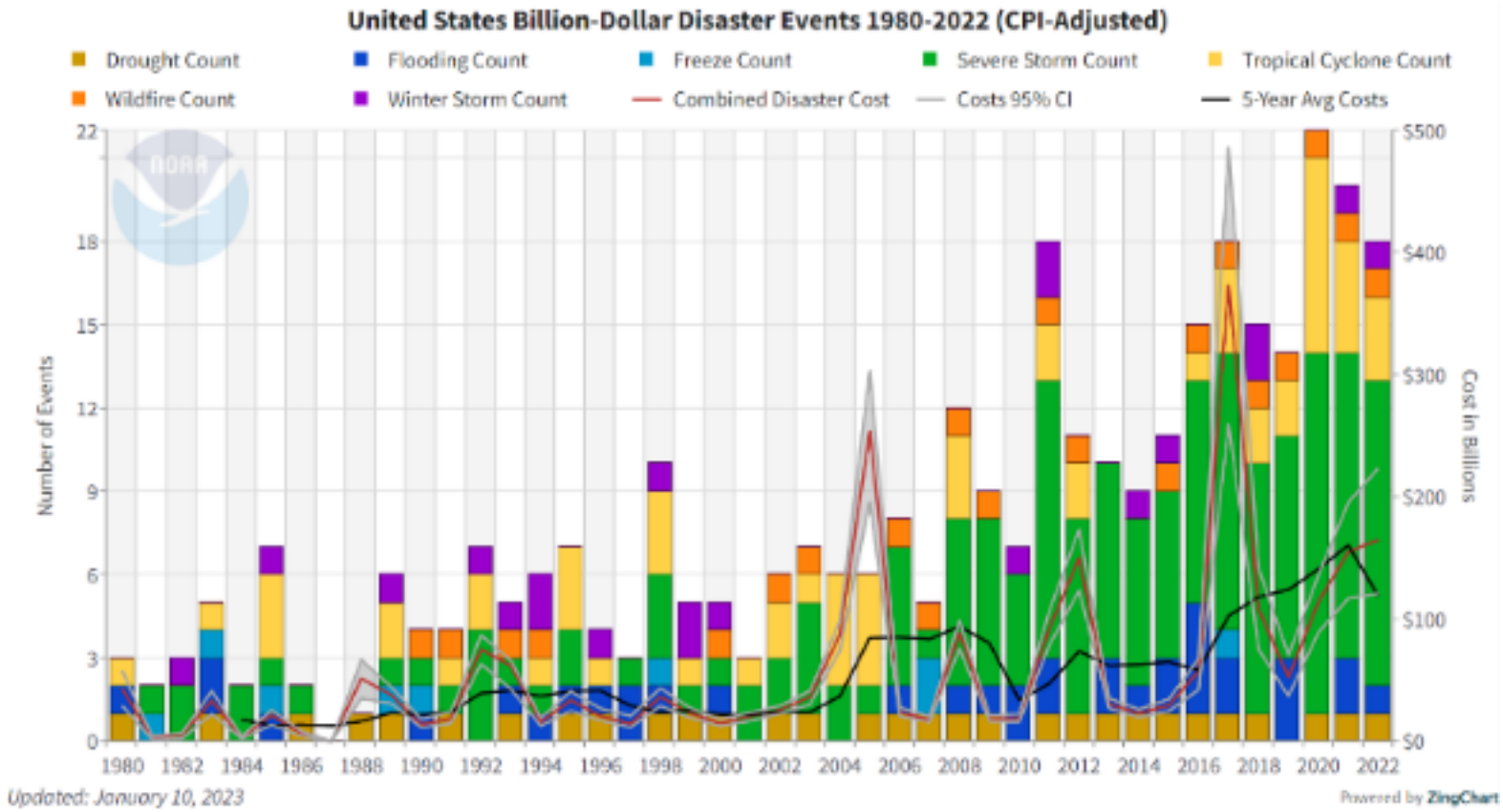
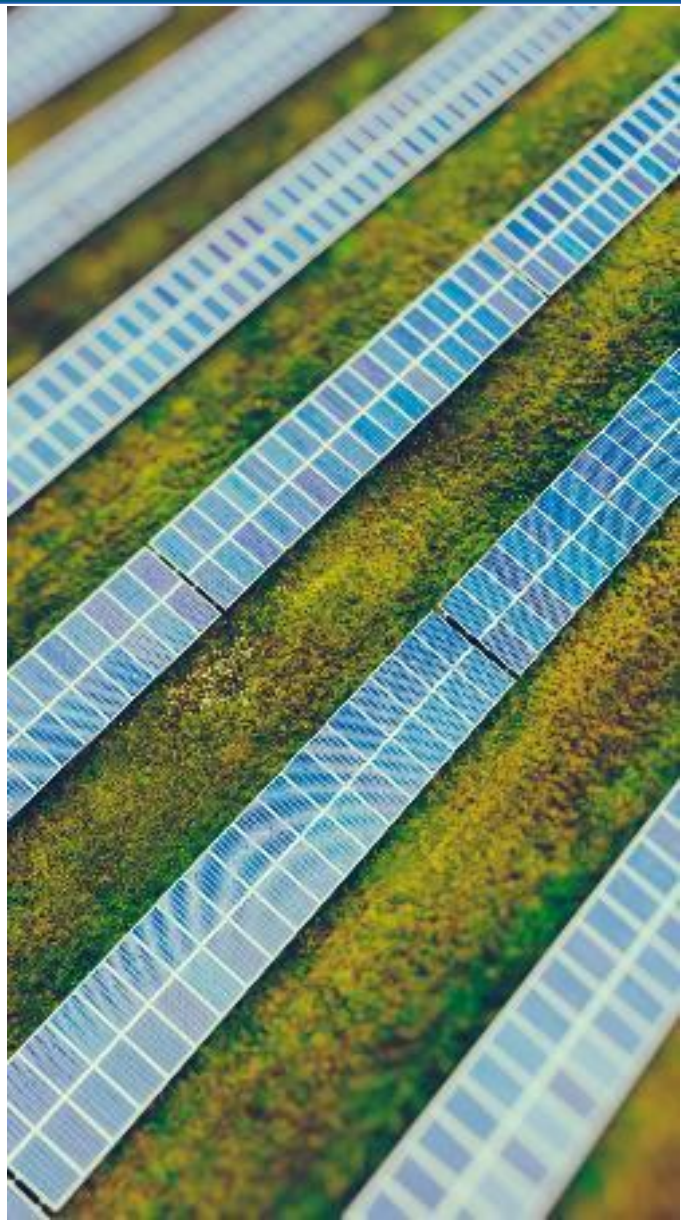


Figure Source: NOAA/NCEI, https://www.climate.gov/news-features/blogs/2022-us-billion-dollar-weather-and-climate-disasters-historical-context

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)

Resilience Initiatives

Rob McQuain
Electric T&D Strategic Advisor, Dominion Energy

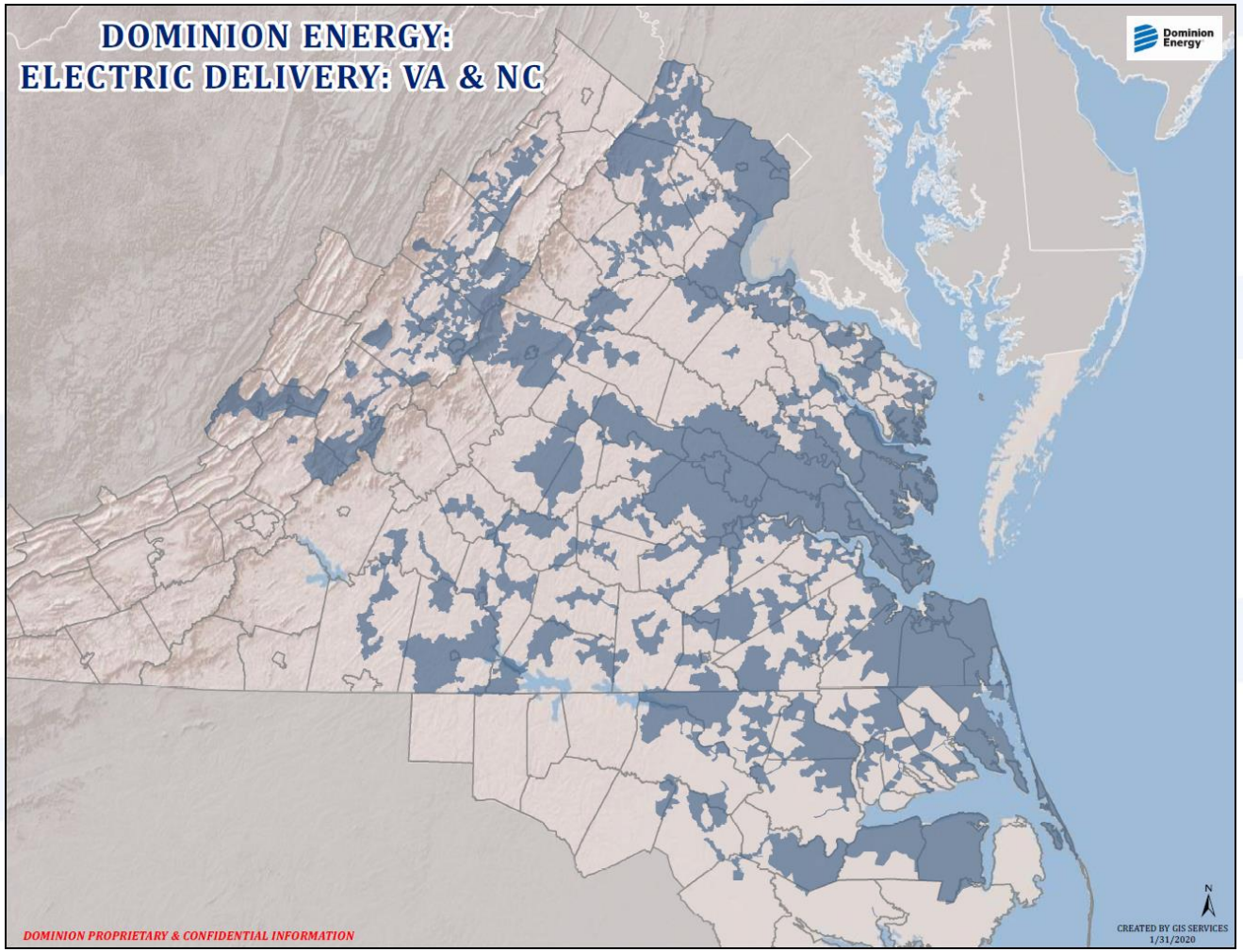
Agenda

- Introduction
  - Dominion Energy at a glance
  - Grid Resiliency: Strategic Underground (SUP) and The Grid Transformation (GT) Plan
- Specific Initiatives
  - Mainfeeder Hardening
  - Targeted Corridor Improvement
  - Self-healing Grid (FLISR/IGD)
  - Substation Technology Deployment
  - Physical Security
- Future plans
- Conclusion

About Dominion Energy Virginia & North Carolina

Dominion Energy at a glance:

- Headquartered in Richmond, Va
- 2.78 million customers
- 769 substations
- 6,900 miles of transmission line
- 60,000 miles of distribution line
- 23,041 MW peak demand



Grid Resiliency

Resiliency - Withstand Adverse Weather Conditions & Recover Quickly when Issues Arise

- Replace legacy assets
- Harden and protect distribution system
- Undergrounding targeted conductors
- Leveraging technology
  - Distribution automation
  - Fault locating
  - Grid intelligence applications

Strategic Underground Program (SUP)

- 2005 study estimated system-wide underground conversion at $83B
- 2014 Legislation passed by Virginia General Assembly
- 60% of tap line outages occur on 20% of tap line mileage
- Data-driven approach to target tap lines
- 2,176 miles converted (target: 4,000 miles)
- 6,382 tap lines converted
- 3,168 events eliminated
- Total Length of Restoration (TLR)

THE VEPCOVIAN

PUBLISHED MONTHLY BY AND FOR EMPLOYEES OF THE VIRGINIA ELECTRIC AND POWER COMPANY

Vol. XXIX June, 1955 Number 6

WHEN THE WIND- AND SLEET-STORMS COME—

Wouldn't It Be Nice! . . . .

To Have Wires Underground

By F. U. Ross

THAT is what the customers of electric service say everytime we have a devastating electrical storm—and we say so, too, because most any storm now means a tremendous clean-up job for Vepcovians, as well as others. As the storm season is again approaching, the biennial question will be asked over and over again, "why don't they put the wires underground?"

It's a good question with a sound, but somewhat complicated answer. Unfortunately, the usual answer given in one form or another that "It would cost too much," does little to satisfy the mind of the average customer. His usual reaction to that type of reply is to think, "That means it would cost the power company too much and since we can't get the service from anyone else, no action can be expected." In other words, no matter how true it may be, any short reply leaves too much to the imagination.

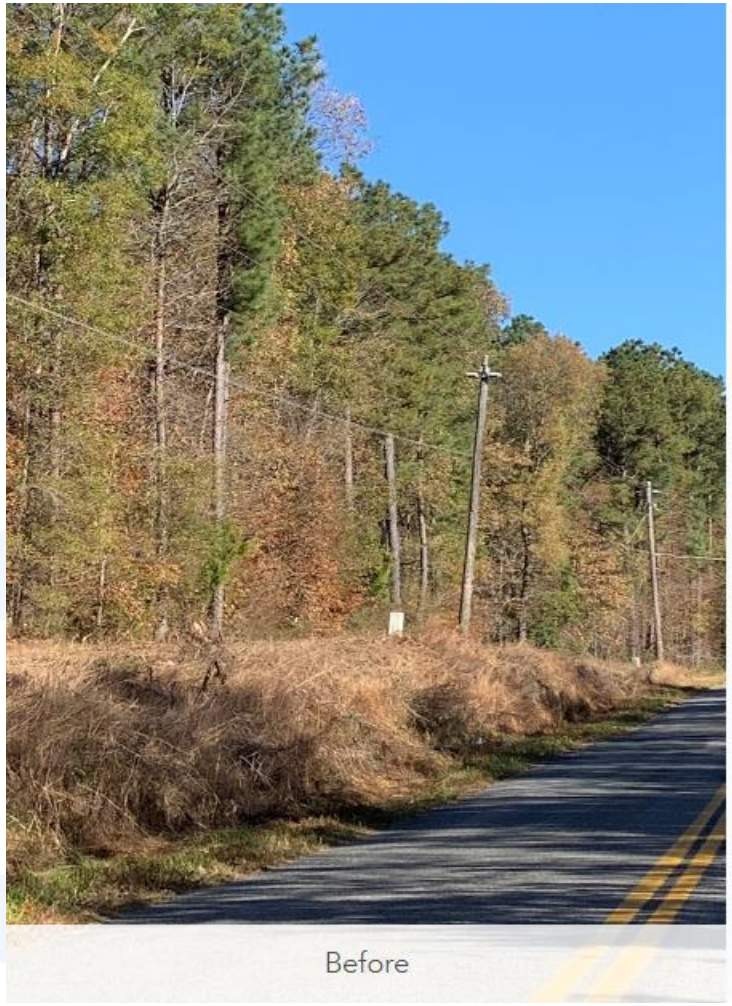
A more comprehensive answer, which would also mitigate any criticism implied by the question, would be that "Undergrounding all wires would cost *you*, the customer, too much". Another

Grid Transformation Plan

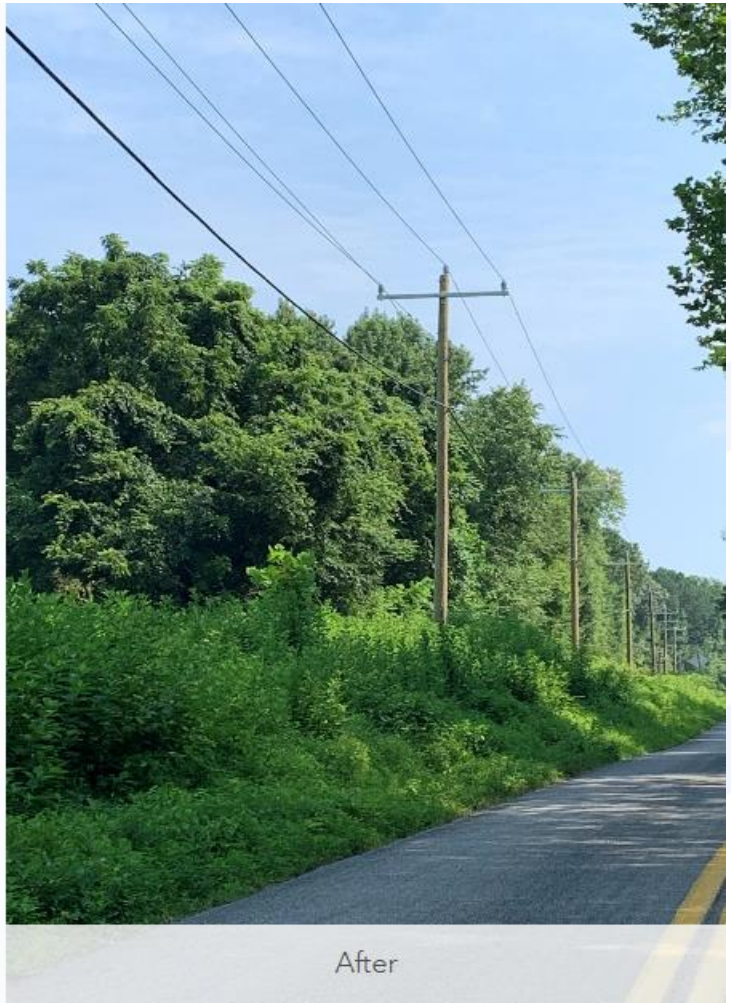
Investments meet Virginia's Grid Transformation and Security Act (GTSA) policy objectives to:

- Facilitate integration of distributed energy resources (DERs)
- Enhance physical electric distribution grid reliability and security

Mainfeeder Hardening Resiliency Improvements



Before



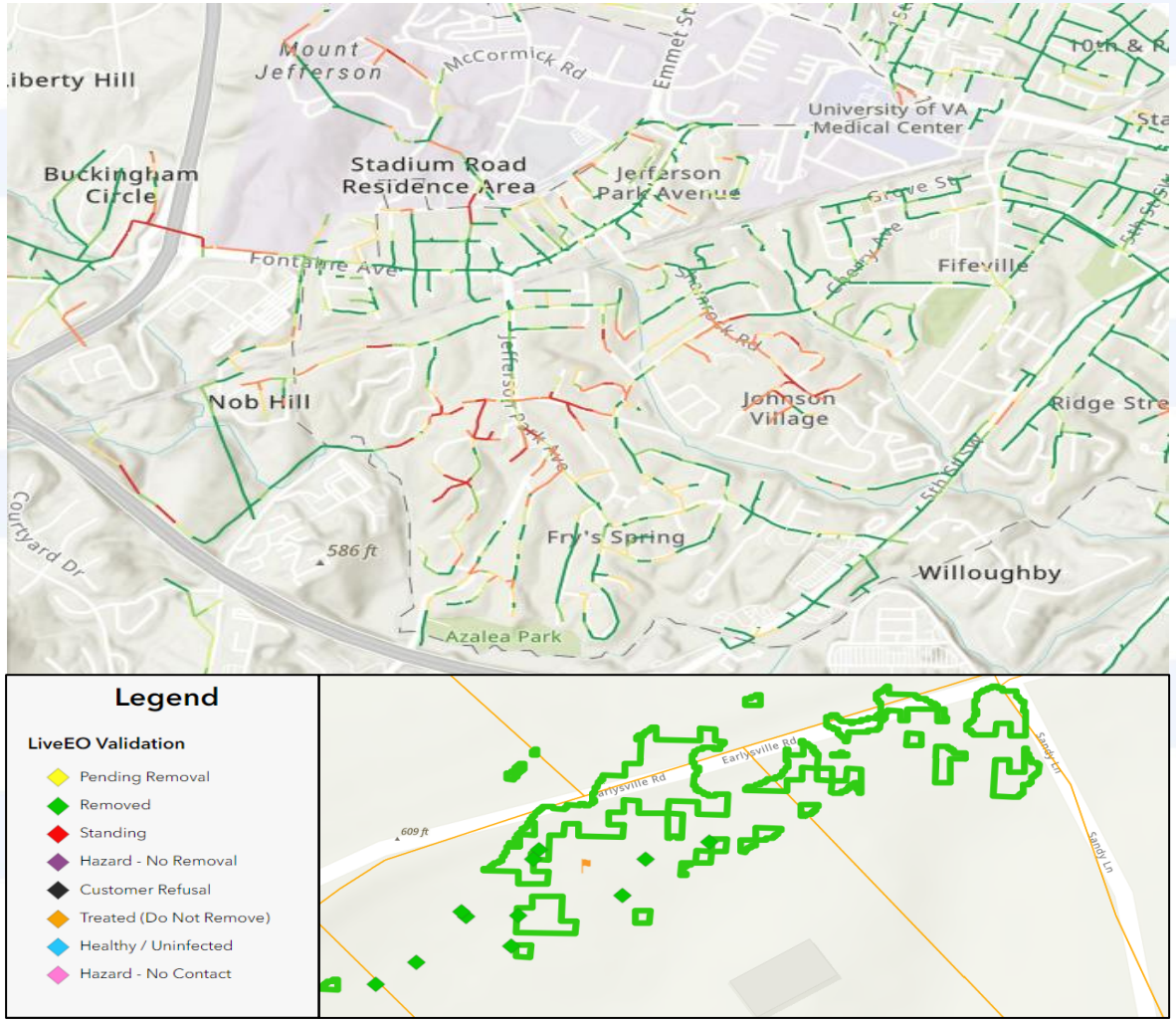
After

- Stronger, larger diameter poles reduce severity of damage
- Mid-span poles reduce likelihood of damage to adjacent facilities
- Fiberglass crossarms utilizing pole-top coordination
- Ground-to-sky tree trimming including overhang removal
- Improved circuit architecture

Targeted Corridor Improvement

- Ash Tree Remediation
- Herbicide Application
- Pilot programs
  - Hazard Tree (AI)
  - Tree Overhang

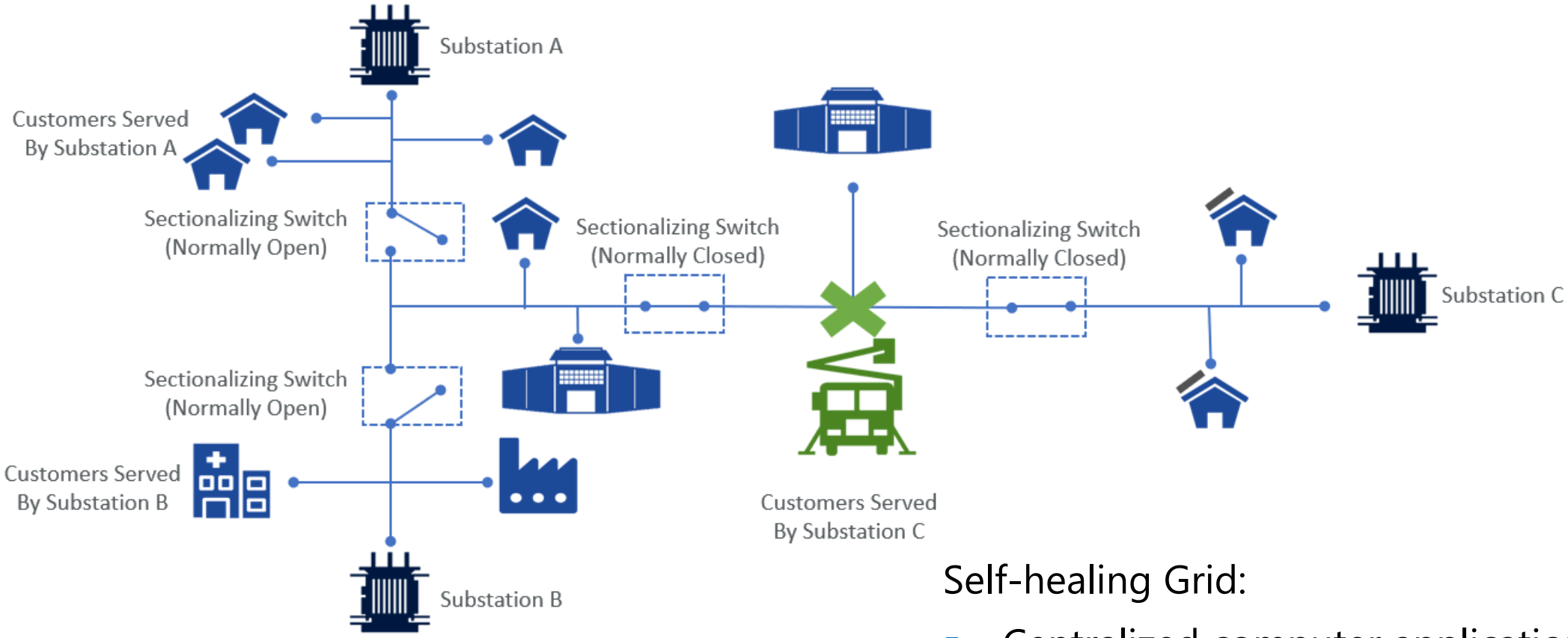
One year after application



Emerald Ash Borer

Damaged tree

Self-healing Grid



Self-healing Grid:

- Centralized computer application (FLISR)
- Intelligent Grid Devices (IGD)

Substation Technology Deployment

- Substation Upgrades
  - Transformer replacement
  - Digital relays
    - Real-time monitoring, protection and control

Electromechanical Relays

Digital Relays

22.4MVA Transformer built in 1968

22.4MVA Transformer built in 2022

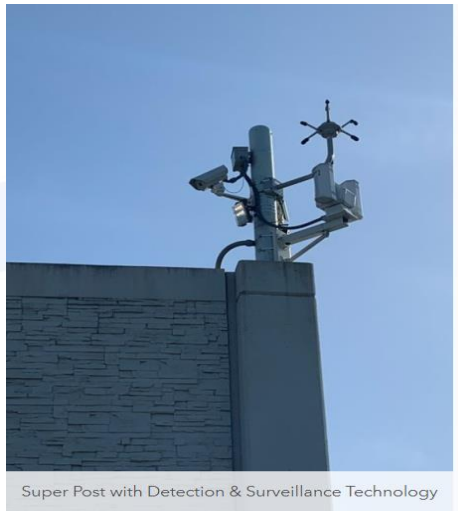
Physical Security

- Physical Security Upgrades
  - Enhanced fencing with anti-dig protection
  - External electronic access controls
  - 24/7 monitoring with upgraded surveillance and intrusion detection technology

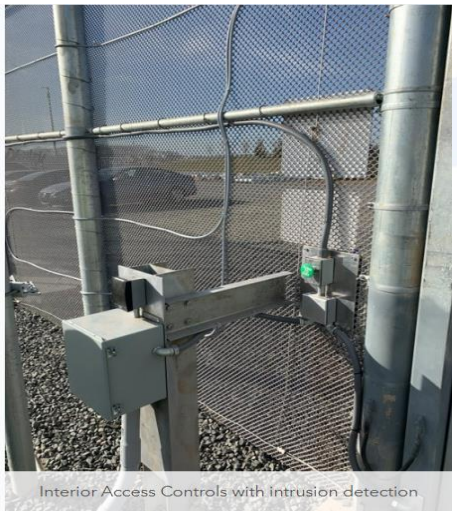
Exterior Access Control

Pedestrian Gate

Vehicle Gate



Super Post with Detection & Surveillance Technology



Interior Access Controls with intrusion detection

The Future of Grid Resiliency

- Continuous improvement
- Continuation of proven programs
  - GTP: 2019 – 2030
  - GTP 2.0: 2030 – ?
- New technologies
- Industry trends
- Customer needs
- Policy and Regulations
- Advanced Analytics

Optionality: Enable all customers with accessible, affordable electric service and engage customers with programs, education, and data access.

Sustainability: Evolve to a clean and decentralized grid that integrates distributed energy resources, such as solar and wind, and electric vehicles.

Resiliency: Build a more resilient energy grid that will reduce the effects of outages with automation and advanced asset management.

Affordability: Deliver value for customers by optimizing demand and seeking to reduce system and customer costs.

Conclusion

By understanding the challenges, solutions, customer needs, and future direction for grid resiliency, we can work towards creating a more resilient and reliable grid for the future.

Questions?

Rob McQuain
Electric T&D Strategic Advisor, Dominion Energy

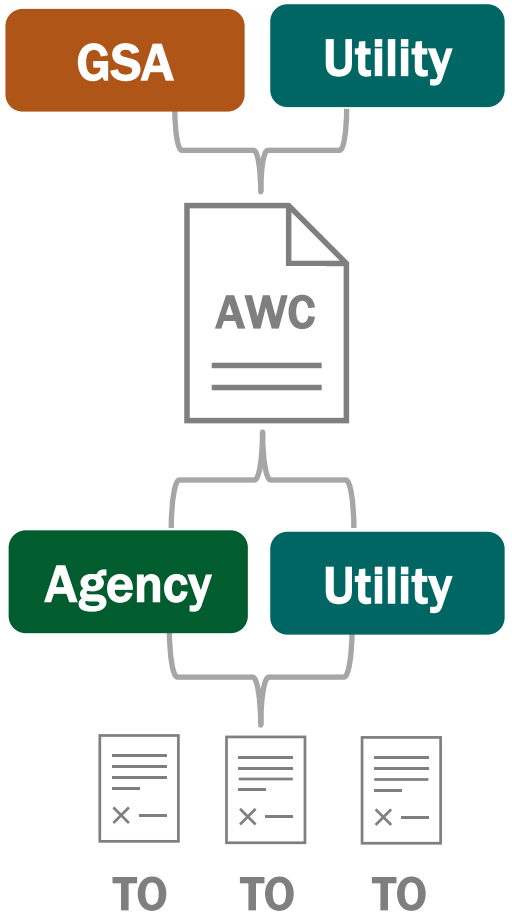
Leveraging GSA Areawide Contracts (AWCs)

Nilka Diaz
Contract Specialist
GSA

Areawide Contracts for Utility Services

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

- Contract Term - 10 years (25 years for UESCs)
- AWC bilaterally signed by GSA and utility
- FAR Part 41 requires agency use available AWC unless head of contracting authority (HCA) determines otherwise
- Exhibits for services signed by agency and utility



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

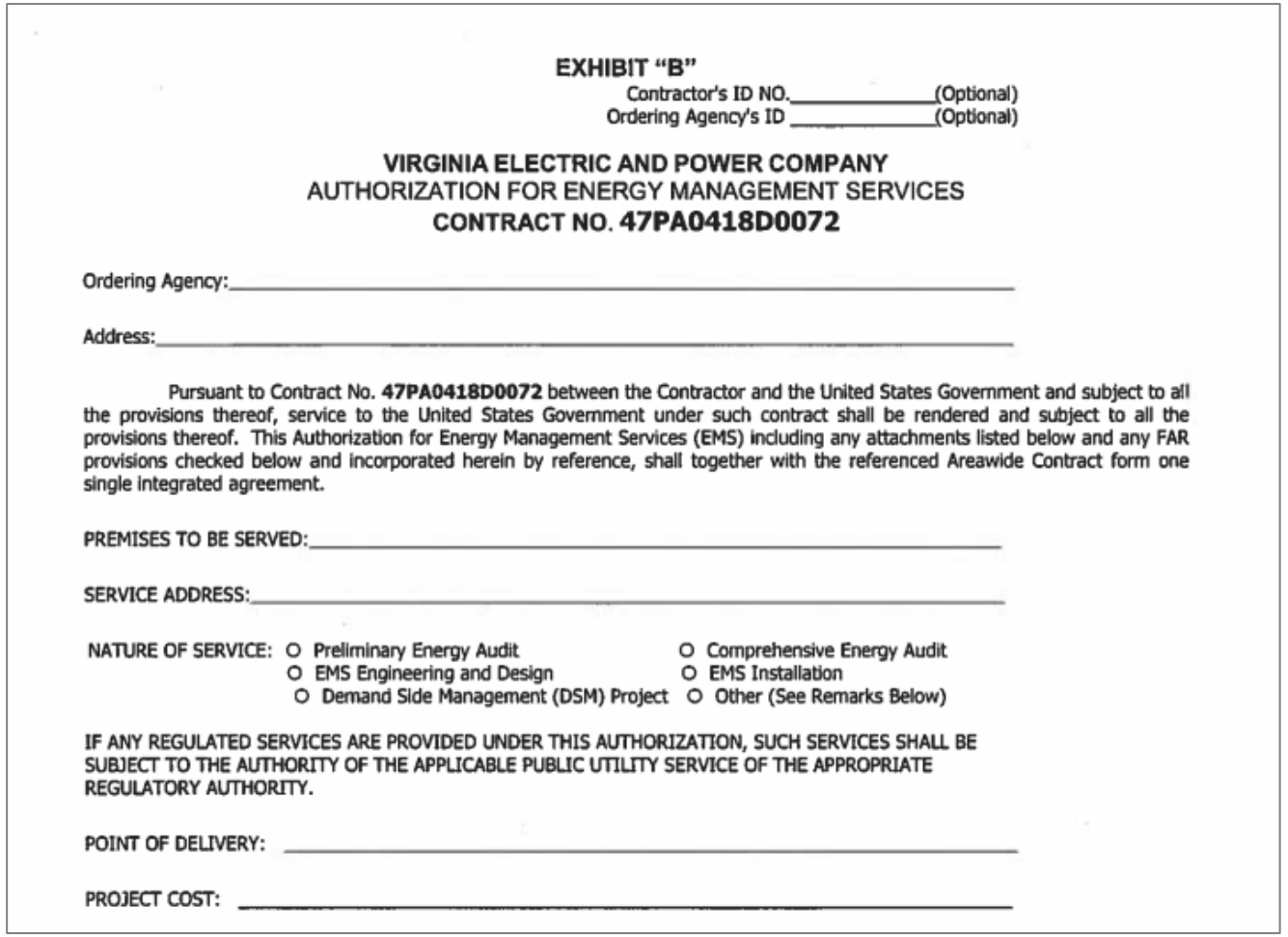


EXHIBIT "B"

Contractor's ID NO._____(Optional)
Ordering Agency's ID _____(Optional)

VIRGINIA ELECTRIC AND POWER COMPANY
AUTHORIZATION FOR ENERGY MANAGEMENT SERVICES
CONTRACT NO. 47PA0418D0072

Ordering Agency:_____

Address:_____

Pursuant to Contract No. **47PA0418D0072** 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 and subject to all the provisions thereof. This Authorization for Energy Management Services (EMS) including any attachments listed below and any FAR provisions checked below and incorporated herein by reference, shall together with the referenced Areawide Contract form one single integrated agreement.

PREMISES TO BE SERVED:_____

SERVICE ADDRESS:_____

NATURE OF SERVICE: O Preliminary Energy Audit O Comprehensive Energy Audit
O EMS Engineering and Design O EMS Installation
O Demand Side Management (DSM) Project O Other (See Remarks Below)

IF ANY REGULATED SERVICES ARE PROVIDED UNDER THIS AUTHORIZATION, SUCH SERVICES SHALL BE SUBJECT TO THE AUTHORITY OF THE APPLICABLE PUBLIC UTILITY SERVICE OF THE APPROPRIATE REGULATORY AUTHORITY.

POINT OF DELIVERY: _____

PROJECT COST: _____

View and Download Dominion Energy's AWC (listed as Virginia Electric Power Company)

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**

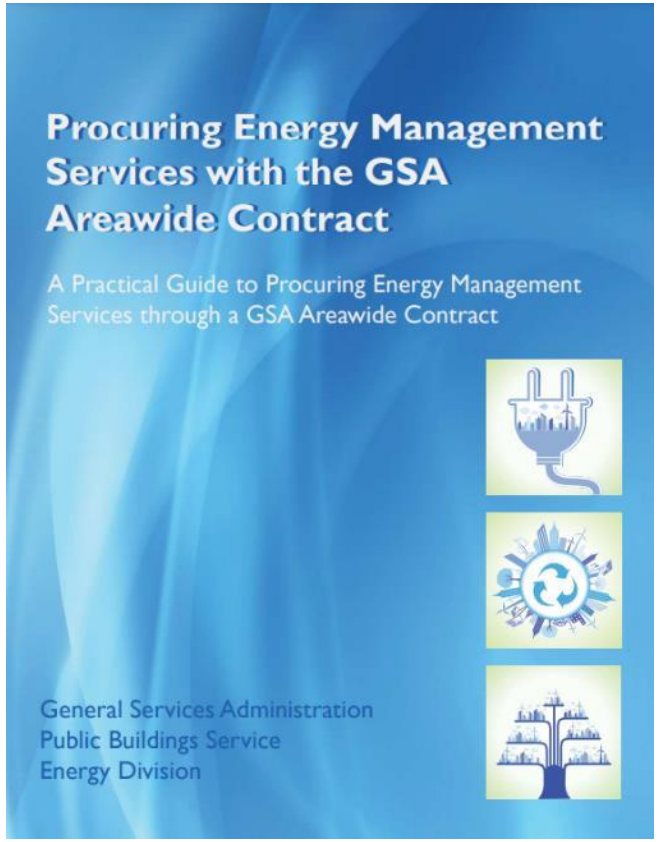
KEY REQUIREMENT

- **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)



Dominion Energy Virginia
GSA Areawide Contract Services

Jarryd Coates
Federal Energy Solutions
Business Development Manager

U.S. General Services Administration
Energy Division
Public Building Services
Washington, DC 20405

Areawide Public Utilities Contract

Virginia Electric and Power Company
Richmond, Virginia

Electric and Energy Management Services
Contract No. 47PA0418D0072
From: August 22, 2018
To: August 21, 2028

Dominion Energy | Powering Your Every Day.

Topics for Dialogue

- **GSA Areawide Contract**
  - Virginia Electric and Power Company Contract No. 47PA0418D0072
  - Areawide – Exhibits A, B & D
- **Partners in Conservation – Energy Management Services**
  - Fort Eustis – Lighting
  - Camp Peary – Electrical System Upgrades
  - Fort Myer/Fort McNair – Facility System Improvements

Virginia Electric and Power Company Contract No. 47PA0418D0072

- Rates & Tariffs
  - Rates & Tariffs | Virginia | Dominion Energy
- Small Business Plan
- Parallel Generation & Interconnection
  - Parallel Generation & Interconnection | Virginia | Dominion Energy
  - Net Metering | Virginia | Dominion Energy

GSA Areawide Contract - Exhibits

Exhibit A – Electric Service:

- Electric serve authorization; connection & disconnection terms
- Rates and tariffs
- Payment provisions – paid with upfront capital
- General energy services (Demand Side Management)

Exhibit B – Energy Management Service:

- Utility Energy Services Contract (UESC) terms
- Energy savings payment stream/financing arrangements
- Performance Assurance processes (Performance Period Services (OMRR))

Exhibit D – Other Services (i.e. Interconnection Agreement):

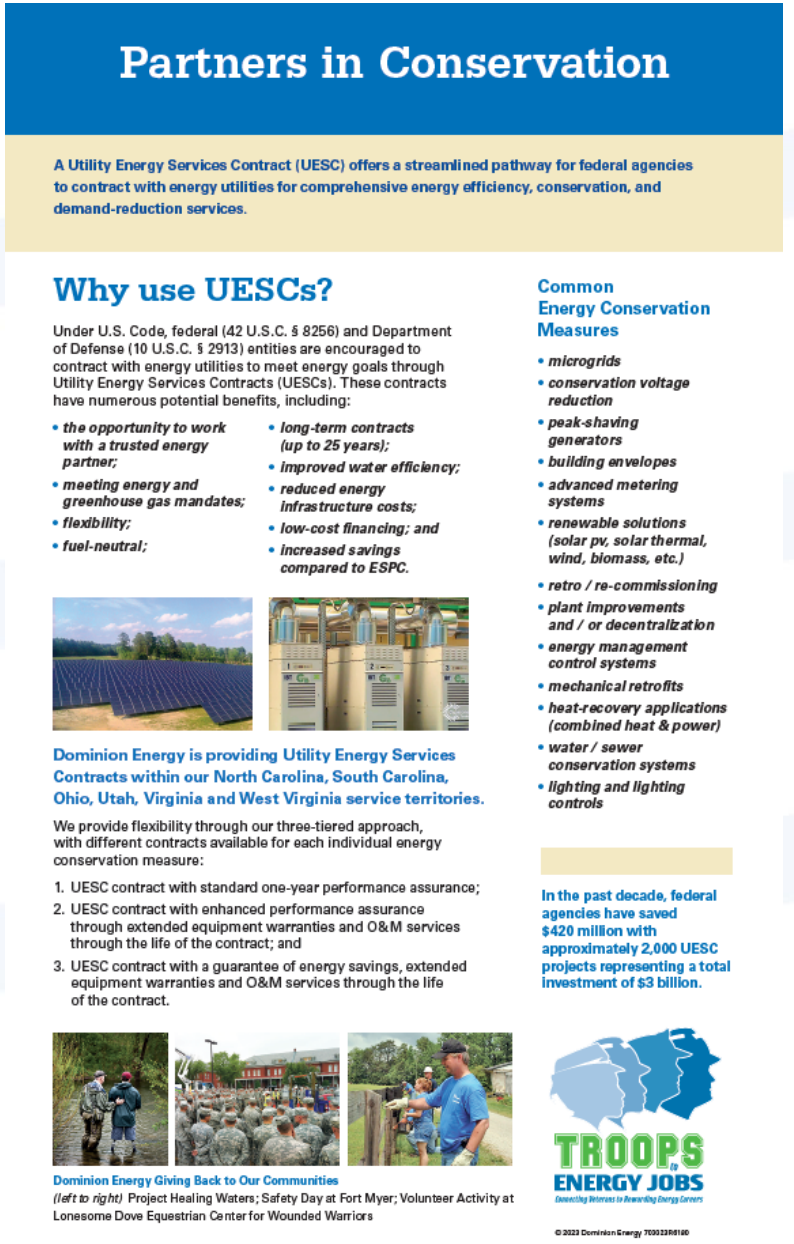
- Interconnection of Government generation assets to utility grid
- General energy services not covered under A or B

Partners in Conservation – Energy Management Services

DEV offers a streamlined pathway for federal agencies to contract with energy utilities for comprehensive energy efficiency, conservation, and demand-reduction services.

Customer Focused:

- *Opportunity to work with a trusted energy partner*
- *meeting energy and greenhouse gas mandates*
- *flexibility*
- *fuel-neutral*
- *long-term contracts (up to 25 years)*
- *improved water efficiency*
- *reduced energy infrastructure costs*
- *low-cost financing*
- *distributed generation*



Partners in Conservation

A Utility Energy Services Contract (UESC) offers a streamlined pathway for federal agencies to contract with energy utilities for comprehensive energy efficiency, conservation, and demand-reduction services.

Why use UESCs?

Under U.S. Code, federal (42 U.S.C. § 8256) and Department of Defense (10 U.S.C. § 2913) entities are encouraged to contract with energy utilities to meet energy goals through Utility Energy Services Contracts (UESCs). These contracts have numerous potential benefits, including:

- *the opportunity to work with a trusted energy partner;*
- *meeting energy and greenhouse gas mandates;*
- *flexibility;*
- *fuel-neutral;*
- *long-term contracts (up to 25 years);*
- *improved water efficiency;*
- *reduced energy infrastructure costs;*
- *low-cost financing; and*
- *increased savings compared to ESPC.*

Common Energy Conservation Measures

- *microgrids*
- *conservation voltage reduction*
- *peak-shaving generators*
- *building envelopes*
- *advanced metering systems*
- *renewable solutions (solar pv, solar thermal, wind, biomass, etc.)*
- *retro / re-commissioning*
- *plant improvements and / or decentralization*
- *energy management control systems*
- *mechanical retrofits*
- *heat-recovery applications (combined heat & power)*
- *water / sewer conservation systems*
- *lighting and lighting controls*

Dominion Energy is providing Utility Energy Services Contracts within our North Carolina, South Carolina, Ohio, Utah, Virginia and West Virginia service territories.

We provide flexibility through our three-tiered approach, with different contracts available for each individual energy conservation measure:

1. UESC contract with standard one-year performance assurance;
2. UESC contract with enhanced performance assurance through extended equipment warranties and O&M services through the life of the contract; and
3. UESC contract with a guarantee of energy savings, extended equipment warranties and O&M services through the life of the contract.

In the past decade, federal agencies have saved $420 million with approximately 2,000 UESC projects representing a total investment of $3 billion.

Dominion Energy Giving Back to Our Communities

(left to right) Project Healing Waters; Safety Day at Fort Myer; Volunteer Activity at Lonesome Dove Equestrian Center for Wounded Warriors

TROOPS to ENERGY JOBS

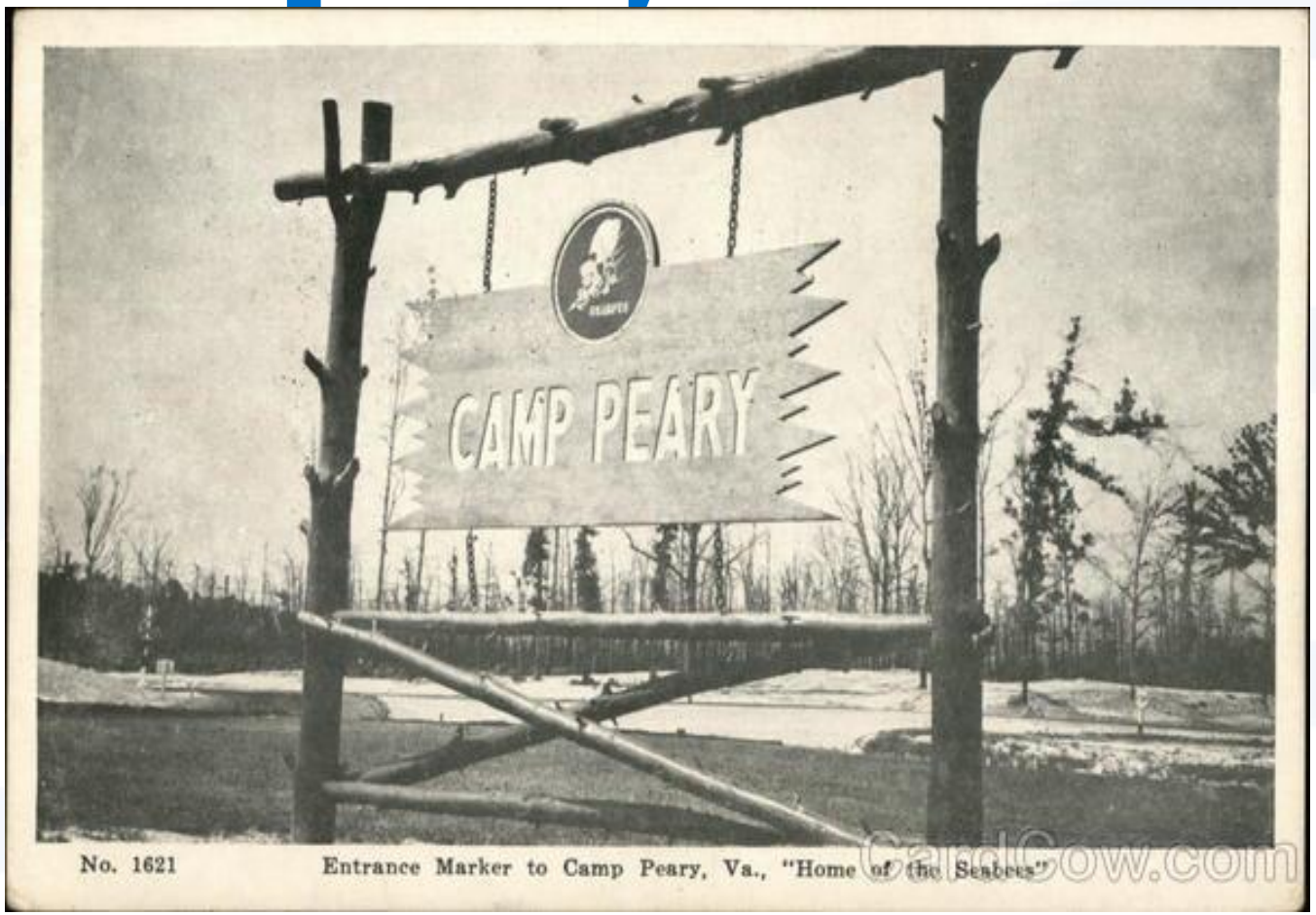
Dominion Energy® | Powering Your Every Day.℠

Fort Eustis – Lighting

The Dominion Team designed and constructed a project at Fort Eustis:

- Install and connect new High Bay LED luminaire fixtures
- Install and connect new vanity LED luminaire fixtures
- Connect new Lighting control occupancy sensors
- Multiple buildings and tenants
- 10-year warranty on equipment installed
- Challenges overcome:
  - audit & award timeline (~3 months)
  - construction timeline (~3 months)

Camp Peary – Electrical System Upgrades



- Grid hardening for base underground power
- OH to UG electric distribution service rearrangements
- Install new switches, transformers, cabling, streetlighting, fiber network & switchgears/panels/ATS (or rearrangements)
- Enhance system resiliency, reduce outages & upgrade to modern day UG facilities
- Government owned infrastructure

Fort Myer/Fort McNair – Facility System Improvements

Estimated energy efficiency and cost savings = $189,700

The Dominion Team designed and constructed a project at JBM-HH & Fort McNair:

- High efficiency lighting upgrades and lighting controls
- Water conservation upgrades
- High efficiency boilers
- High efficiency chillers
- Variable Frequency Drives
- High efficiency motors
- Energy management controls system upgrades

Questions?

Jarryd Coates
jarryd.a.coates@dominionenergy.com
federalenergysolutions@dominionenergy.com

Utility Energy Service Contracts (UESCs)

John Michael Forrest
UESC Program Manager
FEMP

What are Utility Energy Service Contracts (UESCs)?

Energy 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)
- 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

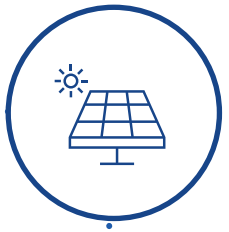
How do UESCs Work?

Select Utility

Competition limited to serving distribution utilities

Conduct assessments* to evaluate energy/water savings opportunities

Dominion identifies cost effective energy conservation measures (ECMs)



Implement ECMs

Dominion secures financing and installs measures

Make payments from cost savings

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

Agency and Dominion implement Performance Assurance Plan to monitor and sustain savings

Via operations & maintenance / savings verification/other

**Preliminary Assessment typically provided at no cost*

Authorizing Law: Utility Energy Service Contract (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**
- **Sites/facilities within Dominion's service territory may be bundled in a single task order**
- **Performance Assurance Plan and/or savings guarantee is required**
  - Utility can perform operations & maintenance, repair/replacement, measurement and verification
  - Dominion can offer a savings guarantee
- **Contracts are firm-fixed-price**
- **Dominion is single point of contact for entire project – evaluation, design, installation, post-installation services**

Energy Conservation Measures

Common Examples

(not exhaustive)

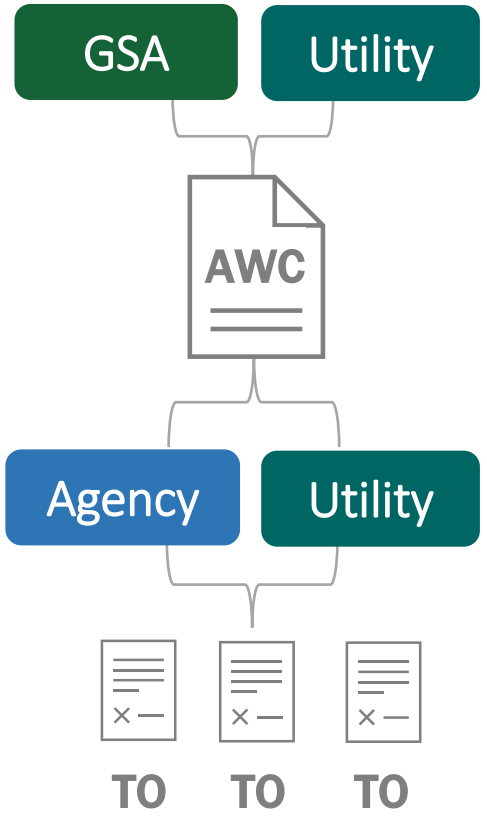
- Boiler and chiller upgrades
- Energy management control systems
- Commissioning/Retro-commissioning
- Building envelope
- HVAC
- Chilled/hot water, steam distribution
- Lighting and lighting control improvements
- Electric motors/drives
- Refrigeration
- Renewable Power Generation Systems
- Electrical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



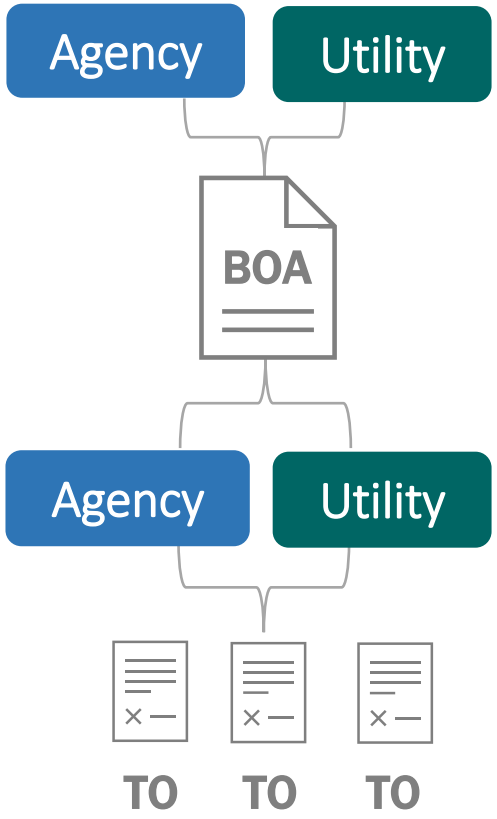



UESC Contracting Options

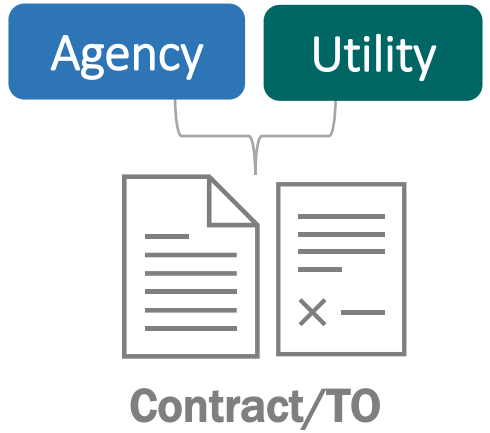
Areawide Contract (AWC)



Basic Ordering Agreement (BOA)



Separate Contract



FAR Part 41.205 Separate Contract | FAR Part 41.204 GSA Areawide Contracts | FAR Part 16.703 Basic Ordering Agreement

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 (*other than Dominion*)**
  - Contact your serving utilities (electricity, natural gas, water) to 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
- 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
- Federal Utility Partnership Working Group
  - 2024 FUPWG Seminar on Wednesday/Thursday August 21-22, 2024 in Houston, TX
  - Free one day UESC training on Tuesday, August 20

How much does FEMP support cost?

Nothing!

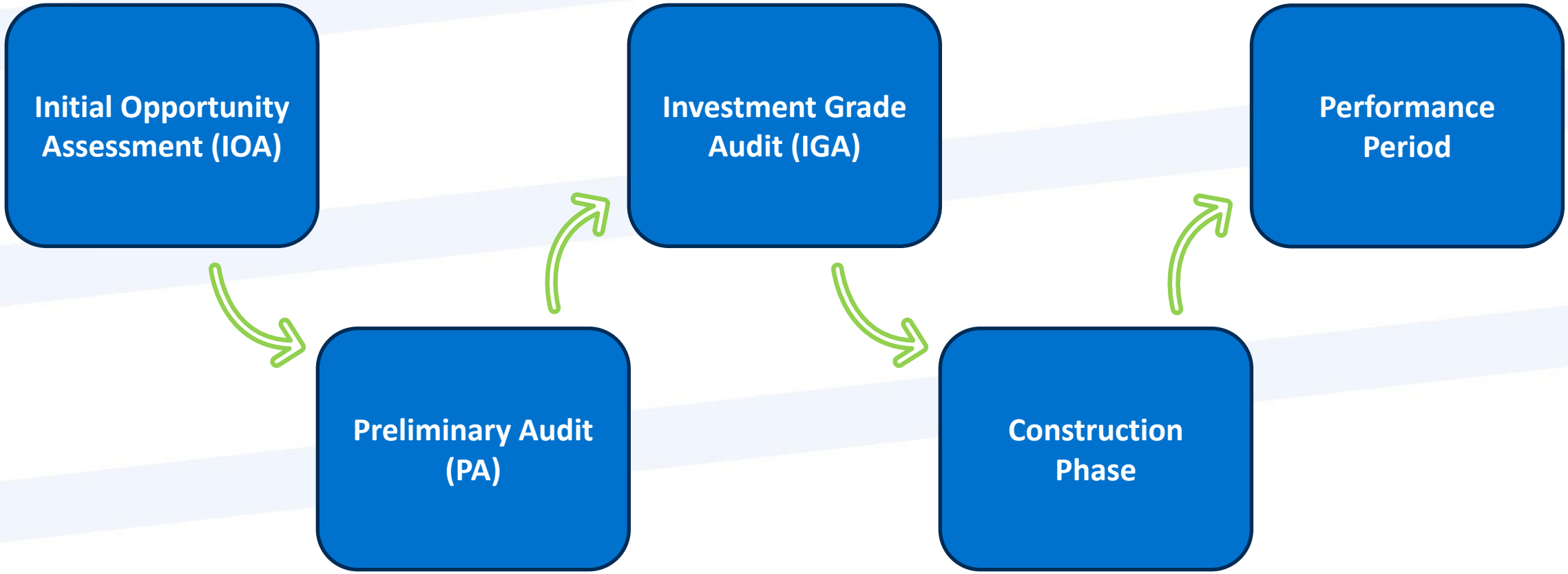
Most support can be provided at no cost*

Visit the FEMP UESC website to learn more

Federal Energy Solutions
UESC Program

Daniel Darden
FES Business Development Manager, Dominion Energy

Typical UESC Process Flow



Dominion Energy's Customizable UESC Program

- **Energy savings guarantees –** Able to provide as requested based on equipment or system characteristics and criticality to the project performance and mission requirements
- **Extended equipment warranties** - For mission critical assets; to provide assurance that if key equipment fails after the normal warranty expires, repair and/or replacement is provided with little to no cost impact to the Government
- **O&M services (for up to the life of the contract)**- When Government resources are limited and/or new systems are unfamiliar to current resource capabilities – ***Especially valuable when pairing with ERCIP projects***
- **Advance System Training** - ECM specific training throughout the life of the contract, DVD recordings of training sessions, training sessions offered at customizable intervals throughout the contract
- **Customer customization –** select any of the above options as appropriate for each individual ECM to ensure project performance and assure customer satisfaction

Energy Conservation Measures (ECM's)

- ❑ LED Lighting Improvements
- ❑ Water Conservation Measures
- ❑ CHP
- ❑ Microgrids
- ❑ Battery Energy Storage Systems
- ❑ Retro-commissioning
- ❑ Electrical System Hardening
- ❑ Building Automation Systems/Controls
- ❑ Renewables – PV, Wind, Geo, etc.
- ❑ Geothermal Systems
- ❑ HVAC System Upgrades
- ❑ Boiler Upgrades
- ❑ Chiller Upgrades
- ❑ Decentralization
- ❑ Building Envelope
- ❑ Generators (FUEL Neutral)
- ❑ AMI Improvements
- ❑ Voltage Reduction
- ❑ + MORE

USCG Base Portsmouth

Location: Portsmouth, VA

Investment: $10.4 M

Estimated Annual Savings: $750,000

ECM's Included:

- LED lighting improvements
- Natural gas line extension
- High efficiency boilers
- 1.4 MW natural gas peak shaving generator
- Water conservation improvements
- Retro-commissioning
- Micro-grid analysis
- Extended warranty and long-term maintenance agreement for generator

Hampton, VA Medical Center

Location: Hampton, VA

Investment: $14 M

Estimated Annual Savings: $876,000

ECM's Included:

- LED lighting improvements
- Compressed air upgrades
- Chiller replacements and plant controls
- DDC controls
- Boiler plant upgrades
- Steam system upgrades
- Condenser replacements
- Chapel window insulation
- Transformer replacements
- Ventilation controls
- Solar hot water
- Water conservation

NSWC Dahlgren

Location: Dahlgren, VA

Investment: $10.5 M

Estimated Annual Savings: $675,000

ECM's Included:

- LED lighting improvements and Controls
- Chiller and A/C Upgrades
- Retro-commissioning
- Buildings controls upgrades

MCB Quantico

Location: Quantico, VA

Investment: $48 M

Estimated Annual Savings: $2 M

ECM's Included:

- 3 MW Peak-shavings generator
- 1 MW Micro-turbine refurbishment
- Electric rate switch
- AMI Improvements
- Retro-commissioning
- RTU Replacements
- LED Lighting upgrades
- Water conservation upgrades
- Long-term performance period service for O&M for select ECMs

Other UESC Projects Underway

Pentagon – Arlington, VA

MCAS Beaufort – Beaufort, SC

Keys to Success

- **Customization** – Every project is different, and we provide customized offerings tailored to site's needs such as energy savings guarantees, extended equipment warranties, advanced system training, and OMR&R
- **Communication** – From cradle to grave - maintain throughout the development process to ensure understanding of customer needs – energy gaps, funding challenges, previous projects, etc.
- **Leverage Additional Funding** - Bundle multiple funding sources such as ERCIP, ESTCP, and AFFECT grants to maximize value when feasible
- **Leadership Endorsement** – Leadership should be engaged from the onset and recognize value provided from the project
- **Safety** – Safety is a core value at Dominion Energy and we ensure this is engrained in our projects and at the forefront of everything we do

Questions?

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Federal Energy Solutions
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Dominion Energy Federal UESC Programs

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Dominion Energy®

Powering Your Every Day.℠

Dominion Energy Virginia Closing Remarks

Robert Wright – VP Strategic Partnerships

8/7/2024

Dominion Energy®

Powering Your Every Day.℠

Final Q&A, Resources, and Next Steps

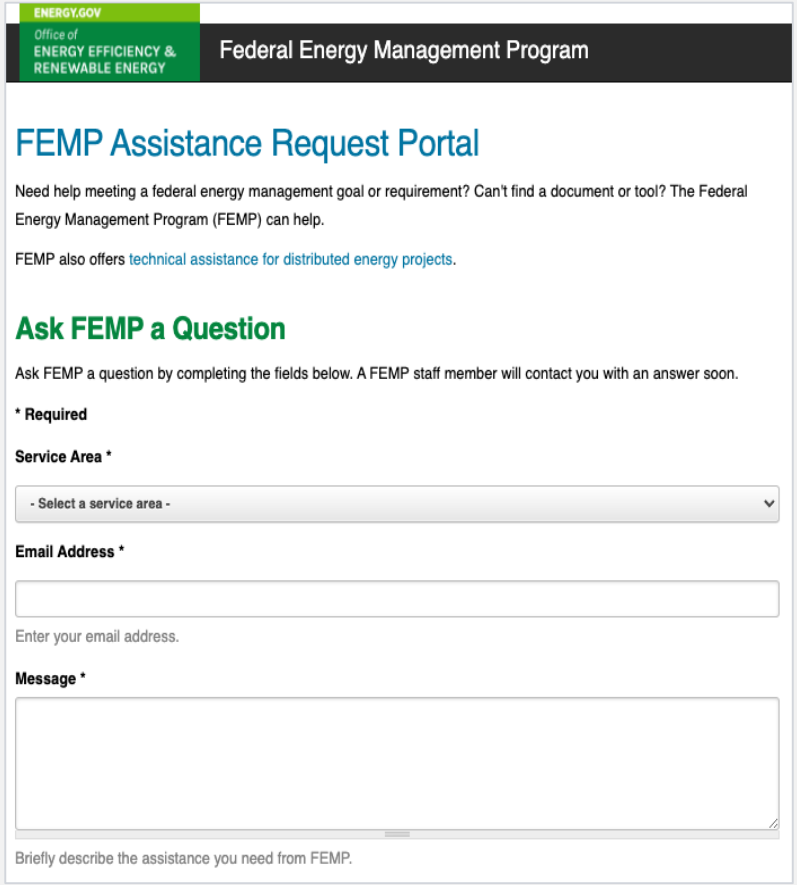
FEMP Technical Assistance

FEMP offers free support to federal agencies via the 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



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

FEMP Federal Energy Management Program

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
- Training and Guidance Information

Only Federal Agencies May Apply for AFFECT

Upcoming Application Deadlines	
Phase 1	May 31, 2023 (closed)
Phase 2	June 27, 2024 (closed)
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 DR/TVP
  - Distributed Energy Procurement
  - Resilience Planning and Integration
  - Facility and Fleet Optimized Design
  - Legislative and Mandate Guidance
  - Energy and Cyber Security Integration

Utility Engagement			
Title	**Level**	**Length**	**CEUs**
Evaluating Your Utility Rate Options	Introductory	1 hour	0.20
Taking Advantage of Demand Response and Time-Variable Pricing Offerings	Introductory	1.5 hours	0.20
UESC Comprehensive Training: Day 1 - Fundamentals and Planning	Introductory	2 hours	.3
UESC On-Demand Webinar Series: Phase 1 - Acquisition Planning	Introductory	1 hour	0.20
UESC On-Demand Webinar Series: Phase 2 - Utility Selection and Preliminary Assessment	Introductory	1 hour	0.20
UESC On-Demand Webinar Series: Phase 3 - Project Development	Introductory	1 hour	0.20
UESC On-Demand Webinar Series: Phases 4 and 5 - Project Implementation and Construction and Post-Acceptance Performance	Introductory		0.20
UESC On-Demand Webinar Series: UESC Introduction Part 1 - Overview and Background	Introductory	1 hour	0.20
UESC On-Demand Webinar Series: UESC Introduction Part 2 - Legislation and Contracting	Introductory	1 hour	0.20
Utility Energy Service Contracts (UESC) New Utility Toolkit	Introductory	1 hour	0.2
Financing for UESCs: Ensuring the Best Value for the Government	Intermediate	1 hour	0.20
UESC On-Demand Webinar Series: Special Topic - Performance Assurance for Utility Energy Service Contracts	Intermediate	1 hour	0.20

Click here to view all courses!

Federal Utility Partnership Working Group (FUPWG) 2024

Registration Open!

August 21-22, 2024 | Houston, TX

Learn More:

FUPWG Webpage | Registration | Agenda

Event Info

- 2-day seminar led by FEMP to cultivate lasting partnerships between federal agencies and utilities for improved energy and water management
- Sessions and panels led by industry experts
- Knowledge sharing around UESC best practices, new technologies, and approaches to achieving energy goals
- Full-day (no cost!) UESC Training held on August 20
- Space will be limited to 200 attendees
- Hosted in partnership with CenterPoint Energy

CenterPoint® Energy

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.

Next Steps: Review Available Dominion Programs

- **Energy Efficiency Rebates**
  - www.domsavings.com
  - See links on the Energy Conservation Programs for Federal Customers slide
- **Time Variable Pricing Rates**
  - Schedule 10 Data | Virginia | Dominion Energy
- **Utility Energy Services Contracts**
  - Partners in Conservation | Dominion Energy
- **EV/EVSE Programs and Rebates**
  - Electric Vehicles | Virginia | Dominion Energy
- **Resilience and Grid Modernization**
  - https://www.dominionenergy.com/projects-and-facilities/electric-projects/energy-grid-transformation

Contact Information

DOE FEMP / Lab Staff / GSA

Name	Program
John Michael Forrest	UESC
Tracy Niro	CFE
Ethan Epstein	Resilience
Jason Koman	GEB and Fleet/EVSE
Billie Holecek (LBL)	TVP
John Michael Forrest	UESC

Contact FEMP SMEs via the

FEMP Assistance Request Portal

Dominion Energy

Name	Program
Morgan Dehaven 804-356-7487 Tim Stuller 804-270-8086	Energy Conservation Demand Response and Time-Variable Pricing
Tim Stuller 804-270-8086	CFE
Josh Martinez 571-388-6727	Fleet Electrification
Robert McQuain 804-241-2496	Resilience
Fred Parry 703-581-8851	UESC and AWC 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.

Sign Up for FEMP Updates

Receive periodic emails to stay informed of FEMP news, trainings, tools, resources, and more.

Find More Trainings

Search the FEMP Training Catalog to find upcoming live trainings, events, and on-demand courses.

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

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