- Engage with state and local licensing and commissions for regulatory relief during the pandemic.
- Coordinate with your respective ISO/RTO, TO, and TOP to ensure they are aware of your pandemic plan.
- Identify potential qualified workers who could be called upon to operate a site.
- Consider using the visitor questionnaire from the "Mutual Assistance Considerations" section of this Resource Guide.
- Follow the terms and conditions of existing mutual assistance or mutual aid agreements.

COVID-19 Interim Cleaning and Disinfection Protocol for Generation Control Rooms

Currently, there are no disinfection protocols that have been tested specifically for SARS-CoV-2, abbreviated "COVID-19," as an emerging viral pathogen. Per current CDC recommendations, evidence suggests that the novel coronavirus may remain viable for hours to days on surfaces made from a variety of materials. CDC disinfection recommendations are linked below; the details noted in this document are not meant to supersede CDC's guidance:

https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/cleaning-disinfection.html

Cleaning of visibly dirty surfaces followed by disinfection is a best practice measure for prevention of COVID-19 and other viral respiratory illnesses in community settings. Following are recommendations from the CDC's April 1, 2020, guidance on the cleaning and disinfection of rooms or areas where those with suspected or with confirmed COVID-19 have visited. It is aimed at limiting the survival of novel coronavirus in key environments.

Cleaning and Disinfection Protocols

After person(s) suspected to have COVID-19 has been at facility

- Close off areas used by the potentially ill person(s) and wait as long as practical before beginning cleaning and disinfection to minimize the potential for exposure to respiratory droplets. Open outside doors and windows to increase air circulation in the area. If possible, wait up to 24 hours before beginning cleaning and disinfection.
    - Due to criticality, some areas (i.e., control rooms) may require immediate disinfection and operation from remote locations such as DCS rooms.
    - When cleaning the control room, have all operations personnel operate the unit from the DCS room. Before operations personnel depart the control room, have them deenergize all keyboards and mice (removing batteries.) This will prevent the risk of cleaning personnel tripping the unit.
    - Before the contractor begins cleaning the control room, show them the areas that are not to be cleaned, such as red E-Stop push buttons.
    - DO NOT use a bleach cleaning solution on any computer equipment. Use a 70% alcohol cleaning solution.

- Cleaning staff should clean and disinfect all areas (e.g., offices, bathrooms, and common areas) used by the potentially ill person(s), focusing especially on frequently touched surfaces.
- Signage and red barricades will be utilized to prevent access to suspected areas.
- Heads-up notifications will be sent to plant personnel as an alert.
- Appropriately trained and approved contract personnel will handle cleaning and disinfection upon plant request.

How to Clean and Disinfect

Surfaces

- If surfaces are dirty, they should be cleaned using a detergent or soap and water prior to disinfection.
- For disinfection, diluted household bleach solutions, alcohol solutions with at least 70% alcohol, and most common EPA-registered household disinfectants should be effective.
    - Diluted household bleach solutions can be used if appropriate for the surface. Follow manufacturer's instructions for application and proper ventilation. Check to ensure the product is not past its expiration date. Never mix household bleach with ammonia or any other cleanser. Unexpired household bleach will be effective against coronaviruses when properly diluted.
- Prepare a bleach solution by mixing:
    - Five tablespoons (1/3 cup) bleach per gallon of water or 4 teaspoons bleach per quart of water.
    - Products with EPA-approved emerging viral pathogens claim icons are expected to be effective against COVID-19 based on data for harder to kill viruses. Follow the manufacturer's instructions for all cleaning and disinfection products (e.g., concentration, application method and contact time, etc.).
    - For soft (porous) surfaces, such as carpeted floor, rugs, and drapes, remove visible contamination if present and clean with appropriate cleaners indicated for use on these surfaces.
    - If the items can be laundered, launder items in accordance with the manufacturer's instructions using the warmest appropriate water setting for the items and then dry items completely.
    - Otherwise, use products with the EPA-approved emerging viral pathogens claims that are suitable for porous surfaces:

        https://www.americanchemistry.com/Novel-Coronavirus-Fighting-Products-List.pdf

Linens, Clothing, and Other Laundry Items

- Do not shake dirty laundry; this minimize the possibility of dispersing virus through the air.
- Wash items as appropriate in accordance with the manufacturer's instructions. If possible, launder items using the warmest appropriate water setting for the items and dry items

completely. Dirty laundry that has been in contact with a potentially ill person(s) can be washed with other people's items.

- Clean and disinfect hampers or other carts for transporting laundry according to guidance above for hard or soft surfaces.

Personal Protective Equipment (PPE) and Hand Hygiene

- Cleaning staff should wear disposable gloves and gowns for all tasks in the cleaning process, including handling trash.
  - — Gloves and gowns should be compatible with the disinfectant products being used.
  - — Additional PPE might be required based on the cleaning/disinfectant products being used and whether there is a risk of splash.
  - — Gloves and gowns should be removed carefully to avoid contamination of the wearer and the surrounding area. Be sure to clean hands after removing gloves.
- Gloves should be removed after cleaning a room or area occupied by potentially ill persons. Clean hands immediately after gloves are removed.
- Cleaning staff should report breaches in PPE (e.g., tear in gloves) or any potential exposures to their supervisor immediately.
- Cleaning staff and others should clean hands often, including immediately after removing gloves and after contact with a potentially ill person, by washing hands with soap and water for 20 seconds. If soap and water are not available and hands are not visibly dirty, an alcohol-based hand sanitizer that contains 60-95 percent alcohol may be used. However, if hands are visibly dirty, always wash hands with soap and water.
- Follow normal preventive actions while at work and home, including cleaning hands and avoiding touching eyes, nose, or mouth with unwashed hands. Additional key times to clean hands include:
  - — After blowing one's nose, coughing, or sneezing.
  - — After using the restroom.
  - — Before eating or preparing food.
  - — After contact with animals or pets.
  - — Before and after providing routine care for another person who needs assistance (e.g., a child).

Additional Resources

Nuclear Generation: NRC Issues Instructions for Obtaining Relief from Work Hours Rules

On March 28, 2020, Ho Nieh (Director, Office of Nuclear Reactor Regulation) sent a letter to the Nuclear Energy Institute outlining a streamlined process for operating nuclear power reactors to obtain exemptions from the requirements of 10 C.F.R. 26.205(d)(1)-(7). The purpose of the exemptions "is to ensure that the control of work hours and management of worker fatigue do not unduly limit licensee flexibility in using personnel resources to most effectively manage the impacts of the COVID-19 [Public Health Emergency]. . . ." The letter provides that if a licensee determines that its staffing levels will be affected by the COVID-19 emergency and no longer can meet the requirements of 10 CFR 26.205(d)(1)- (7), then the licensee should submit an email requesting an exemption to the facility's NRC project manager (with a copy to the NRC Document Control Desk). The request should be submitted "as soon as practicable and no less than 24 hours before [the licensee] would be out of compliance with the regulations." All such requests should include the following information:

- a statement that the licensee no longer can meet the work-hour controls of 10 CFR 26.205(d) for certain positions;
- a list of positions for which the licensee will maintain current work-hour controls under 10 CFR 26.205(d)(1)-(d)(7);
- the date and time when the licensee will begin implementing its site-specific COVID-19 Public Health Emergency fatigue-management controls for personnel specified in 10 CFR 26.4(a);
- a statement that the licensee's site-specific COVID-19 Public Health Emergency fatigue-management controls are consistent with the constraints outlined in this letter and its attachment; and
- a statement that the licensee has established alternative controls for the management of fatigue during the period of the exemption and that, at a minimum, the controls ensure that for individuals subject to these alternative controls:
    - — not more than 16 workhours in any 24-hour period and not more than 86 workhours in any 7-day period, excluding shift turnover;
    - — a minimum 10-hour break is provided between successive work periods; 12-hour shifts are limited to not more than 14 consecutive days;
    - — a minimum of 6-days off are provided in any 30-day period; and
    - — requirements are established for behavioral observation and self-declaration during the period of the exemption.

Supply Chain Considerations

Updated: April 16, 2020
Changes since the last version are highlighted in red

This document provides guidance that investor-owned electric and/or natural gas companies, public power utilities, and electric cooperatives can consider for maintaining adequate supply of inputs and physical equipment during this health emergency. Lists were developed for consideration so that both the volumes of the supply chain need, and the geographic location of suppliers can be determined. Clearly, the extent and duration of this emergency will influence the importance of one supply chain component compared to another.

The guidance in this document was collected from organizations across the industry. The intent is to serve as a general information resource and not to set any industry standards. This document is evergreen and will be updated regularly to reflect additional or revised guidance as it is received.

The three sections provided are:

- Supply Chain Considerations for Industry Critical PPE
- Power Delivery Materials
- Bulk Chemicals Needed for Power Generation and Delivery

It is acknowledged that access plays a key role both for organizations and their suppliers in a pandemic. The access issue is covered more fully in the "Access Considerations" section of this Resource Guide.

Supply Chain Considerations for Industry-Critical PPE (UPDATED)

As the novel coronavirus (or COVID-19) pandemic spreads, the electric power industry recognizes that Personal Protective Equipment (PPE) is in short supply even for first responders and the healthcare sector. Energy and other critical sectors now are considering alternatives to keep workers safe while maintaining reliable service. To assist with these efforts, this section of the Resource Guide provides planning considerations and resources to help investor-owned electric and/or natural gas companies, public power utilities, and electric cooperatives meet their PPE needs by identifying:

- Mission critical PPE, cleaning products, and related supplies for the electric power and natural gas industry;

- Non-government vendors/suppliers for PPE;
- Guidance for engaging those suppliers;
- Creative practices for creating alternative PPE and other protective equipment.

While our sector recognizes that the priority is to ensure that PPE is available for workers in the healthcare sector and first responders, a reliable energy supply is required for healthcare and other sectors to deliver their critical services. The Department of Homeland Security (DHS) emphasized the importance of the energy sector, recently releasing an advisory guidance on Essential Critical Infrastructure Workers (ECIW), that includes energy company and utility workers.

In addition, the Electricity Subsector Coordinating Council (ESCC) has identified a subset of highly skilled energy workers who are unable to work remotely and who are mission-essential during this extraordinary time. Consequently, there is a need to elevate the availability of PPE for workers in the energy sector at the federal, state, and local levels.

Personal Protective Equipment Needs

The supply chain tiger team developed the following material list, which summarizes the critical PPE needs for the electric power and natural gas industries. Tier I items are those items that serve an immediate need where critical infrastructure workers are subject to contact. Tier II are items that are not needed at the time of contact but are in the horizon of the planning scenario of nine months and a 40 percent reduction in workforce.

- Tier I:
  - Nitrile gloves
  - Shoe covers
  - Tyvek suits
  - Goggles / glasses
  - Hand sanitizer
  - Dust masks
  - N95 respirators
  - Anti-bacterial soap
  - Trash bags
- Tier II:
  - Anti-bacterial wipes
  - Disposable thermometers
  - Batteries
  - Alcohol wipes
  - Antiseptic wipes

Non-Government PPE Vendors/Suppliers

The key suppliers of PPE include[3]:

- 3M
- McKesson
- Walmart
- Amazon
- Costco
- Ecolab
- Johnson & Johnson
- Procter and Gamble

Due to regional variations in the availability of PPE, organizations also are encouraged to look to local sources and partners for obtaining PPE. These localized sources may include hospitality wholesalers (Sysco, US Foods) restaurants, malls, and hotels that may have supplies that are not being used. Some organizations also are working with local distilleries to produce disinfectant products.

Energy sector companies and utilities also are encouraged to connect with their local or state energy officials or emergency operations centers to engage in a discussion about the prioritization of PPE needs, access to restricted areas, and testing.

Guidance for Engaging Suppliers and Local Authorities

When contacting vendors and suppliers, organizations should consider the following key points.

- Our sector recognizes that workers in the healthcare and first responders have first priority when it comes to receiving PPE.
- However, the energy industry is a lifeline sector that generates, transmits, and delivers electricity and natural gas to critical services and end-use customers, such as hospitals, clinics and other first responders.
- The Department of Homeland Security emphasized the importance of these workers, and recently released an advisory guidance on Essential Critical Infrastructure Workers (ECIW), that includes energy company and utility workers. That guidance document can be found online at:

  https://www.cisa.gov/publication/guidance-essential-critical-infrastructure-workforce

- The sector is not looking for PPE for the entire workforce. Rather, we are working to prioritize supplies for mission-essential workers – a subset of highly skilled energy workers who are unable to work remotely and who are mission-essential during this extraordinary time. More information on these mission-essential workers on-line at:

[3] Please note that many retailers and suppliers of PPE now only are selling N95 masks to the healthcare sector and government.

https://www.electricitysubsector.org/-/media/Files/ESCC/Documents/ESCC_Mission_Essential_Workforce_2020.ashx

Creative Solutions

With PPE being in short supply and priority being given to health care workers, the energy sector has sought alternative solutions to adequately supply mission essential workers.

- Hand sanitizer formulation:
  - WHO Guidance:

    https://www.who.int/gpsc/5may/Guide_to_Local_Production.pdf

    https://www.ncbi.nlm.nih.gov/books/NBK144054/
  - Bleach-based sanitizing solution:

    https://www.dhhs.nh.gov/dphs/holu/documents/hom-sani.pdf

    https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cleaning-disinfection.html
  - Industrial products can be used as alternatives to medical supplies, such as face shields and masks:
    - Face shields:

      https://www.grainger.com/category/safety/face-protection
    - Respirator masks with HEPA filters:

      https://www.buyinsulationproductstore.com/respirators/
  - Guidance for safely reusing N95 masks with proper decontamination.
    - Decontamination Methods for Filtering Facepiece Respirators:

      https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2781738/
    - Ultraviolet germicidal irradiation (UVGI):

      https://www.nebraskamed.com/sites/default/files/documents/covid-19/n-95-decon-process.pdf
    - Ethylene oxide (EtO):

      https://www.cdc.gov/infectioncontrol/guidelines/disinfection/sterilization/ethylene-oxide.html
    - Vaporized hydrogen peroxide (VHP):

      https://www.draeger.com/Library/Content/article-vhp-pr-9103500-en-us-1702-1-V7-2.pdf

      https://www.battelle.org/newsroom/news-details/battelle-deploys-decontamination-system-for-reusing-n95-masks

- Maximize use of existing stocks:

  https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/face-masks.html

  https://kingcounty.gov/depts/health/communicable-diseases/disease-control/novel-coronavirus/PPE-shortage.aspx

- Homemade masks with pockets for HEPA filter inserts:

  https://www.gfclinic.com/approved-pattern-info-for-homemade-masks/

- CDC recommendations on using cloth face coverings, including ways to make cloth masks. (Note, these may not be appropriate for situations where Fire Retardant face coverings are required.)

  https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cloth-face-cover.html

Organizations also should be aware that the Occupational Safety and Health Administration (OSHA) has relaxed some regulatory requirements to permit the extended use and reuse of respirators, as well as the use of respirators that are beyond their manufacturer's recommended shelf life. This guidance can be found online at:

https://www.osha.gov/memos/2020-04-03/enforcement-guidance-respiratory-protection-and-n95-shortage-due-coronavirus

Power Delivery Materials List

The purpose of this section is to list frequently used critical electric power transmission and distribution materials needed for continued safe and reliable operations. It is not intended to include critical spares for major pieces of equipment such as large power transformers. While investor-owned electric companies, public power utilities, and electric cooperatives maintain a certain stock level of the materials that they frequently use, normal consumption rates, potential spikes in regional demand driven by storms or hurricane landfalls, or a disruption to transportation networks rapidly could deplete these stocks over a broad area. Maintaining a functional manufacturing and delivery supply chain for these materials will support safe and reliable operations over the planning scenario of nine months and a 40 percent reduction in workforce.

Broad categories

- Cable (bulk) and accessories
- Common supplies
- Conductor (bulk) and accessories
- Gases and chemicals
- Insulators
- Metering items
- Poles, structures, and accessories

- Sectionalizing and protection items
- Specialized hardware
- Street lighting items
- Transformers and accessories
- Substation control room and communication equipment

Cable (bulk) and accessories

- Cable connector block, lv insulated - various types
- Cable outdoor termination kit - various voltages and types
- Cable, fiber optic - various types
- Cable, lv control -various types
- Cable, primary ug - various sizes and voltages
- Cable, quadruplex urd - various sizes
- Cable, triplex urd - various sizes
- Conduit and fittings - various sizes
- Termination, fiber optic - various types
- Ug cable arrester elbow - various voltages and types
- Ug cable elbow - various voltages and types
- Ug cable splice kit - various voltages and types
- Wire, optical ground (opgw) - various sizes

Common supplies

- Batteries, common - various types
- Batteries, power tool - various types
- Indicator bulbs -various types
- Spill absorbent and containment - various types
- Tape, electrical

Conductor (bulk) and accessories

- Conductor, aac - various sizes
- Conductor, acsr - various sizes

- Conductor, insulated aac - various sizes
- Conductor, insulated copper - various sizes
- Conductor, quadruplex - various sizes
- Conductor, triplex - various sizes
- Connecter, auto sleeve for aac, acsr, copper - various sizes
- Connector, compression service - various sizes
- Connector, neutral sleeve for cu, acsr - various sizes
- Connector, sleeve for copper - various sizes

Gases and chemicals

- Corrosion inhibitor - various types
- Distilled water
- Gasoline fuel
- Diesel fuel
- Lubricant, dielectric - various types
- Nitrogen gas, bottled
- Sulfur hexafluoride gas, bottled

Insulators

- Insulator, distribution pin - various voltages and types
- Insulator, distribution post - various voltages and types
- Insulator, distribution strain - various voltages and types
- Insulator, distribution suspension - various voltages and types
- Insulator, house knob - various sizes
- Insulator, strain guy - various sizes and ratings
- Insulator, substation post - various types
- Insulator, transmission bell - various types
- Insulator, transmission non-ceramic - various voltages and types and associated hardware
- Insulator attachment/line construction hardware
- Pin, crossarm for insulator

Metering items

- Meter socket and hub - various types
- Meter, watthour - various types

Poles, structures, and accessories

- Crossarm, wood - various sizes
- Ground rod
- Ground strap, copper braided - various sizes
- Guy anchor shaft
- Guy anchor, helix - various types
- Hardware, guying - various types
- Lattice tower member, steel - various types
- Pole, steel - various sizes
- Pole, streetlight - various sizes
- Pole, wood - various sizes
- Wire, guy - various sizes

Sectionalizing and protection items

- Arrester, lightning distribution line - various voltages
- Capacitor, high voltage - various voltages and kvar
- Fuse cutout - various voltages
- Fuse holder, cutout - various sizes
- Fuse link, cutout - various ratings
- Fuse, low voltage control - various ratings and types
- Fuse, substation high voltage - various ratings and types
- Switch, overhead gang operated - various voltages and types
- Switch, overhead single phase - various voltages and types

Specialized hardware

- Armor rod line guard - various sizes

- Brackets, overhead equipment - various types
- Clamp, parallel groove - various sizes
- Clevis assembly, various types
- Deadend clamp - various sizes
- Deadend grip, preformed - various sizes
- Fasteners, distribution line - various types
- Fasteners, transmission line - various types
- Tie wire, aac - various sizes
- Tie wire, bare copper - various sizes
- Tie wire, preformed - various sizes
- Conductor splicing hardware – various sizes

Street lighting items

- Streetlight lamp
- Streetlight luminaire
- Streetlight photocell

Transformers and accessories

- Boxpad, fiberglass padmount transformer - various sizes
- Bushing, padmount transformer - various voltages and types
- Transformer and circuit breaker insulating mineral oil
- Transformer, overhead 1ph - various voltages and kva
- Transformer, padmount 1ph - various voltages and kva
- Transformer, padmount 3ph - various voltages and kva

Substation control room and communication equipment

- Storage battery cells

Bulk Chemicals Needed for Power Generation and Delivery List

The purpose of this section is to list bulk chemicals critical to power generation and delivery. These chemicals are consumed at various rates by power production processes, so maintaining continued reliable access is critical to generate electricity. The manufacturing and delivery supply chain of these chemicals must remain functional for continued reliable power generation.

- Additives
  - Coal
  - Coal Additives
  - Fuel Oil Additives
- Bulk Chemicals
  - Activated Carbon
  - Ammonia
  - Boric Acid
  - Glycol
  - Hydrazine
  - Hydrochloric Acid (HCl)
  - Lignosulfonate
  - Lithium Hydroxide
  - Sodium Bisulfate
  - Sodium Carbonate (Soda Ash)
  - Sodium Hydroxide (Caustic Soda)
  - Sodium Hypochlorite (Bleach)
  - Sulfur and Molten Sulfur
  - Sulfuric Acid
  - Urea
- Bulk Gases
  - Argon (AR)
  - Carbon Dioxide

- Hydrogen (H2)
- Nitrogen (N2)
- Oxygen (O2)
- Trailer or Tank Rentals

- Bulk Powders
- CEMS (Protocol) Gases
- Cylinder (Bottled) Gases
  - Argon (AR) Cylinder
  - Carbon Dioxide (CO2) Cylinder
  - Cylinder Rentals
  - Hydrogen (H2) Cylinder
  - Nitrogen (N2) Cylinder
  - Oxygen (O2) Cylinder
  - Propane
  - Sulfur Hexafluoride (SF6)
- Lime (Hydrated Lime)
- Wastewater Treatment
  - Flocculent
- Water Treatment
  - Demineralizers
  - Mobile Demineralizers Trucks
  - Water Filtration Equipment
  - Water Treatment Systems
- Water Treatment Chemicals
  - Resins
- Water Treatment Services

Natural Gas Delivery Materials List

Reliable natural gas delivery depends, in part, on the availability of several components and parts. The availability of these components depends on two key factors: lead times and chokepoints. Natural gas companies typically do not overstock certain components and parts because they tend to be widely available in the market under normal conditions. If these components and parts become in short supply and there are longer lead times for production, the natural gas delivery system could be challenged. In general, the availability of these components and parts also is subject to transportation constraints that can delay delivery. Therefore, both rail and fleet availability can create chokepoints, which, in turn, can create supply chain difficulties.

Long lead time items

- Large diameter valves and accessories
- Electro-fused fittings
- Prefabricated risers
- Prescriptive-based rebuild or maintenance kits for metering and/or regulating stations

Chokepoint items

- Nitrogen – for purging pipes and pressure testing
- Odorant (Mercaptan) – for odorizing natural gas

ESCC

Electricity Subsector Coordinating Council

ESCC COVID-19 Six-Month Review

AN INTERIM REVIEW OF THE ESCC'S RESPONSE TO THE COVID-19 GLOBAL PANDEMIC, MARCH-AUGUST 2020

SEPTEMBER 2020

Contents

I. EXECUTIVE SUMMARY

When coronavirus (or COVID-19) cases began to emerge in the United States earlier this year, the Electricity Subsector Coordinating Council (ESCC) immediately began to engage with its federal government partners to align the industry and government pandemic response efforts and to ensure the resilience of critical electric infrastructure across North America.

Following a series of staff-level engagements between the ESCC Secretariat and the Department of Energy (DOE), the ESCC held its first executive-level coordination call with senior federal government officials in early March. At this point, there were fewer than 200 reported cases of COVID-19 within the United States. These coordination calls bring together executives and government leaders from across the subsector and, when needed, subject matter experts from DOE, the Departments of Homeland Security (DHS) and Health and Human Services (HHS), and the Centers for Disease Control and Prevention (CDC).

Early in the COVID-19 response, the ESCC directed the Secretariat to establish a "Tiger Team" of industry professionals to identify and to help address major potential barriers and challenges during the pandemic. The ESCC Tiger Team, which is led by Southern Company Services Executive Vice President for Operations Stan Connally, includes staff-level representatives from all segments of the industry (investor-owned electric companies, public power utilities, electric cooperatives, federally owned utilities, independent power producers); the Electricity Information Sharing and Analysis Center (E-ISAC); the natural gas and nuclear energy industries; Canadian electric companies; and the federal government.

The Tiger Team has produced a comprehensive Resource Guide that includes tools, resources, and planning considerations for making localized decisions in response to the pandemic. The Resource Guide is updated regularly and is publicly available on the ESCC website, http://electricitysubsector.org.

In June, the ESCC began a review process to identify opportunities for enhancing and strengthening the electric power industry's continued response to this pandemic and to any future incidents that impact the energy grid. Several key themes have emerged from that review process, including:

- **Partnership/Engagement:** While the nature of the COVID-19 pandemic is unlike any recent disasters in North America, ESCC and federal government leaders are using the principles of executive-level engagement from previous incidents to respond to this health emergency. Additional engagement with federal subject matter experts further enhances the industry-government partnership during this pandemic.

- **ESCC COVID-19 Resource Guide:** The ESCC COVID-19 Resource Guide continues to be a central component of the ESCC's response to COVID-19, and it has been praised by industry, government, and cross-sector partners all over the world as a valuable resource during the pandemic. The Resource Guide should remain central to the ESCC's pandemic response moving forward, allowing for updates as needed.

- **State and Local Government Outreach:** During the early stages of the pandemic response, the federal government played a critical role in interfacing with state governments on the importance of allocating personal protective equipment (PPE) and testing capabilities to utility

personnel. Additional industry outreach to state and local officials still is needed to enhance their understanding of the critical work performed by mission-essential workers in the electric power industry.

- **Supply Chain and Testing Challenges:** During the early stages of the pandemic, many organizations within the subsector had challenges with obtaining PPE and accessing adequate testing capabilities. To address these issues going forward, the ESCC should consider establishing a standing supply chain team of industry and government experts to build "blue sky" relationships with key suppliers and vendors that would benefit the entire subsector during a major incident.

The ESCC response to the COVID-19 pandemic is ongoing, as the virus continues to spread around the world and across the United States. As the industry sustains a coordinated response alongside partner organizations and the U.S. government, the ESCC will continue to organize collective efforts, to solicit feedback on ongoing initiatives, and to provide tools and resources through the Resource Guide and other materials. This report serves as an interim review of the current state of the ESCC response to COVID-19 and will help inform ongoing efforts during this pandemic or during a resurgence of the virus or a similar health emergency in the future.

II. ESCC PANDEMIC RESPONSE OVERVIEW

The ESCC Secretariat began tracking the coronavirus in late January 2020 in coordination with DOE and participated in several stakeholder calls hosted by DHS and HHS. On February 5, the Secretariat forwarded an E-ISAC bulletin on potential supply chain impacts related to COVID-19 to ESCC stakeholder lists. On March 5, the ESCC co-chairs and members held their first industry-government coordination call. This call included senior leadership from DOE, the Cybersecurity and Infrastructure Security Agency (CISA), and HHS. At this point, there were 164 reported COVID-19 cases in the United States.[1]

Over the course of the next several months, subject matter experts from HHS and the CDC joined the industry-government leadership calls to brief on pandemic-related issues, such as testing and contact tracing. The calls also included regular updates from Federal Energy Regulatory Commission (FERC) commissioners and staff, as well as the CEO and staff of the North American Electric Reliability Corporation (NERC), concerning regulatory relief and pandemic response actions taken by FERC and NERC. The calls continued twice a week through May, before transitioning to a once per week cadence in June. By July, the calls were taking place once a month, and they continued into August.

Each ESCC call provides an opportunity for industry and government leaders to address how organizations are responding to the pandemic and to raise any issues or challenges to the group. For example, the calls have covered the need for additional PPE and testing capabilities, as well as workforce sequestration strategies and challenges. The calls also provide a forum for sharing real-time situational awareness, identifying barriers for implementing response plans, and discussing how industry and government can work together to eliminate those barriers.

In early March, the ESCC co-chairs directed the Secretariat to establish a "Tiger Team" of industry professionals to identify and to help address major barriers and challenges. The team is led by Stan Connally, Executive Vice President for Operations at Southern Company Services, and he is supported by the ESCC Secretariat. The Tiger Team includes staff-level representatives from all segments of the industry (investor-owned electric companies, public power utilities, electric cooperatives, federally owned utilities, independent power producers); the E-ISAC; the natural gas and nuclear energy industries; Canadian electric companies; and the federal government. By June, the calls transitioned to once a week, and are now taking place monthly.

The Tiger Team created eight subgroups to focus on specific aspects of the pandemic response. The subgroups are focused on the following topics:

- Control Center Continuity
- Accessing Quarantined and Restricted Environments
- Supply Chain Challenges
- Mutual Assistance Preparation
- Generation Operational Continuity
- IT and Telecommunications Issues
- Responsible Reentry and Return to the Workplace

[1] "Total Number of COVID-19 Cases, by Date Reported," Centers for Disease Control and Prevention website; https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/previouscases.html; Accessed July 9, 2020.

- Internal and External Communications

The subgroups work across the industry to develop and to compile tools, resources, and planning considerations that organizations can use to make localized decisions in response to the pandemic. The groups' work product is funneled into a comprehensive document that is updated regularly. The ESCC Resource Guide, which is publicly available at http://electricitysubsector.org, has been praised by electric power industry, government, and cross-sector partners all over the world as a valuable resource during the pandemic.

In late June, the Tiger Team held a series of "hot wash" calls to discuss the ESCC's response, to date, to the pandemic, focusing on three issue areas: 1) engagement and coordination with the federal government; 2) the operation of the Tiger Team and various subgroups; and 3) the development and use of the Resource Guide. Based on the feedback from those calls, the remainder of this report summarizes the ESCC's pandemic response to date and identifies opportunities for improvement.

III. ENGAGEMENT AND COORDINATION WITH THE FEDERAL GOVERNMENT

During a major incident that threatens or impacts the electricity subsector, the ESCC serves as the principal liaison between the federal government and the electric power industry. The ESCC provides high-level situational awareness on response operations and identifies or anticipates industry-wide challenges that could limit the effectiveness of those operations. In turn, the ESCC and government leaders from DOE, DHS, and other federal agencies work together to resolve those challenges quickly. While the nature of the COVID-19 pandemic is unlike any recent disasters in North America, ESCC and federal government leaders are using the principles of executive-level engagement from previous incidents to respond to this health emergency.

Federal Government Engagement – Accomplishments and Strengths

Proactive Outreach from DOE Set the Stage for Productive Industry-Government Coordination

Representatives from across the electric power industry repeatedly have praised DOE leadership and staff for their proactive outreach during the initial response to the COVID-19 pandemic. At the staff level, DOE began engaging with the ESCC Secretariat in late January before COVID-19 cases within the United States started to increase dramatically. DOE has continued that engagement throughout the pandemic response, and, as the Sector Specific Agency (SSA) for the industry, it effectively has represented the subsector's interests within the federal government.

For example, DOE was instrumental in securing and distributing cloth masks and a limited number of test kits from federal government stockpiles. At times, the federal government did not have the resources to meet specific industry needs. In those instances, DOE's leadership and staff provided direct and frank feedback and worked to find alternative sources/methods for industry requests.

Senior-Level Engagement with Government Leaders and Subject Matter Experts Facilitates Effective Coordination with Industry

The COVID-19 pandemic continues to be an unprecedented global health emergency. The response requires coordination and engagement with a wider range of U.S. government agencies and additional expertise beyond the electric power industry's historical interactions with federal partners. To address those needs, the ESCC has engaged proactively with DOE and representatives from HHS and CDC on regular coordination calls with industry leaders.

Early on, federal government representatives provided key subject matter expertise and context on the ongoing pandemic and how the U.S. government's actions would impact the subsector and the economy. For example, during an April 9 ESCC briefing, Admiral Brett P. Giroir, the HHS Assistant Secretary for Health, provided an update to the group on COVID-19 testing. Another ESCC-organized call included CDC representatives who discussed contact tracing. The rapidly evolving nature of the COVID-19 pandemic and the need to adapt quickly, while maintaining operations, makes this type of timely information extremely useful to industry leaders.

DHS/FEMA Coordination Calls Provide a Helpful Cross-Sector Perspective on the Pandemic Response

In 2019, DHS and the Federal Emergency Management Agency (FEMA) created a new Emergency Support Function (ESF) under the National Response Framework focused on cross-sector coordination. As part of the new ESF-14, FEMA and CISA hosted regular coordination calls with all 16 critical infrastructure sectors to discuss the pandemic. The ESCC Secretariat participated in these calls to provide updates on the subsector's response. Representatives from the electric power industry noted that these calls provided a helpful perspective on other sectors' response to this health emergency.

Regulatory Relief Has Provided Needed Flexibility for the Electric Power Industry During the Pandemic

FERC and NERC have played key roles in aiding the electric power industry during the pandemic with discretionary enforcement of some federal regulations. For instance, in April, FERC commissioners approved a request submitted by NERC to defer implementation of seven reliability standards. This, and other efforts, gave the industry additional flexibility to respond to COVID-19, reallocate resources, and maintain a focus on critical operations, while not undermining the safety of workers and the reliability of the energy grid.

Federal Government Engagement – Opportunities for Improvement

Access and Distribution of PPE Could Be Improved

Access to, and distribution of, PPE challenged many organizations early on during the COVID-19 pandemic, creating widespread frustration. Many organizations turned to lower-quality suppliers out of desperation. Going forward, the electricity subsector would benefit from a clearly defined process and timeline for securing and distributing additional quantities of PPE, including from federal, state, and local stockpiles.

Organizations widely have acknowledged that the issues experienced with PPE were largely due to the surging global demand for these resources and the strain placed on global supply chains. Public- and

private-sector efforts to secure this equipment were hampered by the backlog in orders and a limited supply of these resources at the beginning of the pandemic when available stocks already were dedicated to medical personnel.

The ESCC has experienced varying levels of success working with U.S. government agencies and state governments on the PPE issue. While DOE and CISA have tried to help the electricity subsector and have succeeded in securing and shipping some quantities of PPE, challenges have arisen due to competition with other critical infrastructure sectors. At the state level, access to PPE has varied widely from state to state, as some state governments cooperated extensively with utilities to secure PPE, while other state governments took limited or no action on the issue.

To address these issues, the ESCC should consider establishing a standing supply chain team of industry and government experts to build "blue sky" relationships with key suppliers and vendors that would benefit the entire subsector during a major incident. This team could explore the option of stockpiling PPE, including fire-retardant masks, that could be used during a major industry response to wildfires, hurricanes, earthquakes, or other incidents with catastrophic impacts.

"Blue Sky" Outreach to State and Local Leaders Can Help Improve the Understanding of the Electric Power Industry's Critical Role in the Economy

During the pandemic response, DOE and DHS have played a crucial role in interfacing with state governments on the importance of allocating PPE and testing capabilities to utility personnel. The ESCC has worked closely with DOE and DHS to ensure that industry workers were represented appropriately in CISA's *Guidance on Essential Critical Infrastructure Workers*. This guidance, while not a federal standard or directive to states, helps state governments decide which workers should be considered for prioritized PPE and/or provided with unrestricted movement and access to restricted areas.

This guidance also underscores why expediting PPE to critical utility workers is essential. One entity reported that it used the CISA guidance when pitching the need for prioritized testing for utility employees to local government officials. In addition, the Secretary of Energy sent two letters to governors of each state/territory underscoring the important role the electric power industry plays in the economy and disaster recovery.

Despite these helpful efforts, some industry representatives indicated that state and local governments still do not understand fully the critical importance of prioritizing PPE and testing for electric industry workers. In addition, it was reported that some states needed background information on how the sequestration of control center staff would help secure grid operations during the pandemic. Entities that began their outreach early in the pandemic response and focused on local officials had the most success. Based on this, the ESCC should consider developing materials for the subsector to use during "blue sky" days to engage with state and local officials and discuss how the work performed by mission-essential workers in the electric power industry is critical.

Initial Availability of Testing Equipment and Sites Was Limited

Many issues have contributed to the extreme difficulties electric power industry organizations encountered when trying to access adequate testing. One big challenge was state and local governments' strict interpretation of the now-outdated CDC Priority Testing Guidance established in

March, which did not include prioritization of asymptomatic critical infrastructure workers. As a result, some state governments did not prioritize mission-essential workers for testing.

After outreach by DOE to HHS, a limited number of test kits was provided to some electric utilities. Even when test kits were secured, organizations reported issues finding local laboratories that could process test results easily and efficiently. Many of these organizations reported that they could not find a lab within 150 miles that could process the Abbott Rapid ID NOW Test Kits that were provided by HHS. This left some companies unable to conduct tests.

Going forward, utilities recommend better preparation across the ESCC, U.S. government, and state government partners to address the anticipated demand for testing before there is a backlog. Additionally, the ESCC recommends that the federal government focus on prioritizing testing for community lifeline sectors, such as energy, as established by DHS and FEMA.

The Structure of Initial ESCC Calls with Government Leadership Could Have Been Improved

Some industry leaders have noted that the structure of the early ESCC calls with government leadership could have been improved. Instead of focusing on the pandemic response in some of the hardest-hit areas, such as New York and Washington State, the initial calls included reports from other regions of the country. While those reports were informative, more detailed presentations from the early hotspots in the pandemic would have been more helpful to organizations in other regions preparing for an increase in COVID-19 cases. This observation was noted and addressed by the ESCC co-chairs, and the structure of coordination calls was adjusted.

A Streamlined Federal Government RFI Process Would Be Welcomed by Industry

The industry has received several "Requests for Information" (RFIs) from DOE and DHS with quick turnaround times. While the industry understands that federal agencies need information for situational awareness and to make informed decisions regarding federal resources, the short timelines put unnecessary burdens on the organizations, especially as they are responding to the pandemic. A streamlined RFI process would be welcomed by industry.

IV. TIGER TEAM OPERATIONS

The ESCC Tiger Team created a forum in which utilities, federal representatives, and partner organizations can share practices and guidance, receive information, and coordinate joint response efforts. The regular cadence of Tiger Team calls and the subgroup structure have helped to organize joint efforts among industry organizations responding to COVID-19. The Tiger Team and subgroups are a core component of the industry response to the pandemic and have helped guide the drafting of the ESCC Resource Guide. Among the issues identified, industry representatives highlighted the importance of the Tiger Team in fostering an industry-wide sense of common purpose. A notable area of improvement includes the need to broaden the ESCC's communication across the electric power industry.

Tiger Team Operations – Accomplishments and Strengths

Diverse Participation from Cross-Sector, Canadian, and Government Partners Strengthens the Work of the Tiger Team

Electric power industry organizations from across the United States, both large and small and of every ownership type, participate in the Tiger Team and subgroups and have shared relevant and critical information on their operations and response to COVID-19. Participation by Canadian partners has been well-received, with Canadian representatives noting that they appreciate the inclusion given that the energy grid inherently is a shared asset between the United States and Canada. Additionally, the American Gas Association (AGA) and American Public Gas Association (APGA) have expressed appreciation for participating in the Tiger Team and subgroups, as natural gas distribution utilities face many of the same issues as electric utilities. Staff from the E-ISAC also play an important role on the Tiger Team and have offered valuable contributions to team documents and materials.

The widespread inclusion of various industries and international partners has enhanced the "unity of effort" and the sense of a shared mission among organizations, helping to underscore that the fight against COVID-19 is a collective effort and that all utilities gain from sharing practices and resources through the collaborative efforts organized by the ESCC.

One utility representative noted that ESCC initiatives are seeing a significant boost in participation from across the industry and from partner industries/trade associations, which is a win for the electric power industry overall. Other representatives have suggested that future participation from additional trade organizations in similar industries would be helpful. In addition, expanding outreach to other sector coordinating councils would be beneficial. For instance, the supply chain subgroup has partnered with the Chemical Sector Coordinating Council on some of its work during the pandemic. Accessing the expertise in those councils could help facilitate the efforts of other subgroups and expand the ESCC outreach to other sectors.

The Use of SharePoint Has Improved Tiger Team and Subgroup Coordination

Several Tiger Team participants noted that the SharePoint file sharing and collaboration tool has improved coordination among team members, and they thanked DOE, the National Energy Technology Laboratory (NETL), and Southern Company for their efforts to establish the platform early in the pandemic response. Throughout the pandemic, utilities have been inundated with information and guidance from a range of U.S. government, ESCC, and related authoritative sources. Industry representatives highlighted the importance of SharePoint as a collaborative tool for information sharing, joint drafting, and consensus building.

Tiger Team Operations – Opportunities for Improvement

Communications Gaps Have Limited Some Information Sharing with External Partners

By and large, the ESCC has been lauded for its information sharing efforts during the COVID-19 pandemic. Information developed by the Tiger Team and subgroups is distributed by multiple organizations, including the various trade associations, the E-ISAC, and DOE. Industry representatives

report receiving an extensive flow of information, which has helped to ensure a common understanding of the operating environment in response to COVID-19.

Some gaps in the ESCC's communications to industry have been noted. While the ESCC succeeded in providing early and detailed information on the pandemic response to industry executives, this information took time to cascade down from the executives of some large organizations to staff at operational levels. Similarly, information on ESCC efforts took time to reach utilities that aren't members of (or don't regularly communicate with) a national trade association, but still would benefit from ESCC information sharing and participation in the Tiger Team or a subgroup.

While the challenges of information silos within organizations are beyond the purview of the ESCC, the Council nevertheless should consider broadening its outreach to the subsector. Working with additional industry organizations could help expand partnerships with asset owners that do not traditionally work with the ESCC, but that have a critical role to play in energy grid security and reliability. As the diversity of participation on the Tiger Team and subgroups is a key positive attribute identified by several representatives, developing a broad communications strategy to accompany future Tiger Team efforts is recommended.

As part of this strategy, the ESCC also should consider other channels, such as FEMA's National Business Operations Center (NBEOC) online portal and the U.S. Chamber of Commerce and its state affiliates, for disseminating ESCC messaging and material broadly.

Internal Tiger Team Communications Could Be Improved

Early communications challenges created some confusion within the Tiger Team regarding the topics, leadership, makeup, and logistics for each of the various subgroups. This left some unaware of the purpose of the Tiger Team and subgroups and how best to become involved in the effort. Electric power industry representatives recommend creating marketing materials in the future that highlight the relevant logistical information. Some pointed to the need for better coordination and collaboration at the point of establishing subgroups and their leadership structures. It also was noted that additional communications among subgroups, such as sharing meeting minutes across groups, would improve Tiger Team coordination.

In addition, some noted a lack of clarity regarding how certain ESCC information could be shared. Organizations distribute ESCC updates within their organizations and with partner utilities that may not have ready access to these materials. However, there are concerns about sharing information too broadly. Organizations would benefit from enhanced guidance on how to share information when it is received, including whether the information is intended for wide distribution among industry partners or to the public.

The Tiger Team Should Consider Creating a Health-Focused Subgroup

The ESCC Tiger Team has addressed key health issues relevant to the industry's COVID-19 response and has sponsored coordination calls with industry and external medical professionals who provided important information on testing experiences and protocols. While those calls were widely attended and were helpful, some utility representatives have noted that an additional health and safety-focused subgroup could be created to expand those calls with the medical sector. This group would track health

and safety information and health guidance coming from the U.S. government and would work to amplify that guidance across the industry to ensure wide dissemination.

As noted, the COVID-19 pandemic unfolded differently than traditional crises, and the U.S. government response continues to evolve over the course of the response operation. This evolution partly is reflected in the guidance given by CDC, HHS, and other public health authorities during the pandemic, which continues to be updated as experts gain more information on the characteristics and spread of the virus. Tracking these changes and checking compliance with new and evolving guidelines has required a herculean effort from organizations. Dedicating a subgroup to serve as a point of contact for this information would centralize the industry's understanding of guidelines as they evolve and would provide electric power industry organizations a forum to consider and to respond to health and safety guidance from the U.S. government.

Subject Matter Expertise/U.S. Government Participation on the Tiger Team Should Be Expanded

With the understanding that U.S. government personnel resources are strained due to COVID-19, industry representatives recommend additional participation from experts on standing calls. Utilities repeatedly emphasized that hearing from DOE, DHS, CDC, and other U.S. government representatives directly, and more quickly, on testing, PPE, and related issues helps organizations manage their response to the pandemic. The ESCC would need to establish a proper cadence for participation and a clear purpose for federal partner involvement and would need to identify appropriate participants for future Tiger Teams.

The ESCC also should consider establishing standing Tiger Teams focused on different areas of a response operation. For instance, as noted, a standing supply chain team of industry and government experts could build "blue sky" relationships with key suppliers and vendors that would benefit the entire subsector during a major incident.

Additional International Engagement Should Be Considered

In the early stages of the pandemic, the Electric Power Research Institute provided helpful insights on how other countries were approaching this health emergency. Given the global implications of a fast-moving pandemic, the ESCC should consider additional outreach and collaboration with international partners. This engagement will facilitate the sharing of leading practices that could inform and improve how we prepare for and respond to future health emergencies.

V. ESCC COVID-19 RESOURCE GUIDE

The ESCC Resource Guide developed by the Tiger Team and subgroups offered a core set of planning considerations to inform the electric power industry's COVID-19 response. With regular updates and additions, the Resource Guide has become a widely used source of information across industries in the United States and around the world. Industry representatives speak highly of the Resource Guide, noting the document's accessibility, detailed sections, and ease of implementation. These same representatives consider the Resource Guide to be a central component of the ESCC's response to COVID-19, and they recommend that it remain a core component, with some additions and updates, of the pandemic response moving forward.

Resource Guide – Accomplishments and Strengths

The Resource Guide Is Comprehensive and Broadly Applicable to the Electric Power Industry's Pandemic Response

The ESCC Resource Guide has been a well-received and widely used tool across the electric power industry and beyond during the COVID-19 pandemic. Organizations note that the Guide stands out among documents provided by trade associations or sector coordinating councils in other industries. It is used by other critical infrastructure sectors in the United States, as well as internationally, to help organizations guide their COVID-19 responses.

Industry representatives appreciate that updates to the Guide reflect new and expanding guidance from U.S. government and health authorities, and they feel that the updates come in a proper cadence, with appropriate markings to reflect these updates. They also note that template documents included in the Guide are helpful and can be incorporated easily into an organization's internal planning materials. The sections on mutual assistance and control center sequestration, in particular, are helpful.

Overall, the Resource Guide demonstrates true industry leadership in thought, clarity of mission, and actions, and it was produced at a speed that enabled it to be used by organizations while they planned and managed their initial responses to the pandemic.

Resource Guide – Opportunities for Improvement

The Guide Could Benefit from Enhanced Marketing and Distribution

Although the Resource Guide is valued by organizations that have learned of its availability, the ESCC could expand its marketing and distribution of the document beyond traditional recipients. As discussed, some utilities are not members of the ESCC or do not participate routinely in trade associations. Many of these utilities were not on the initial distribution list for the Resource Guide.

ESCC participating organizations report that organizations that received the Resource Guide via formal or informal information-sharing between organizations greatly appreciate the information from the ESCC. The Resource Guide has extensive applicability to critical infrastructure in adjacent industries like natural gas. The ESCC is well-served by helping a broader set of asset owners, not just immediate members, respond to the COVID-19 pandemic, as it reinforces the ESCC's role as a leader within the electric power industry and as a trusted partner for emergency response. Exploring other platforms, such as FEMA's NBEOC online portal, would help distribute the document to a broader audience.

Additional Templates and Checklists Could Help Organizations Operationalize the Resource Guide

The checklists/templates included in the Resource Guide are helpful to utilities in implementing the tools and resources contained in the document. A checklist or tear-sheet for each section of the Resource Guide distilling the main points would be useful to many utilities. Hyperlinks within the document also would make it much easier to navigate. Other industry representatives have suggested the use of an online wiki-tool to ensure consistency throughout the document.

Continued Updates to the Resource Guide Should Reflect the Evolving Pandemic and Response Activities

The ESCC Resource Guide is a living document and should serve as the basis for continued updates as the United States continues to respond to the pandemic. Several industry representatives cited the Resource Guide as a jumping off point for additional materials to guide utilities through a resurgence of the virus across the United States. For example, information on the types of external and internal triggers for reentry planning were cited as a welcome addition to the document. The Resource Guide was helpful to utilities during the first wave of the virus. Additional information would help utilities during the ongoing first wave and during any secondary waves of COVID-19, or any future pandemics.

VI. CONCLUSION

The ESCC response to the COVID-19 pandemic is ongoing, as the virus continues to spread around the world and across the United States. As the industry sustains a coordinated response alongside partner organizations and the U.S. government, the ESCC will continue to organize collective efforts, to solicit feedback on ongoing initiatives, and to provide tools and resources through the Resource Guide and other materials. This report serves as an interim review of the current state of the ESCC response to COVID-19 and will help inform ongoing efforts during this pandemic or during a resurgence of the virus or a similar health emergency in the future. Additionally, the report will aid ESCC efforts to maintain situational awareness and response capabilities for all-hazards, whether natural or man-made, which continue to threaten utilities across the country even amid the pandemic.

APPENDIX A: ACTION ITEMS

Based on the feedback provided in this report, the ESCC should consider the following action items to enhance its response to the current pandemic and to future incidents that impact the energy grid:

1. **Develop a Process for Accessing Government PPE Stockpiles:** Coordinate with federal government partners to develop a clearly defined process and timeline for securing and distributing PPE from federal, state, and local stockpiles.

2. **Anticipate and Prioritize Testing:** Coordinate with federal government partners to anticipate and to prioritize pandemic testing for the energy sector.

3. **Facilitate "Blue Sky" Outreach to State and Local Governments on "Mission-Essential Workers":** Develop materials for the subsector to use during "blue sky" days to engage with state and local officials and discuss how the work performed by mission-essential workers in the electric power industry is critical.

4. **Explore Options for Streamlining Federal RFIs for Industry:** Work with federal government partners to discuss the RFIs submitted to the industry by DOE, DHS, and other federal agencies, and explore ways to combine or streamline those requests.

5. **Expand Cross-Sector and Government Participation in the Tiger Team and Subgroups:** Expand participation of government staff and trade organizations and sector coordinating councils for other partner industries on the Tiger Team and subgroups.

6. **Include Additional Government Experts on Standing ESCC Calls:** Include additional government experts on standing ESCC calls, with the understanding that U.S. government personnel resources are strained during the COVID-19 health emergency.

7. **Expand Communications to Electric Industry and External Stakeholders:** Develop a new procedure for distributing ESCC-branded communication to executives and staff within the electric power industry and to external stakeholders. These communications efforts should include a focus on industry staff who may not be familiar with the ESCC and should provide clear guidance on how to disseminate ESCC-related information within an organization. In addition, the ESCC also should consider other information channels, such as FEMA's National Business Operations Center online portal and the U.S. Chamber of Commerce and its state affiliates, for broadly distributing ESCC messaging and materials.

8. **Encourage Additional Communication Within the Tiger Team:** Encourage additional communications among subgroups, such as the sharing of meeting minutes across groups, to improve Tiger Team coordination.

9. **Develop Procedure to Form Ad Hoc ESCC Groups:** Use the pandemic response as a model for future ESCC initiatives and develop a procedure to form ad hoc groups within the ESCC to focus on specific issues and deliverables.

10. **Establish a Standing Industry Supply Chain Team:** Establish a standing supply chain team of industry and government experts to build "blue sky" relationships with key suppliers and vendors that would benefit the entire subsector during a major incident.

11. **Create a Health- and Safety-Focused Subgroup:** Create an additional subgroup to track and amplify health and safety information and guidance.

12. **Expand International Collaboration with International Partners:** Expand outreach and collaboration with international partners, given the global implications of a fast-moving pandemic.

13. **Include Additional Checklists and Templates in the Resource Guide:** Where appropriate, include a checklist and/or tear-sheet for each section of the Resource Guide that summarizes the main planning considerations.

APPENDIX B: TIGER TEAM SUBGROUP LEADERSHIP

Tiger Team Executive Sponsor

Stan Connally
Executive Vice President for Operations
Southern Company Services, Inc.

Control Center Continuity

- **Leads:** Tom O'Brien (PJM); Kevin Howard (WAPA)
- **Secretariat Leads and Support Staff:** Sam Rozenberg (APPA); Hailey Siple (EEI); Nathan Mitchell (APPA)
- **Federal Government Representatives:** Pat Hoffman (DOE); David Howard (DOE); Mike Wech (SWPA); Danny Johnson (SWPA); Lloyd Linke (WAPA); Jonathan Aust (WAPA)

Accessing Quarantined and Restricted Environments

- **Leads:** Kimberly Denbow (AGA); Adrienne Lotto (NYPA)
- **Secretariat Leads and Support Staff:** Pat Hart (EEI); Nathan Mitchell (APPA)
- **Federal Government Representatives:** Sean Plankey (DOE); Stephen Curren (DHS)

Supply Chain Challenges

- **Leads:** Johnny Howze (Southern Co.); Michele Guido (Southern Co.)
- **Secretariat Leads and Support Staff:** Jack Cashin (APPA); Sam Chanoski (E-ISAC)
- **Federal Government Representatives:** Sean Plankey (DOE); Shana Kuhn (BPA); Virgil Hobbs (SEPA)

Mutual Assistance Preparation

- **Leads:** Louis Dabdoub (Entergy); Michael Willetts (Minnesota Municipal Utilities Association); Kenny Roberts (ElectriCities of North Carolina)
- **Secretariat Leads and Support Staff:** Wally Mealiea (EEI); Chris Eisenbrey (EEI); Sam Rozenberg (APPA); Martha Duggan (NRECA)

- **Federal Government Representatives:** Kate Marks (DOE); Ashton Raffety (DOE); Mike Miller (BPA)

Generation Operational Continuity

- **Lead:** Jim Heilbron (Southern Co.)
- **Secretariat Leads and Support Staff:** Sam Rozenberg (APPA); Matt Duncan (E-ISAC)
- **Federal Government Representative:** Danny Johnson (SWPA)

IT and Telecommunications Issues

- **Lead:** Sharla Artz (UTC)
- **Secretariat Leads and Support Staff:** Laura Schepis (EEI); Corry Marshall (APPA); Sam Rozenberg (APPA)
- **Federal Government Representatives:** Chris Alexander (DHS)

Responsible Reentry and Return to the Workplace

- **Leads:** Adrienne Lotto (NYPA); Dave Megna (WEC Energy Group)
- **Secretariat Leads and Support Staff:** Pat Hart (EEI); Sam Rozenberg (APPA); Martha Duggan (NRECA); Matt Duncan (E-ISAC); Hailey Siple (EEI)
- **Federal Government Representatives:** Pat Hoffman (DOE); Megan Tsuyi (DHS); Emily Burdick (DOE); Charles Rousseaux (DOE)

Internal and External Communications

- **Leads and Secretariat Support Staff:** Stephanie Voyda (EEI); Brian Reil (EEI); Tobias Sellier (APPA); Scott Peterson (NRECA); Stephen Bell (NRECA); Sarah Robinson (CEA); Susan Buehler (PJM); Jon Wentzel (NEI); Kimberly Mielcarek (NERC); Christina Nyquist (EPSA)

Power Line-Caused Wildfire Mitigation Annex

Mitigation

After the devasting fires of 2011 and 2012, Texas A&M Engineering Experiment Station (TEES) developed a powerline-monitoring technologies to detect downed powerlines, failing line apparatus, and arcing equipment that can cause fires. Preliminary work has shown that this technology, in concert with Texas A&M Forest Service fire risk predictive models, can prevent many wildfires and provide more timely awareness of fires as they occur, facilitating rapid response. These two Texas owned and developed technologies have the potential to improve public safety, save lives, and significantly reduce wildfire-related property losses.

The Texas legislature has authorized and funded a two-year TEES project to demonstrate the effectiveness of its technology in selected high-risk fire areas. The success of the project will depend upon cooperation from many stakeholders: utility companies, local fire-response teams, and state agencies, including Emergency Management and the Public Utility Commission.

United was invited to participate in this study along with other cooperatives and investor-owned utilities. United board has given the approval to be active in this project which will include acquiring and installing substation hardware for four substation feeders, act as a participating member of the Wildfire Project Advisory Council and work cooperatively with TEES to respond to failure events and evaluate the performance of the equipment that is being tested.

United will use lessons learned from this project along with the associated power line equipment to mitigate the damaging effects of wildfires going forward.

Wildfire Emergency Response

As with weather related emergencies, United's employees should refer to the Disaster Planning Guide for weather related emergencies. Additionally, the System Operators and other key personnel are expected to follow the ERP Considerations Chart and the Definition of Emergency Levels Chart when handling any outage effecting United's Members. These Charts and Definitions are found in the Weather Emergency Annex.

UNITED COOPERATIVE SERVICES

EMERGENCY RESPONSE PLAN/EMERGENCY OPERATIONS PLAN

Version 1.2022

Pages 331 through 352 redacted due to confidentiality.

Emergency Response Plan
Active Shooter Training

In 2018, United's employee group was provided with Active Shooter Awareness training. As a part of the training, information from the State of Texas and The U.S. Department of Homeland Security was shared with the employees. Information from the training, as well as other pertinent information can be located at:

- https://www.youtube.com/watch?reload=9&v=pY-CSX4NPtg
- https://www.youtube.com/watch?v=j0It68YxLQQ
- https://www.dhs.gov/active-shooter-workshop-participant
    - https://www.dhs.gov/sites/default/files/publications/active-shooter-how-to-respond-2017-508.pdf
    - https://www.dhs.gov/sites/default/files/publications/active-shooter-pamphlet-2017-508.pdf
- https://www.youtube.com/watch?v=tLbhurhAYzs

Emergency response plan considerations

These guidelines have been developed to grade the outage severity level to determine staffing, outage time expectations, internal communications and member communications.

These guidelines do not take into account all variables, circumstances, and emergencies which may dictate other actions.
Note: outages involve many dynamics that must be working in tandem for outages to be handled perfectly including:

(1) SCADA
(2) Telephone Systems
(3) IVR system
(4) Radio System
(5) Inbound Communication Volume
(6) Outage Management System
(7) Crew/Staffing availability
(8) Radio Communication
(9) Member Communication
(10) G&T Communication
(11) Substation status
(12) Equipment availability
(13) AMI system
(14) AVL/Crew Mgmt.

Conditions	Level 1 Outage	Level 2 Outage	Level 3 Outage	Level 4 Outage	Level 5 Outage
Main cause of outage?	Various reasons for outage	Various reasons for outage	Storms	Major Storms / Accidents	Major Storms / Accidents
Expected frequency of occurrence?	Daily possibility	Sporadic	15 times per year	Several years apart	Several years apart
How many crews are out on site calls?	3 crews or less	Enough crews for timely work	More site calls than crews	More site calls than crews	More site calls than crews
How many site calls?	Enough crews for timely work	< 10 outages per office/< 20 for multiple offices	> 10 outages per office/< 20 for multiple offices	> 10 outages per office/ > 20 for multiple offices	> 30 outages per office
Possible outage time with sectionalizing capability?	2 hours	4 hours	> 4 hours	> 12 hours	Multiple days
Actions	**Level 1 Outage**	**Level 2 Outage**	**Level 3 Outage**	**Level 4 Outage**	**Level 5 Outage**
Are additional Sys Operators needed?	No additional Sys Operators	More than 3 crews = additional	Yes	Yes	Yes
Notify Engineering Services for support?	No unless there are software issues	No unless there are software issues	Yes	Yes	Yes
Request MSRs to handle unresolved calls?	No, unless extreme call volume	No, unless extreme call volume	Yes	Yes	Yes
Does the staff need to be notified?	No, unless unusual circumstances	No, unless unusual circumstances	Yes	Yes-Emergency action plan?	Yes-Emergency action plan enacted
Notify Communications Dept. for press release?	Not normally	Possibility, dependent upon # of Priority accts affected	Yes	Yes	Yes
Priority accounts contacted by phone?	Yes	Yes	Yes	Yes	Yes
Priority accounts which cannot be contacted by phone?	Sys Ops first available crew to priority account	Sys Ops first available crew to priority account	Sys Ops first available crew to priority account	Sys Ops first available crew to priority account	Sys Ops first available crew to priority account
Use the High Call or Low Call Volume IVR Script?	Low	Low	High	High	High
ETOR applied?	Yes	Yes	No	No	No
Other	Planned may be postponed	Postpone planned outages	Postpone planned outages	Postpone planned outages	Postpone planned outages
Damage assessment				Yes?	Yes - Damage assessment enacted
Staff and Leadership Team - TEAMS Meeting Initiated?				Yes - Initial Meeting with possible bi-hourly updates	Yes - Initial Meeting with probable bi-hourly updates
Need for Mutual Aid Evaluated?				Yes?	Yes

***Communication - Expectations**

Notification of Engineering Services will be the responsibility of System Operations

Notification of Member Services Department will be the responsibility of Engineering Services

Notification of Staff, Communications and MSRs will be the responsibility of System Operations

Business Continuity

The Business Continuity addendum must address the basics of what shall receive priority attention by the personnel of the cooperative during any emergency situation. The Executive Staff and Leadership team shall review each of these items immediately prior to or immediately following an emergency situation.

Employees

UCS must have employee resources in order to serve the membership during the emergency situation. Without employees, the cooperative will not be able to meet the needs of the membership.

Availability of the employees must be addressed. Executive management, or the Leadership Team in their absence, should perform a thorough availability analysis of all personnel in the first emergency meeting. Any deficiencies should be discussed at that time, and solutions developed during that time where shortfalls exist. Employees within the cooperative may be asked to perform duties outside of their normal job description to fill the most pressing needs of the emergency situation. Further, mutual aid agreements should be acted upon through Texas Electric Cooperatives employee Martin Bevins **(Vice President, Communications and Member Services) (Contact Info - Phone: 512-486-6249 e-mail: mbevins@texas-ec.org).** Contractor use should also be considered as an option for pressing needs.

Accounting shall ensure salaries are continually paid throughout the emergency situation to maintain income stability for employees and their families during the emergency timeframe. In the event that the Daffron iXp and MyAccount servers fail or are destroyed, United will utilize Daffron's Disaster Recovery services as detailed in the IS&T Addendum. This will ensure that Payroll functions will continue with very little interruption.

Human Resources shall work with the Executive Management/Leadership team to ensure the employees are available to serve the membership. HR shall be ready to review housing options for employees and their families that might have been displaced by the situation at hand. If an employee's family's needs are not being met, the employee will most likely not be available to work, therefore this is a key consideration.

Revenue

Membership billing shall continue during the emergency situation where and how reasonably possible. In the case that the meter reading function is not available for some reason, bills shall be estimated at their normal cycle billing dates to ensure continued cash flow. Engineering services will work with IS&T

to upload the list to the Daffron system and move the affected accounts to a special cycle and rate. These accounts will be on "hold" until readings are reported again. The special cycle will be monitored by the billing department to bill any accounts that have readings for more than a 20 day billing. No accounts will be billed a minimum estimated bill during the transition time. As the AMI readings post daily, the program will change any of those accounts that had a reading reported back to the rate and cycle they were in prior to the move.

In the event that the Command Center and Daffron iXp servers at the Burleson office fail or are destroyed, the billing process will be disabled. IS&T personnel will be responsible for loading Command Center on a backup server in Cleburne to allow meter readings to be gathered for billing. United will utilize Daffron's Disaster Recovery services as described within the ERP. With these procedures completed, the billing process would be restored with very little interruption.

Collections can be worked during this time, but the Executive Management/Leadership team shall agree to what level this will occur.

Cash/Credit Availability

UCS shall be prepared to make short term advances from lines-of-credit from financial institutions and be prepared to set up credit accounts with local businesses as necessary to support the emergency restoration effort. Where applicable, company credit cards should be used in lieu of credit accounts with local businesses. In the event that credit card information has been compromised, new credit cards should be ordered and the old ones canceled.

Offices

UCS shall maintain its three key facilities at a minimum (Burleson, Cleburne and Stephenville) in the case of an emergency situation. In the case where smaller offices need to be closed, personnel will be moved to other offices as necessary.

Communications and IS&T

UCS relies heavily on communications and IS&T functions. A backup and security plan must be in place to account for different types of failures with solutions already detailed. This plan along with several guidelines for backup purposes are listed within the ERP.

Transportation and Fuel

The Executive Management/Leadership team shall review the availability from the various departments prior to and immediately following the emergency situation. Mutual aid agreements/contractors shall be used in the event that the UCS transportation assets are severely impacted. Rental vehicles from vendors shall be considered if necessary. Fuel arrangements for each local area shall be made prior to the situation or immediately following the emergency.

Materials and Supplies

The purchasing/warehouse disaster plan shall be followed to ensure continued availability of warehousing duties and material availability. Other neighboring utilities stock may be used if necessary. Material review shall be done where possible if the situation requires UCS to move away from currently approved materials. Other supplies shall be made available to employees and visiting employees and contractors as necessary and possible. TEC may provide statewide support, where local organizations such as the Red Cross, United Way, Operation Blessing, will be used to support needs as possible. Further, the Wal-Mart Distribution Center may be an outlet for further support. Local community organizations and churches may be contacted for assistance for meal preparation until formally organized operations can begin. Credit accounts shall be established by the cooperative where necessary to support needs of employees and visiting workers. Preference should again be given to the use of company credit cards instead of establishing credit accounts with local businesses.

Member/Asset Information

Prior to the event or immediately after the event, member information must be available to all employees, visiting workers and contractors as necessary to perform their assigned function. The Emergency Coordinator shall ensure all information is available to workers as necessary and kept secure. There shall be a process set initially to track all system changes as they occur to keep up with accounting and engineering information. System engineering employees shall work to ensure work orders are created as necessary. Further, information shall be kept in methods where FEMA support can be requested if necessary.

ERP – Live Data Pulls

Several of the documents in the ERP are outdated by the time a printed copy is available. These documents are in the ERP; however, there are ways to pull "Live" data included in each TAB of the electronic version of the ERP that will allow access to the most current data available. These items are marked with "Live Data Pull" in the table of contents for each tab.

Guidelines for providing lodging and meals to UCS employees as well as outside resources as deemed necessary. These guidelines are intended to be used where feasible; however, they may be modified as needed to better accommodate the needs of UCS' employees and outside resources.

- Logistics Team (Landy Bennett, Russell Young, Blake Beavers, and Kade Kincannon) shall assess the severity of the event to effectively address lodging and meal needs for both UCS employees as well as outside resources.
  - Identify locations affected
  - Communicate/coordinate with appropriate UCS personnel to determine number of UCS employees that will need temporary lodging and the location(s) in which these resources are to be assigned
  - Communicate/coordinate with appropriate UCS personnel to determine the number of outside resources needed and the location(s) in which these resources are to be assigned
- Accounting Department to request temporary limit increases to company-issued credit cards for appropriate UCS personnel.
  - Instruct UCS personnel to obtain receipts of all purchased goods during and for the event
- Accounting Department to contact mutual aid organizations, if applicable, with record keeping and invoicing instructions, keeping in mind the possibility of FEMA requirements for such records.
- For the duration of the event, Logistics Team to obtain list of resources (both internal and external) each morning from appropriate UCS personnel that require temporary lodging that night and the location each resource has been assigned. Such list may be submitted to Logistics Team via e-mail at ERPLogisticsTeam@united-cs.com.
- Contact surrounding hotels to book appropriate number of rooms for the number of resources assigned to each specific location that will require temporary lodging.
  - Two (2) individuals per room
  - Book all rooms/reservations under the name 'United Cooperative Services'
  - Request from each hotel to apply all lodging expenses to one of the Logistics Team member's company-issued credit cards
  - Obtain/validate hotel invoices/room confirmations each day—direct hotel(s) to send all room confirmations electronically to the ERPLogisticsTeam@united-cs.com e-mail address
  - Use Mutual Aid Hotel Flyer, located in the ERP, to provide lodging information to internal and external resources (include hotel room confirmations, if available)
- Depending on how widespread the event is, coordinate meals (breakfast, lunch, dinner) for both UCS employees as well as outside resources.
  - When feasible, all breakfasts and dinners will be served in a communal fashion.
  - Lunches are to be served as a 'sack lunch' and available for pickup during breakfast each morning.
  - Coordinate meals with local restaurants the day before they will need to have food prepared
  - Where possible, all meal costs are to be applied to one of the Logistics Team member's company-issued credit cards
  - Verify if food will be delivered, served or require pick-up; pick-up food when necessary
  - When needed, assist in the setup and breakdown of "chow hall" for communal meals

Damage Assessment Process

Damage Assessment (DA) process will be initiated once a significant number of outages have been reached and crews dispatched are unable to restore outages without considerable construction efforts. When this occurs, management personnel should be prepared to call crews in and begin the DA process.

Once United has entered DA, all efforts to restore power have essentially been halted. All personnel and resources will be directed towards the DA process. There might be a need for operations personnel to help public safety officials in affected areas.

Field Engineering Manager will be the responsible person for directing the DA in each of the respective areas. Specifically, Senior Field Engineers – Gary Sowders (Granbury/Meridian), Denny Adams (Stephenville/PK) and Wes Burton (Burleson/ Cleburne) will coordinate DA operations in each of their respective areas.

Field Engineering Manager and Sr. Field Engineering Personnel will:

- Determine area to be assessed using:
    - OMS and SCADA information
    - Information from the field
    - News reports
- Determine DA crews
    - DA crew will need to consist of at least 2 persons
    - Ideally would consist of an engineering and operations person.
- Create and assign DA areas
    - Laptop with Partner's damage assessment module loaded.
    - Maps and/or other beneficial documents
    - Digital Camera associated to the DA (association will be a picture of the damage assessment log sheet (snap a picture of the laptop screen with the log sheet filled out) clearly visible at the beginning of the picture set. note: ensure date/time stamp is correct in camera and the function is on in the camera
    - Damage Assessors will:
        - Visit site assigned.
        - Fill out Damage Assessment Log
        - Take pre-cleanup/pre-restoration pictures of site assigned. to tie to FEMA form/staking sheet. note: ensure date/time stamp is correct in camera and the function is on in the camera
        - Synch DA package back to the Partner Hub upon return to the office.

Engineering Services will:

- Compile data from DA entries within the Partner module and make available to all departments to use in restoration processes. This will be done in Excel spreadsheet format and accessible through the network. The data will also be available through Partner's DA module and Filter Table.

Things to consider:

- It should be understood that when the DA process is put into place, FEMA reimbursement occurs with the outage restoration. Therefore, it is important where possible to return the line back to normal construction spec when restoring power, rather than utilizing the band-aid approach to get power restored.
- One DA = One log sheet = One Work Order. This will be the thought in the beginning. Findings from the field might dictate otherwise. For example, One DA might be broken into multiple Work Orders if significant damage is found.
- Cameras should be used from the inventory, but more can be purchased if necessary during the time of gearing up to begin the official damage assessment (see attached Digital Camera Inventory list). A digital camera with preview screen (non-lithium type battery) and a 1 gig SD card will be sufficient for the DA process - @ $60 class camera.

United Cooperative Services

Your Touchstone Energy® Cooperative 

Disaster Planning Quick Reference Guide for Employees

Last Updated: December 2021

Introduction and Purpose

As established by the United States Department of Homeland Security, United's facilities are considered critical infrastructure. Consequently, United is required to prepare and practice for emergencies in case they do occur so there is minimal impact on critical infrastructure and ultimately the public.

This Disaster Planning Quick Reference Guide for Employees of United is meant to serve as a general guide for employees when dealing with emergencies. The intent of this guide is to ensure that employees are prepared for various types of emergencies, but is not possible to cover every possible emergency scenario.

This Guide is broken up into sections that can help employees understand their roles in an emergency. Primarily, United must maintain an Emergency Response Plan (ERP) that will guide the organization in the event of an emergency. An "emergency" is defined as "**an unusual event that involves risk to people, property, or the environment**." Some potential threats that can lead to an emergency are listed below:

Fire	Employees	Pandemic
Chemical Spill	Terrorism	Gas Leak
Power Failure	Contract Labor	Domestic Violence
Weather	Aircraft	Explosion
Customers	Vehicles	Biohazard
Flood	Bomb Threat	Loss of Communications

Each employee should take time to consider how they would respond within these guidelines to the threats above, and possibly others. The remaining sections following the overview of United's ERP provide general information that will allow each employee to evaluate their response readiness.

Any questions or concerns regarding this Guide should be brought to the attention of the employee's direct supervisor or United's Emergency Coordinator.

United Emergency Response Plan Overview

The process of creating United's ERP began with creating a departmental vulnerability and risk assessment (VRA). With the VRA complete and after reviewing a myriad of available materials, United decided to use Texas Electric Cooperative's (TEC) emergency response plan template as its starting point. United has adopted this document as the foundation of its ERP to maintain consistency with other cooperative's in the State of Texas. United has not edited content, other than the addendums described below, and understands that the typical organizational structure described in the document does not exactly coincide with United's organization. It is imperative that United's emergency response team review this document prior to or within 24 hours following the emergency situation to ensure guidelines are agreed to and followed.

The addendums to the ERP provide details and supplemental documentation specifically applicable to United. The addendums to the ERP follow the below numbered tab format:

1. Emergency Response Plan Structure and Guides
    a. Disaster Specific Information
2. Contacts, and Key Accounts Lists
3. Processes, Guidelines, and Procedures
4. Regulatory Agencies
    a. RUS
    b. FEMA
    c. PUC
    d. ERCOT
    e. Other
5. Miscellaneous

This document has been accepted and approved by the Executive Staff, CEO, and Board of Directors as United's Emergency Response Plan as required by CFR 1730.28.

This document should be reviewed and tested by United's emergency response team annually as required by CFR 1730.28.

An excerpt from the ERP concerning responsibility of employees follows:

> *The organizational chart shall govern the operations of United in the case of an emergency event. In the event that United has information of a potentially severe emergency, the Executive Staff shall meet prior to the potentially severe emergency and review the elements of this plan. In the event that the emergency has already or is occurring, the Executive Staff, or the Supervisor Task Force in their absence, shall meet as quickly as feasibly possible immediately following the start of the emergency situation in order to prepare for handling such using this plan.*
>
> *The Emergency Coordinator (Senior Vice President of System Engineering) [or secondary Emergency Coordinator (Senior Vice President of Cooperative Planning and Procurement) in the absence of the Emergency Coordinator] shall work with the rest of the Executive Staff to coordinate all emergency response. In the absence of both the Emergency Coordinator and secondary Emergency Coordinator, the CEO shall appoint some other employee to be the Emergency Coordinator. In the absence of the CEO and Executive Staff, the President of the Board of Directors will be contacted to call an*

emergency Board meeting to name an interim CEO. For immediate disaster response, the Manager of Operations will assume the role of interim Emergency Coordinator, the Vice President of Informtion Systems and Technology will assume the role of interim Secondary Emergency Coordinator, and the Leadership Team will provide leadership as well. It is the responsibility of the Emergency Coordinator to ensure the plan is followed for its purposes. In the absence of the CEO, the Emergency Coordinator shall work with the COO and CAO along with the rest of the Executive Staff or Leadership Team in their absence.

Other duties of the Emergency Coordinator are as follows:

- *Keep this plan and all information contained herein consistent with the TEC statewide disaster plan(s) where applicable,*
- *Keep up/be involved with Local, State, and Federal training exercises where possible/applicable,*
- *Keep the information contained herein up-to-date and accurate with a minimum of an annual review and update process, and*
- *Annually 'test' the plan and coordinate information transfer with RDUP concerning UCS' compliance with ERP requirements.*

Duties of UCS employees may not follow general job descriptions following an emergency. Employees will be utilized where and how necessary to best deal with the emergency at hand.

Employees with responsible charge to act within the ERP for United as designated by United's Emergency Coordinator/Secondary Emergency Coordinator or the Assistant Manager, or CEO in his absence should have a copy and should annually review the Plan.

Office Evacuation in Emergency

Office evacuation may be necessary in the event of an emergency. United has employees working in seven different offices across its service territory, all of which have different layouts, tools, and resources that each employee should be familiar with in an emergency situation. Evacuation plans for each office are located on the Circuit under the Safety Documents in the Human Resources and Safety Section. Following the contacts sections in this Guide is an 'Employee Checklist' that each employee should fill out during or immediately following the annual emergency training session.

The Total Evacuation method should be utilized in the case of an emergency. Total Evacuation requires all employees in the affected building to orderly evacuate to the nearest safe, accessible exit. In the event that all accessible exits are blocked by the emergency, employees should exit through windows of the first floor.

Employees should consider when evacuation might be necessary if any of the threats listed below should occur. There may be different correct answers across United's offices and work areas.

Threat	Some Points to Consider about Preparedness
Fire	Is the fire within portable control? Do you know where the fire extinguisher is located? Are there other fire extinguishing methods that could be used? Have you contacted 911? Have you notified personnel necessary to begin an evacuation?
Chemical Spill	Do you know where the MSDS sheets are located to determine what steps you may need to take in the event of a spill? Do you know who to contact if a spill occurs? What should you do if you encounter a substance that is unknown?
Power Failure	Is your equipment on a UPS? Should it be? What should we do to restore power?
Weather	How does weather impact your job? What would you do if there is a tornado that creates building damage? Where would you go in the building for safety? Is it safe to drive in ice conditions?
Customers	How do you handle an impatient/uncontrollable customer? Should you challenge them? What if they are armed?
Flood	What if a building floods due to water pipe break or massive rains? How will it impact your job? Are computers or other electrical equipment directly on the floor?
Employees	What would you do if an employee or ex-employee became belligerent?
Terrorism	What areas at work are vulnerable to a terrorist act? How would you respond?
Contract Labor	How do we maintain total security with contract labor? Do we perform background checks? How is insurance handled?
Aircraft	Two of United's offices are near landing strips. What would happen if we had an accidental crash into our facility? How would you react?
Vehicles	What would occur if a vehicle was used to damage United office facilities? What would you do if an employee was injured?
Bomb Threat	What should you do if you receive a bomb threat? Does your telephone show caller ID?
Pandemic	How should you conduct your job in the case of a severe pandemic? What actions would UCS need to take to separate employees from infectious materials/areas?
Gas Leak	What if we have a natural gas leak? How will we know? Who do you call?
Domestic Violence	What do you do if an unhappy family member of an employee shows up to the office to discuss family business? What if the situation gets out of hand?
Explosion	If there is an explosion, should you evacuate immediately? What about if employees are left in the building that are injured?
Biohazard	What if a biohazard presents itself, say in a bathroom, or in other areas in the office? Who are you going to contact?
Loss of Communications	What plans are in place for loss of communications? Who is responsible for implementing backup plans? Are there complete backup plans for likely modes of failure?

Reporting to Offices in an Emergency

There are several emergencies that could keep employees from reporting to an office. The likely possibilities are 1) weather complications that prohibit the travel of employees to the office; or 2) an office has been damaged to the point that it cannot be occupied.

If there is an emergency and you cannot report to the office, you should do the following:

1. Contact the HR employee lines at 817-556-4099 or 254-918-6199 to find out if there have been messages left as to the status of offices.

2. Contact your supervisor by any means possible and let them know that you cannot report to the office. At this point, the supervisor will have to decide whether or not he will work out other modes of transportation.

3. If your supervisor cannot be directly reached, leave a message and attempt to contact the next level supervisor. Leave a message if there is no answer.

If you report to an office and it is not accessible, you should report this to the Emergency Coordinator and Safety On-Call Employee as soon as possible if no employee is already on site. If there are no other instructions, employees should report to the following offices under these circumstances:

- Cleburne Office Damaged: All employees report to Burleson.

- Stephenville Office Damaged: Stephenville Administration employees and Cooperative Planning employees report to Cleburne. Customer service, system engineering, and line crew employees report to Granbury.

- Granbury Office Damaged: All employees report to Stephenville.

- Burleson Office Damaged: All employees report to Cleburne.

- Meridian or PK Lake Office Damaged: All employees report to Stephenville.

- Joshua Office Damaged: All employees report to Cleburne

Contact with Media

Media personnel will generally be involved in emergency situations. If a member of the Media contacts you, please direct them to the Chief Operating Officer/Assistant General Manager. If this person is not available, then the CEO shall be the next employee to be contacted. If this does not work, contact the Emergency Coordinator. It is important to remember that all media contact should be directed through a single point of contact to enable consistency of the message. Further, kindly avoid responding to media citing lack of information and pass the request to the appropriate employee as mentioned above.

Personal Preparation

In the event of impending disaster prepare by doing the following:

- Store a two-week supply of water, non-perishable food, and prescription medications. During an emergency, if you cannot get to the store or the store is out of supplies, it will be important for you to have extra supplies on hand.

- Have other needed items such as batteries, flashlights, manual tools/appliances, garbage bags, toilet paper, soap, etc.

- If possible, maintain an extra supply of your regular prescription items to ensure continuous supply is available to see you through an emergency situation that may continue for several days.

- Have any non-prescription drugs and other health supplies on hand, including pain reliever, stomach remedies, cough and cold medicines, fluids with electrolytes (Gatorade), and necessary vitamins.

- Talk with family members and loved ones about how they would be cared for if you were not available to take care of them.

To Limit the Spread of Germs:

- Follow CDC guidelines for personal hygiene.

- Wash your hands frequently with soap and water; model the correct behavior for peers and children.

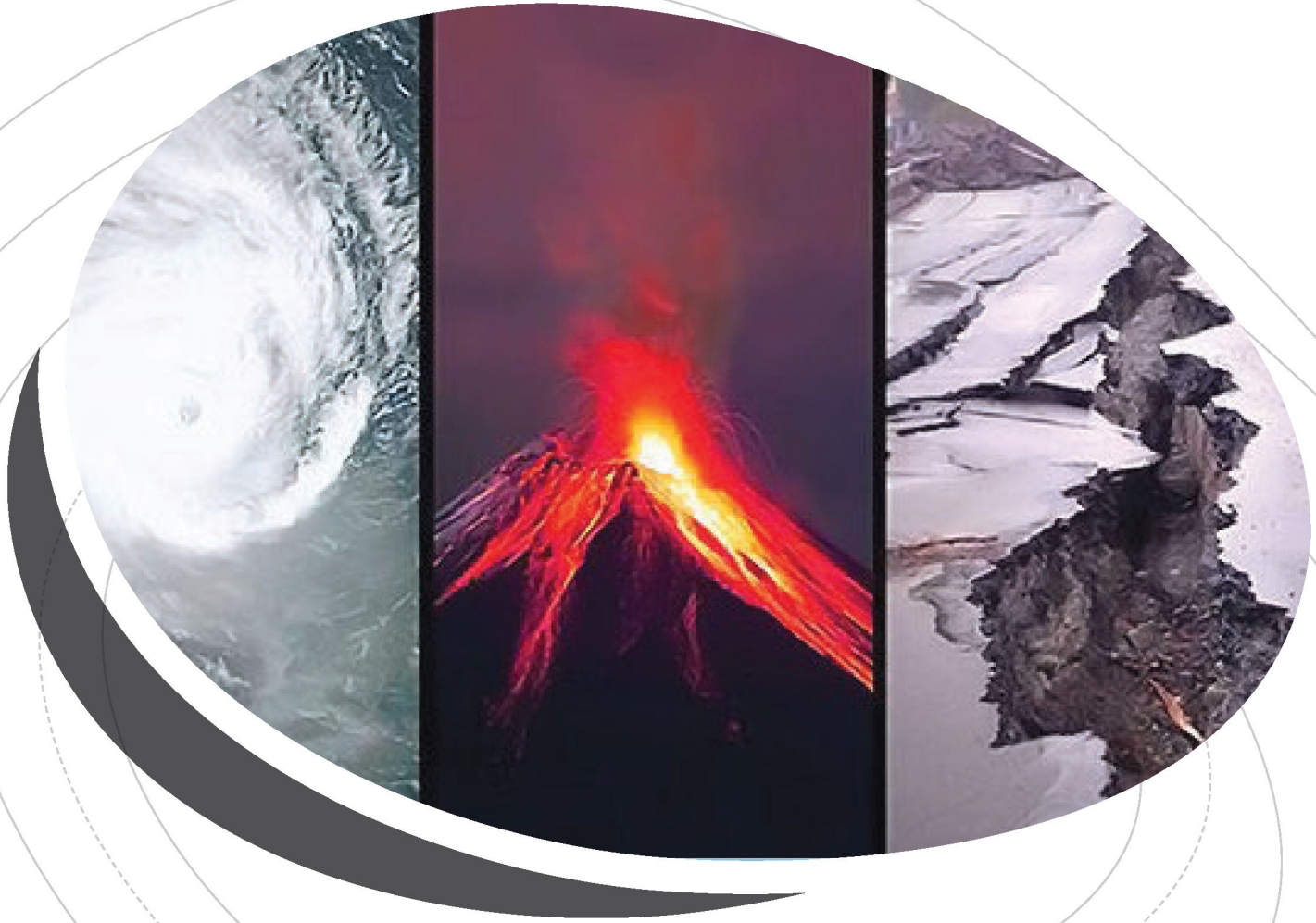
- Always cover when coughing or sneezing.

- Stay away from others as much as possible if they are sick or if you are sick. Stay home if you are experiencing any common symptoms of the pandemic.

Employee Checklist

There are some key things employees should know about their work area to properly respond in an emergency. Below is a checklist that should be reviewed during or immediately following the annual emergency training. Place a check mark on each item as you have evaluated the appropriate answer for your office. Notes should be written next to each question to assist you in remembering your environment.

- ☐ Do you know how to use the telephone system at the office in which you work? How do you dial 911 from your office?
- ☐ How would you describe the location/address of your office to law enforcement personnel in a 911 call?
- ☐ Where is the closest fire extinguisher to your work area? Do you know how to operate the extinguisher if necessary?
- ☐ If it were necessary and available, do you know how to access the overhead paging system for your office to notify other employees in the building that there is an emergency?
- ☐ Do you know where all exits are for your office? What is the closest exit to your actual work area? What is the next closest exit to your actual work area if the closest exit is not accessible?
- ☐ If a Total Evacuation is required, do you know where you should meet with other employees? Should someone attempt to make a count of each employee after an evacuation has occurred?
- ☐ If a Total Evacuation is required, what timeline applies to be totally complete with the evacuation?
- ☐ Where is the closest first aid kit to your work area?
- ☐ Who is United's Emergency Coordinator? Who is the Backup Emergency Coordinator?
- ☐ Where can you find a copy of the EEC (Employee Evacuation Plan)?
- ☐ Where are you going to keep this Guide so that you have access?
- ☐ Where can you find United's Emergency Response Plan?

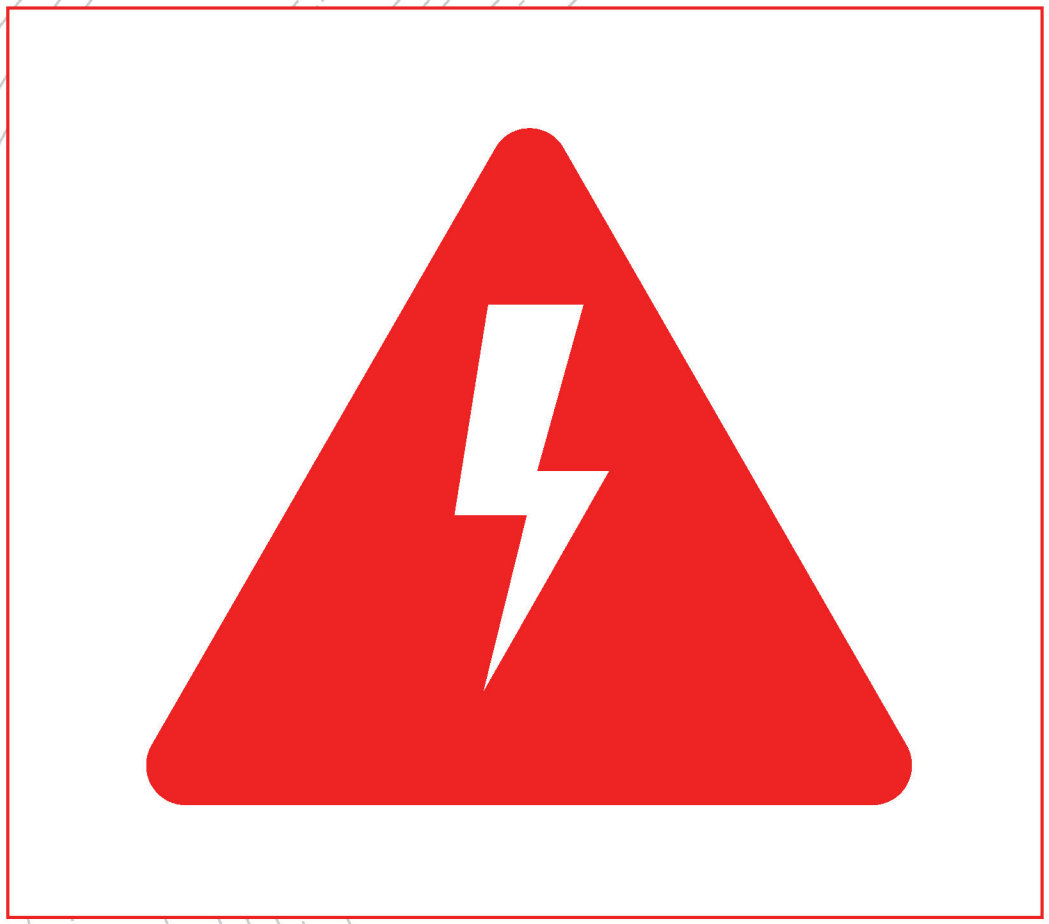


Disaster Planning for Employees

JANUARY 2022

WHY ARE WE GOING OVER THIS?

- The Department of Homeland Security defines United as Critical Infrastructure
- Rural Utilities Service – Requirements to continue to receive loan funds
- Over the past 15 years, United has had the "opportunity" to use the contents of the ERP every other year on average.
- Most importantly - Being Prepared = The Safest Work Environment



Emergency Response Plan

- **Emergency Coordinator: Quentin Howard**
- **Secondary Emergency Coordinator: Jared Wennermark**
- **ERP Must Be Tested And Updated <u>Once a year</u>**

Emergency Response Plan (ERP) Overview

Follows TEC's Emergency Plan template for Texas Co-ops.

Tabs 1 through 5 give specific information related to the type of emergency event that occurs.

The current Emergency Response Plan can be found on The Circuit under Important Documents/Disaster Plan

2021 Tabletop Exercise - Disaster Scenario

- On Sunday, January 10, 2021, United's territory began receiving heavy, wet snow (8+ inches in some areas).
- The snow began to cause several smaller (1 to 10 meter) outages - At the peak, approximately 4,000 Members were affected by approximately 400 individual outages.
- Adding to the complexity – the storm occurred on a Sunday, and it affected several of United's neighboring Coops, making it hard to find mutual aid.

Quick Reference Guide Layout

- Introduction and Purpose
- Emergency Response Plan Overview
- Office Evacuation in Emergency
- Reporting to Office in Emergency
- Contact with Media
- Personal Preparation
- Employee Checklist

The Quick Reference Guide is located on The Circuit under Important Documents/Disaster Plan

Office Evacuation in an Emergency

- List of Threats: How would you respond to an emergency as listed?
- Read through this list, if you can't answer a question, please get with your supervisor.
- If a total evacuation is required, do you know where you should meet with other employees? Should someone attempt to make a count of each employee after an evacuation has occurred?

Reporting to the Office in an Emergency

- If you cannot report to your normal office location due to a widespread emergency, what should you do?
  - Contact HR employee lines for employer instructions:
    - Cleburne 817-556-4099
    - Stephenville 254-918-6199
  - Contact your supervisor for further instructions as soon as practical; leave a message.
- Understand which office you are to report to if an office is damaged.

Contact with Media

- Please don't try to be a media spokesman for United.
- It is very important to provide the media with a single point of contact during emergency events to ensure timely and accurate information is always provided.
- Direct all media requests to United's Chief Operating Officer/Assistant General Manager Marty Haught

Personal Preparation

- Be prepared for an emergency. Your understanding of emergency procedures will save valuable time in United's response.
- Review the information provided in the Quick Reference Guide.
- Red Cross, CDC, and FEMA also provide helpful information on personal disaster preparedness.

Are you prepared?

- Understand how you should react to different threats
- Understand and answer the check-list

Questions should go to your supervisor

ERP – Distribution List

Distribution List for United Cooperative Services Emergency Response Plan – Version 1.2022
Emergency Coordinator: Quentin Howard
Secondary Emergency Coordinator: Jared Wennermark
Emergency Team Copies:
Quentin Howard – Electronic copy for business computer; Iron Key copy for home
Jared Wennermark – Electronic copy for business computer; Iron Key copy for home
Official Office Copies: Posted on the Circuit (Cooperative Intranet Site for all employees) – Microsoft Share Point

Date: _____

RE: United Cooperative Services requests your assistance.

United Cooperative Services has sustained significant damage to our electric distribution facilities as a result of the recent _____, and United is requesting your Cooperative's help. In accordance with the Cooperative Mutual Aid Agreement, United is sending you this letter to officially request your assistance. If you have personnel and equipment available and are willing to render aid to our Cooperative, United is specifically in need of the following personnel and equipment to assist us in restoring power to our Members as quickly and safely as possible:

_____

_____

_____

_____

_____

_____

_____

_____

I would like to personally thank you in advance for your help! In addition, I would like to point out that any and all aid will be reimbursed in accordance with the Cooperative's Mutual Aid Agreement.

Should you have any questions or concerns you can contact United's Emergency Coordinator, Quentin Howard at (254-918-6127) or Quentin@united-cs.com; or our secondary Emergency Coordinator, Jared Wennermark at (817-782-8358) or Jared@united-cs.com.

Yours truly,

Cameron Smallwood
Chief Executive Officer
United Cooperative Services

United Cooperative Services 2/16/2021

Considerations for the Operations Department during a Disaster

Set up:

1) Locate an area large enough to be utilized for warehouse, control center, on-site fueling, and scrap material. Location needs to be as close to damaged area as possible. Additional locations for pole distribution and ease of delivery required.
2) Location will require scrap material trailers and large dumpster to accommodate large volume of trash.
3) Restroom facilities
4) If this event may last for days, security fence or 24-hour security may be required
5) If operations from the selected area will continue during non-daylight hours, portable lighting systems may be necessary.

Daily Crew Work:

1) Have all contact info-Company names /foreman /cell phones readily available
2) Spec book-to each crew, crews will utilize since they will be given a W/O with units
3) Keep track of crew W/O's for coordination with warehouse to allow for progression times of completion of each W/O
4) Crew Foreman turn in W/O after each is completed and check for as-builts
5) Coordinate with engineers on next area needed for progression

Safety:

1) Safety meeting at the start of each day
2) Ensure that all PPE is expected to be utilized
3) Review Personal Grounds
4) Have United employees assist crews to work site
5) Brief each crew on W/O's
6) All line to be energized will only be done so thru coordination with Dispatch and Operations Field Coordinator
7) Have name and contact of Fire Marshall and other emergency officials

Equipment:

1) Have phone numbers for onsite repairs, tires, and welding vendors (internal and external)
2) Notify fleet mechanic vendors

Determine when to change from construction to disaster management:

Begin to evaluate the transition from construction to disaster management at Outage level 3 to 4, from Outage Management Guidelines in Tab 4 of ERP.

Fuel:

1) Operations Manager will notify Senior Fleet Mechanic to start fuel shortage process
2) Notify listed suppliers of fuel storage capacity needed to fit districts needs
3) Notify listed suppliers of fuel amount and type to be delivered to required district locations

Honstein Oil
370 North Sylvania Ave.
Fort Worth, TX 76137
817-831-0601 office
Shannon Stanley 817-829-4378 mobile

S&S Scott Oil
106 Avenue A
P.O. Box 86
Blum, TX 76627
254-874-5569

Love Oil Company
700 W. Vanderbilt
Stephenville, TX 76401
254-965-3518

Connel Oil Corp.
100 SE 6th Avenue
Suite 280, Bank of America Building
Mineral Wells, TX 76067
940-325-7777

Internet Connectivity 2019

During an emergency it may become necessary to access the internet in an area where internet access is not available. In that case, UCS will utilize (2) Verizon MiFi devices. Up to 5 computers can connect to the internet thru each MiFi device. Tethering to a cooperative issued iPhone is secondary option. The MiFi devices are assigned to the following employees:

1. Cameron Smallwood- Ext. 5222, Cell-817-648-6515
2. Marty Haught- Ext 5223, Cell-817-487-7009

If you need any assistance setting up the MiFi devices or tethering to an iPhone, please contact the following:

1. Brad Mead - Cell-817-648-5906
2. Eric Cagle - Cell-254-396-2705
3. John Huffman - Cell-682-228-8141
4. Yuri Lavadour –Cell-817-456-4382

Identifying Specific Needs 2/16/2021

Evaluate current ERP event to determine cooperative needs regarding internal and external personnel resources, as well as restoration equipment.

To accomplish this, items to be consider are

- Damage Assessment need's
- Type of ERP event
- Ground conditions
- Special equipment
- Type/scope of work
- ERP field managing essentials (command center if needed

Beginning of event ERP Coordinator and Operations Manager will analyze specific requirements that will be communicated to workforce and contractors before restoration begins.

Name	Department	Job Title	Location	Office Phone	Mobile Phone
Aaron Lowe	Field Engineering	Field Engineering Rep I	Cleburne	817-556-4014	817-487-3078
Anthony Mejia	Field Engineering	Field Engineering Rep II	Stephenville	254-918-6143	254-434-3663
Brandon Sadler	Field Engineering	Field Engineering Rep II	Granbury	817-326-1556	817-517-1282
Brian Haydon	Field Engineering	Field Engineering Rep II	Cleburne	817-556-4048	682-459-5223
Brody McPherson	Field Engineering	Field Engineering Rep I	Granbury	817-326-1557	682-228-8668
Brody Weems	Safety	Safety and Loss Control Coordinator	Stephenville	254-918-6140	254-485-5249
Daniel Cornia	Field Engineering	Construction Contract and Veg Mgmnt Coordinator	Burleson	817-556-4058	682-702-8911
Dustin Lumm	Field Engineering	Field Engineering Rep I	Cleburne	817-326-1553	682-459-3080
Gary Sowders	Field Engineering	Senior Field Engineer	Granbury	817-326-1561	254-396-2716
Jason Dillard	Field Engineering	Field Engineering Manager	Cleburne	817-556-4055	817-253-3514
Jason Jean	Field Engineering	Field Engineering Rep I	Burleson		
Jesse Whitt	Field Engineering	Senior Field Engineer	Stephenville	254-435-6752	254-978-0098
Joe LoPalo	Field Engineering	Field Engineering Rep II	Burleson	817-782-8320	817-682-7782
John P. Jones	Field Engineering	Field Engineering Rep II	Stephenville	254-918-6146	254-396-0836
Mark Buckner	Field Engineering	Contract Coordinator	Cleburne	817-556-4066	254-396-1340
Mark Dixon	Safety	Safety and Loss Control Director	Burleson	817-782-8346	817-648-5943
Matt Biery	Field Engineering	Field Service Agent	PK Lake	940-779-7102	940-452-1034
Paul Taylor	Field Engineering	Field Engineering Rep I	Stephenville	254-918-6169	254-431-1383
Phil Silva	Field Engineering	Senior Field Engineer	Cleburne	817-556-4070	254-396-2717
Steven Ferguson	Field Engineering	Construction Contract and Veg Mgmnt Coordinator	Stephenville	254-918-6155	254-485-3588
Wes Burton	Field Engineering	Senior Field Engineer	Burleson	817-782-8316	817-517-9612

Credentialing Process

In the event of an ERP event that requires assistance from other Cooperatives, and/or contractors that are not already performing work for United, the following credentialing process will be initiated. The process is as follows:

- Access Permits (see below) will be printed (Landscape – 8 ½ x 11) for each vehicle that will be working on the Cooperative's system.
- Individually assigned and numbered permits will be cataloged through denotation of date, time and participating organization.
- When possible, the permits will be included with the informational packets that are to be given to the Cooperative personnel when they arrive to provide assistance.

ACCESS # PERMIT

PERMIT VOID AFTER:

This unit is assisting United Cooperative Services with mutual aid in response to this emergency restoration event. Please allow these authorized cooperative representatives entrance and access to any unrestricted areas of United's electric distribution system.

United Cooperative Services

United Cooperative Services
Vulnerability Analysis Chart

Type of Event	Priority
EMP Attack	18.90
Nuclear Meltdown - Major Loss of Coop. Overhead Assets	18.70
Nuclear Meltdown - Major Loss of Coop. Underground Assets	18.50
Nuclear Meltdown - Materials, Warehouse, and Purchasing	18.30
Ice Storm (Systemwide)	18.10
Tornado (localized) - Facilities	17.60
Nuclear Meltdown - Effect on Staking	17.30
Nuclear Meltdown - Effect on Connects/Disconnects	17.00
Terrorism	16.70
Electrical Contact Fatality - Internal	16.30
Severe Weather - Major Loss of Coop. Overhead Assets	16.20
Ransomware affecting entire network	16.00
Ice Storm (localized)	16.00
OTJ accident causes employee fatality	16.00
OTJ accident causes employee fatality	16.00
Severe Weather - Major Loss of Coop. Underground Assets	15.80
Major Transmission Loss	15.70
Cyber Attack of our network	15.60
Loss of Entire Phone System	15.60
Electrical Contact Fatality - External	15.60
Inadequate Generation	15.60
Fire in the server room damaging servers and network equipment	15.50
Tornado - Warehouse and Purchasing	15.50
Workplace violence, traumatic event	15.20
Flu epidemic, cause serious illness to employees	15.10
OTJ employee accident causes serious injury	15.10
OTJ employee accident causes serious injury	15.10
Fire at Office - Facilities	15.00
Power surge in server room that could take out multiple servers and/or network equipment	14.90
Fire at Office - Materials/Purchasing/Warehouse	14.90
Disgruntled IT employee intentionally bringing down AD or network	14.80
Earthquake - Facilities	14.70
Employees & families displaced due to natural disaster	14.70
Fire at Office - Billing/CIS	14.70
Tornado - Accounting, Payroll, HR	14.70
Solar Flares Event	14.60
MW Tower Loss	14.50
Electrical "Dig In" - External	14.50
Inability to man offices - All offices	14.50
Loss of Internet Connections	14.30
Dispatch Technology Failure	14.30
Severe Weather - Effect on Staking	14.20
Fire at Office - Accounting/Payroll/AP	14.10
Hail Damage - Facilities	14.10
Ransomware affecting one office	14.00
Brazos Network Loop Failure	14.00
Substation Overload Failure	14.00
Electrical "Dig In" - Internal	13.80
Falling Objects (trees, towers) - Facilities	13.70

United Cooperative Services
Vulnerability Analysis Chart

Type of Event	Priority
Fleet damage/loss	13.70
Severe Weather - Effect on Connects/Disconnects	13.70
Hail Damage - Vehicles	13.60
Power Contract Obligations - Inability to meet contractual agreements/provide power	13.60
Cell Network - Employee Phones	13.60
PCB/Major Oil Spill	13.60
Theft of wire/materials - distribution system	13.60
Vehicle slamming into the building	13.60
Loss of each offices Computer/Switch room	13.50
Gas "Dig In"	13.50
Power loss of facilities	13.50
Rainwater Damage - Facilities	13.50
Theft of service	13.50
Circuit Overload Failure	13.40
Dispatch - Loss of primary dispatch center	13.40
Material supplier/manufacturer catastrophe	13.30
NRECA Employee benefits (cash/non-cash default)	13.30
Physical Robbery	13.30
Substantial liability suit cause	13.30
Inability to man office	13.20
Earthquake - Roads/Transportation	13.10
Earthquake - Gas Leak/Environmental	13.10
Failure of phone system in individual offices	13.10
D-mark or lines from telco company destroyed into building	13.00
Cell Network - MV90	13.00
Radios - Loss of LMR	13.00
Sudden tariffs on imported goods	13.00
Theft/Vandalism in individual offices	13.00
AS400 Work Order Sys. Malfunction	12.90
UPS problems denying power to server racks	12.90
Earthquake - Distribution System	12.90
AMI System Failure - System Engineering	12.90
AS400 Hardware Loss	12.80
AMI System Failure - Billing/CIS/Pre-Power	12.80
Computer System Failure - Billing/CIS	12.70
Event due to proximity to Highway/Interstate - Distribution Systems	12.70
Employee misconduct/vandalism - Billing/CIS	12.60
Event due to proximity to Highway/Interstate - Facilities	12.60
AS400 Billing System Failure- Effect on Meter Reading	12.50
Loss of both firewalls in Burleson	12.50
Major insurance carrier - bankruptcy	12.50
Earthquake - Materials/Warehouse	12.40
Employee misconduct/vandalism - Accounting, Payroll, & AP	12.40
Geo-Political Events affecting supply chain	12.40
Daffron Billing Software Servers failure	12.40
Employee misconduct/vandalism - Materials/Purchasing/Warehouse	12.30
Key personnel lost/unavailable	12.30
HP Switch Failure	12.20
Cell Network - DA Communications/FCI	12.20

United Cooperative Services
Vulnerability Analysis Chart

Type of Event	Priority
Pilferage/Embezzlement	12.20
AS400 Billing System Failure - Effect on Collections	12.10
AS400 Billing System Failure - Effect on Connects/Disc.	12.10
Computer System Failure - Accounting, Payroll, and AP	12.10
Antivirus software failure	12.10
Exchange Server failure/damage/loss	12.00
Protests outside of office(s)	12.00
Key Account Staff loss/inability to contact	11.80
SCADA A and B Down	11.80
UFR Event	11.80
Human Error	11.70
In ability to communicate with media and/or membership	11.70
Recloser/Control Failure	11.70
Supplier Misconduct	11.70
Loss off VMWare Stacks	11.60
Failure of Access Control System	11.40
MV-90 Computer Failure/Loss	11.40
SPCC Event - Facilities	11.30
Capacitor/Control Failure	11.10
Regulator/Control Failure	11.10
Milsoft FE Failure	11.10
Environmental/Historical Impact on Line Construction or Work Plan	10.80
Employee training files lost/mismanaged/compromised	10.30
Driver qualification files lost/mismanaged/compromised	9.80
Test Facility Collections Interruption	8.80

UNITED COOPERATIVE SERVICES

EMERGENCY RESPONSE PLAN/EMERGENCY OPERATIONS PLAN

Version 1.2022

Pages 393 through 450 redacted due to confidentiality.

United Cooperative Services
Standard Practice When Providing Mutual Aid

In the event that United Cooperative Services is called upon to provide mutual aid assistance to another electric cooperative, the following practices are followed:

1. Within 90 days of the return of all of United's labor and equipment from the Cooperative requiring aid, United will submit an invoice of all charges related to the aid provided.

2. Labor force – All labor charges will be charged at double (two times) the normal hourly rate for each individual crew member that provides assistance. The time charged shall include all transportation time to and back from the Cooperative seeking aid, and all time worked during the mutual aid event. Rest and down time shall not be charged.

3. Equipment – All equipment, such as bucket trucks, digger derricks, and other special equipment provided by United Cooperative Services, shall be charged at the latest hourly rate provided on the Schedule of Equipment Rates provided by FEMA at https://www.fema.gov/assistance/public/schedule-equipment-rates. These rates will only be charged for hours actually worked at the Cooperative seeking aid.

4. Transportation – All vehicle transportation charges shall be based on the mileage to and back from the Cooperative seeking mutual aid. These charges will be in accordance with the rate published on the IRS website at https://www.irs.gov/newsroom .

5. Meals, lodging and other related expenses - Charges for meals, lodging and other expenses related to the provision of aid shall be the reasonable and actual costs incurred by United's personnel while rendering actual aid and/or while traveling to or back from the Cooperative seeking aid.

6. Materials – Generally there will be no charges related to the use of negligeable quantities of minor material (such as fuses, nuts and bolts, and splices) that United may supply from the "truck stock" that is brought to the aid site. However, in the rare event that the Cooperative requesting aid is in need of larger inventory items (such as poles, crossarms, and fuse cut-outs); these items will be invoiced at the actual cost of the materials plus a 10% handling charge.

Emergency Response Plan – Contacts, and Key Accounts Lists

Description	Obtained From
Organization Chart Overview - CONFIDENTIAL	Live Data Pull
Organization Charts - CONFIDENTIAL	Live Data Pull
Board of Directors and Support Staff - CONFIDENTIAL	Live Data Pull
Employee Directory with Home Phone and Cell Phone - CONFIDENTIAL	Live Data Pull
UCS Emergency Numbers Listing - CONFIDENTIAL	Jared Wennermark
Brazos Electric Management and Personnel - CONFIDENTIAL	Brazos EOP
Key Accounts Outage Contact Information - CONFIDENTIAL	LiveDataPulls - Landy Bennett
School Districts Contact Information - CONFIDENTIAL	LiveDataPulls - Landy Bennett
Media Contacts Broadcast Newspaper	LiveDataPulls – John Davis
Contractor Listing	LiveDataPulls- Quentin Howard
Number of Customers/Priority Customers per Sub	LiveDataPulls- Dispatch
Critical Accounts Listing - CONFIDENTIAL	LiveDataPulls- AS400 Query
Technical Problem Contacts List - CONFIDENTIAL	LiveDataPulls- Robert Bernhoft
Hotel Listing	LiveDataPulls - Kevin Keesee
Emergency Management Support Organizations	County Websites
County Judge Listing	County Websites
RV & Mobile Office Contacts	LiveDataPulls - David Stone
TEC Emergency Contacts	TEC Loss Control
Security Fence	Director of Facilities

UNITED COOPERATIVE SERVICES

EMERGENCY RESPONSE PLAN/EMERGENCY OPERATIONS PLAN

Version 1.2022

Pages 453 through 507 redacted due to confidentiality.

	A	B	C	D	E	F	G	H	I	J	K	L
1	COUNTY	CITY	NEWSPAPER	CIRCULATION	NEWS CONTACT	NEWS E-MAIL	PHONE	FAX	AD CONTACT	AD E-MAIL	Extra Information	1/4 Page Ad
2	Bosque	Meridian	Meridian Tribune	5,000	Cynthia Davis	news@meridiantribune.com	(254) 435-6333	(254) 435-6348	Jessica Brown	ads@merdiantribune.com		5.75 x 10.5
3	Johnson & Tarrant	Burleson										5.75 x 10.5
4			Dallas Morning News	288,059	Beth Grerking	beth.frerking@dallasnews.com	214-977-8456					
5	Johnson	Cleburne	Cleburne Times-Review	3,593	Dale Gosser - Editor	dgosser@trcle.com	817-556-0870, Ext. 2331	(817) 556-0879	Kelly Burgess	kburgess@trcle.com		5.667 x 10.5
6	Bosque	Clifton	Clifton Record	2,303	Cynthia Davis	editor@cliftonrecord.com	(254) 675-3336	(254) 675-4090	Jessica Brown	ads@cliftonrecord.com		6.417 x 10.5
7	Commanche, Hamilton, Erath	Dublin	Dublin Citizen	1,794	Paul Gaudette	publisher@dublincitizen.com	(254) 445-2515	(254) 445-4116	Sara Gann	ads@dublincitizen.com		5.75 x 10.5
8	Somervell	Glen Rose	Glen Rose Reporter	1,845		news@theglenrosereporter.com	(254) 965-3124	(254) 897-9423	Chris Wood	cwood@theglenrosereporter.com		
9						eaglenews@sbcglobal.net						
10	Hamilton	Hico	Hico News Review	1406		hiconews@gmail.com	(254)796-4325	(254)796-2548	Jerry E. McAdams			
11	Hood	Granbury	Hood County News	8959	Roger Enlow - Editor	editor@hcnews.com	(817) 573-7066	(817) 279-8371	Judy Terry	judy@hcnews.com	kcruz@hcnews.com; dschneider@hcnews.com	6.4375 x 10.5
12	Palo Pinto	Graford	Lake Country Sun/Graham Leader	1669	Timothy O'Malley	publisher@grahamleader.com	(940) 549-7800			admgr@grahamleader.com		6.1875 x 10.5
13												
14												
15	Erath	Stephenville	Stephenville Empire-Tribune	3108		sara.vandenberge@empiretribune.com	(254) 965-3124	(254) 965-4269		cwood@empiretribune.com	mwilson@empiretribune.com;	5.75 x 10.5
16	Tarrant, Johnson, Parker, Hood	Fort Worth	Fort Worth Star-Telegram	184,079	Tom Johanningmeier	tjohanningmeier@star-telegram.com	817-390-7383					
17												
18	Radio/TV Station	CITY		NEWS CONTACT	NEWS E-MAIL	PHONE	FAX	AD CONTACT	Extra Information			
19	WFAA		WFAA	Lauren Zakalik	lzakalik@wfaa.com							
20	KCLE RADIO-CLASSIC COUNTRY	Cleburne	KCLE RADIO-CLASSIC COUNTRY	Jared Fuller	JaredFuller@TheRanchRadio.com	817-645-6643	817-645-6644		cell: 817.913.6075			
21	95.9 THE RANCH/92.1 KTFW SALES	Fort Worth	95.9 THE RANCH/92.1 KTFW SALES			817-787-1959						
22	KPIR AM 1420 REAL COUNTRY	Granbury	KPIR AM 1420 REAL COUNTRY		LEE@KPIR.COM	817-774-1921		Jerry Reynolds Owner	Alternate number: (817) 736-0360			
23	*95.9 THE RANCH - REQUEST LINE	Fort Worth	*95.9 THE RANCH - REQUEST LINE			254-968-2141						
24	*92.1 KTFW - REQUEST LINE	Fort Worth	*92.1 KTFW - REQUEST LINE			254-559-6543			Other request number: (817) 877-1921			
25	KSTV-FM / KSTV - AM/FIESTA 1500 AM	Stephenville	KSTV-FM / KSTV - AM/FIESTA 1500 AM	Stephanie Gade	texdaydj@yahoo.com	254-559-6543	254) 559-6545	Boots Robert S. Elliott Jr. Owner/GM	boots@villecom.net			
26								254-968-2141 wk				
27								254-967-2389 cell				

United Cooperative Services

2012 Pole Attachment Audit
Request for Proposal

Potential Contractor Listing

Cornelius-Pierce Consulting Engineers, Inc.
9020 Highway 377 S
Benbrook, TX 76126
Contact: Mr. Brian Tomlinson
Phone: 817-249-1547
Fax: 817-249-1674
Email: brian.tomlinson@powereng.com

Schneider Engineering, Ltd.
1001 S. Main St., Suite 6
Boerne, TX 78006
Contact: O.W. Schneider
Phone: 830-249-3887
Fax: 830-249-4899
Email: ow@se-texas.com

TechServ Consulting and Training, Ltd.
3320 SSW Loop 323
Tyler, TX 75701
Contact: Mr. George Milsovsky
Phone: 800-903-8183
Fax: 903-509-8185
Email: gmiksovsky@techserv.net

McCall-Thomas Engineering Company, Inc.
845 Stonewall Jackson Blvd.
Orangeburg, SC 29115
Contact: Mr. Ryan Smoak
Phone: 803-534-1040
Fax: 813-534-1045
Email: rsmoak@mcteng.com
Talked with Don

Alexander Utility Engineering
975 W. Bitters Rd.
San Antonio, Texas 78216
Contact: Mr. Dan Banks
Phone: 210-496-3200
Fax: 210-494-9987
Email: dan.banks@alexutil.com
Email: leonard.hill@alexutil.com

Osmose
980 Ellicott Street
Buffalo, NY 14209
Contact: Mr. Jim Corbitt
Phone: 800-877-7653
Email: jcorbitt@osmose.com

Utility Support Systems, Inc.
2309 Superior Dr.
Arlington, Tx 76013
Contact: Larry Honza
Phone: 817-226-8101 ext. 203
Email: lhonza@utilitysys.com

Innovative Joint Utility Services
560 Office Center PL
Gahanna, OH 43230
Contact: Mr. Wil Schulze
Phone: 614-470-9882 x12
Fax: 614-470-9886
Email: wil.schulze@ijus.net

VentureSum Corporation
9102 Aviation Blvd.
Concord, NC 28027
Contact: Mr. Joey Johnson
Phone: 704-721-4199
Fax: 704-721-4202
Email: jjohnson@venturesum.com

Sammy McFarland
UC\Synergetics
smcfarland@ucsinc.com

Davey Resource Group
2035 grassland parkway
Alpharetta, GA 30004
770-377-1584
Tommy.maloney@davey.com
Dave.terry@davey.com

Palmetto
3504-320 Hwy 153
Greenville, SC 29611
Office - 704-323-5765
Cell – 980-322-6641
Worth.sparks@palmettoeng.com
Tim.moore@palmettoeng.com

David Rogers
Project Manager
ESC Engineering
3540 JFK Parkway
Fort Collins, CO 80525
970-212-1450 (Direct)
970-224-9100 (Main)
970-224-9137 (Fax)
970-443-3257 (Cell)
drogers@thinkesc.com
drogers2@att.blackberry.net

Havlak Inspection
PO Box 33
Garden City TX 79739
432-354-2581
jimhavlak@yahoo.com

Acculine consulting
Jody Wheeler
GA

ed@c-pce.com; ow@se-texas.com;
gmiksovsky@techserv.net
rsmoak@mcteng.com
jjohnson@venturesum.com
wil.schulze@ijus.net
lhonza@utilitysys.com
jcorbitt@osmose.com
svickers@ucinc.net
Tommy.maloney@davey.com
Dave.terry@davey.com
Worth.sparks@palmettoeng.com
Tim.moore@palmettoeng.com
drogers@thinkesc.com
jimhavlak@yahoo.com
smcfarland@ucsinc.com
jwheeler@acculineconsulting.com

Large Oil Spill Contractors

Apex TITAN, Inc.
2801 Network Boulevard, Suite 200
Frisco, TX 75034
O) 469-365-1170 M) 214-282-6838
https://www.apexcos.com/southwest/dallas-tx

TAS Environmental Services, L.P.
Emergency Response: 1-888-654-0111
Phone: (817) 535-7222
Fax: (817) 535-8187
http://www.taslp.com

Rodgers Construction
12454 Rendon Road
Burleson, Texas 76028
(817) 561-6052
http://rodgersconstruction.net/

Updated 1-6-2015 Jared W.

United Cooperative Services
Contractors Bid List – Last updated: October 2021
OVERHEAD

Hutton Contracting Company, Inc.
1600 Clifty Hwy.
Hindsville, AR 72738
Marlan L. Wahl – Vice President
479.789.2550 - office
479.789.2520 – fax
huttoncontracting@yahoo.com

Techline Overhead Contractors **(request no bids but stay on list for future work)**
108 S. Pinkerton, Suite 104
Athens, TX 75751
800.410.9119 - office
Don Lawyer – President
903.603.6260 – Don's Cell
dlawyer@techline-inc.com
Stephen Johnson – Branch Manager
214.354.3331 – Stephen's Cell
sjohnson@techline-inc.com

Scott Pole Line, LLC
150 CR 224
Stephenville, TX 76401
Dan Scott
254.979.0577 - cell
scottpoleline@gmail.com

Chain Electric Company
1308 ½ West Pine
Hattiesburg, MS 39401
Melissa Lyman – Contract Coordinator
601.545.3800 –office
mlyman@bchain.com
www.chainelectric.com

Southern Electric Corporation of Mississippi
Utility Construction Division
4374A Mangum Drive
Flowood, MS 39232
Josh Smith – Project Manager/Estimator
601.939.2333 Ext. 107 – office
josh.smith@secofms.com

Bird Electric
2384 U.S. Hwy 287 N. Suite 204
Mansfield, TX. 76063
Jeff Walters
254.653.2950-office
817-752-4088
bids@birdelectricinc.com

Infratech Corporation
2036 Baker Ct.
Kennesaw, GA 30144
Steve Mitchell – Vice President
770.792.8700 – office
770.826.2827 - cell
770.792.8788 - fax
smitchell@infratechcorp.com

Great Southwestern Construction Co.
99 Regency Parkway Suite 113
Mansfield, TX 76063
www.gswc.us
Robert Harris
972.750.6222 – cell
rharris@myrgroup.com
Jo Allison
254.205.6167 – cell
jallison@myrgroup.com

Dixie Electric
801 NW Mustang Dr.
Andrews, TX 79714
Josh Corbin – Project Manager
Cell – 575.749.3534
josh.corbin@dixielectric.com

Bobcat Contracting, LLC (request for make ready only)
PO BOX 663
Hillsboro, TX 76645
254.582.0205 – office
866.582.3199 – fax
John Gerik
john@bobcatcontracting.com

Varnell's Powerline Construction Co
PO BOX 236
Sayre, OK 73662
202 E Main Street
Sayre, OK 73662
Roy Varnell, Jr – President
580.729.2171 – office
580.928.8208 – fax
royvarnelljr@yahoo.com

Higher Power, LLC—Jon Richardson
8048 68th St. NW
Stanley, ND 58784
Justin Wickenhauser
701.628.1182 – office

justin@higherpowerllc.com
a: 4401 W. 21st ST Tulsa, OK 74071
e: jrichardson@hpeservices.net
m: 405-203-8900

TSU 1 (Texas State Utilities, Inc.) (No overhead crews)
3112 Wichita Ct.
Fort Worth, TX 76140
Adam Campbell – Sr Dir of Bsn Ops
817.665.9000
682.438.1362
ACampbell@tsu1.com
www.tsu1.com

Aztlan Utilities & Construction
12456 Red Stag Ct.
Conroe, TX 77303
Jimmy Webster – General Partner
Cell – 832.928.5419
jwebster@aztlanco.com
David Ponder – General Partner
Cell – 409.429.6699
dponder@aztlanco.com
www.aztlanco.com

WTX Powerline services
750 Three Pine Church Rd.
Deridder, LA. 70634
Phillip Walker
Cell: 817-517-7775
phillipwalker.wtx@outlook.com

Altitude Energy
26400 I-76 Frontage Rd.
Keenesburg, CO. 80643
Aracely Malley
Office: 720-618-3252
bids@attitudeenergy.com
www.altitudeenergy.com

Renegade Group
7501 Cr. 1128
Godley, TX. 76044
Jacob Percifull---CEO
Office: 817-389-2745
Cell: 817-240-7895
Jacob.percifull@renegadegroupllc.com

K.V. Power
5617 Gee Road
Granbury, Texas 76049
Jason Scott---Superintendent—432-978-0633
Jason.scott@kv-p.com

Axis Power
726 HCR 2415 South
Hillsboro, TX. 76645
David Graham
Cell: 254205-2039
dgraham@axixpower.com

Transition Power
7570 FM. 417 West
Center, TX. 75935
John Henry Cagle
Cell: 936-488-9001
jhcagle@transitionpower.net

United Cooperative Services
Contractors List
STAKING

Power Engineers
4100 International Plaza
Suite 320
Fort Worth, Texas 76109
817-249-1547
817-882-1900

Tech-Serv
12078 State Hwy 64 West
Tyler, Texas 75704
903-509-8183

Scarborough Engineering, Inc.
Jon Scarborough
2400 Scott Avenue
Fort Worth, Texas 76103
817-451-6687
sei@seitexas.com

McCord Engineering, Inc.
Rex Woods
916 Southwest Parkway East
P.O. Box 10047
College Station, Texas 77840-4018
979-764-8356
rwoods@mccordeng.com

Synergetic Design
UC Synergetic
1925 E. Beltline Rd.,
Suite 250
Carrollton, TX 75006
972.428.5660

Alexander Utility Engineering, Inc.
975 W. Bitters Road
San Antonio, Texas 78216
210-496-3200
info@alexutil.com

United Cooperative Services
Contractors List – January 2022
TREE TRIMMING

American Eagle Tree Services Inc.
P.O. Box 1448
Kennedale, TX 76060
Rita Meaders- Office Manager
817.535.7031-office
817.535.8783-fax
rita@waddellexc.com
James Rogers – Part Owner
817.422.2242-cell
Barclay Waddell – Part Owner
817.205.7108-cell

Asplundh Tree Expert Co.
711 South 4th Ave
Mansfield, TX 76063
Jerry Kensinger-Region 68 Contact
817-473-2292-office
Jkensinger@Asplundh.com

Davey Tree Surgery
12926 Lowden Ln
Menchaca, TX 78652
Steve White- Area Manager
512.658.8388-cell
steve.white@davey.com

Northeast Services Inc.
DBA **Horton Tree Service**
P.O. Box 1185
Kennedale, TX 76060
5120 Southeast Loop 820
Forrest Hill, TX 76140
Johnny Horton - President
817.572.2334-office
817.266.0118-cell
817.483.9378-fax
johnny@hortontree.com

McCoy Tree Surgery
PO BOX 817
Norman, OK 73070
3201 Broce Dr
Norman, OK 73072
Sam Batty
800-654-3625-toll free
405.579.6002-direct dial
sbatty@mccoytree.com

Trees, Inc.
650 N. Sam Houston Pkwy. E.
Suite 209
Houston, Texas 77060
George Leszkowicz
713.423.4021-cell
866.865.9617-toll free
gleszkowicz@treesinc.com
Stephanie Stafford – Assistant
281.447.1132-direct dial
sstafford@treesinc.com (please cc her)

Quail Energy Services, LLC
5700 Glen Rose Hwy
Granbury, TX 76048
Matt Allen - President
817.573.3633-office
432.349.0166-cell
817.573.3644-fax
mallen@quailenergy.com

Welch Contract Services, Inc.
374 Sandhill Church Road
Ellisville, MS 39437
Chris Welch - President
601.763.3331-office
601.319.5100-cell
601.477.3241 fax
cwelch@welchcontractservices.com

Vegetation Management
PO Box 1456
Seguin, Texas 78156-1456
Frank Vigil – General Manager
830.433.9021-office
210.559.1734-cell
Vegetationman@yahoo.com

W.A. Kendall and Company, Inc.
P.O. Box 831
Lawrenceville, GA 30046
Robert Williams
770.963.6017-office
770.962.8510-fax
rwilliams@wakendall.com
www.wakendall.com

National Tree Expert Co.
311 Industrial Drive
Burnet, TX 78611
Brian Dalland-VP
512.715.0464-office
512.470.1358-cell
512.715.0546-fax
bdalland@national-tree.com

Wolf Tree, Inc.
3310 Greenway Drive
Knoxville, TN 37918
Mark D. Calko – Operations Manager
865.687.3400-office
865.689.4914-fax
mcalko@wolftreeinc.com
www.wolftreeinc.com

Contractor	Contact Name	phone	email
Wright Tree Service	Tim Bingaman	903-277-3238	tbingaman@wrighttree.com
Nelson Tree	Elmer Vargas	817-229-9224	Elmer@nelsontree.com
ABC Tree	Yvonne Garza	713-847-7172	ygarza@abctree.com
Davey	David Miller	832-226-9365	david.miller@davey.com
Bacco Inc.	John Baker		jd@baccoinc.org
Asplundh	Jerry Kensinger		jkensinger@asplundh.com
United Contractors	Willie Spiller		wspiller@yahoo.com
Arbor Experts	Tim Manners	832-714-1992	tmanners@thearborexperts.com
Horton Tree	Johnny Horton	817-572-2335	myra@hortontree.com
BDG Trees, LLC	Joe O'Neal	832-720-4304	joneal@bdgtrees.com

United Cooperative Services
Contractors Bid List – Last updated: July 2019
UNDERGROUND

Hutton Contracting Company, Inc.
1600 Clifty Hwy.
Hindsville, AR 72738
Marlan L. Wahl – Vice President
479.789.2550 - office
479.789.2520 – fax
huttoncontracting@yahoo.com

Rodgers Construction Co.
12454 Rendon Road
Burleson, TX 76028
Blake Rodgers - Owner
Paul Woodall – Operations Manager
817.561.6052 – office
817.925.9196 – Blake cell
817.565.7034 - Paul cell
817.561.6089 - fax
blake.rodgers@rodgersconstruction.net
paul.woodall@rodgersconstruction.net

Turn Key Utility Construction Inc.
9716 Limestone Court
Joshua, TX 76058
Butch Newell - Estimator
817.309.3702 - office
817.925.1785 - cell
817.309.3475 - fax
butch@turnkeytexas.net

Standard Utility Construction, Inc.
2630 W Freeway Suite 200
Fort Worth, TX 76102
Greg Pinkerton – Director of Operations
817.738.8400 - office
817.994-1650 - cell
817.738.7864 - fax
gregpinkerton@standard-utility.com

Team Fishel
1661 N. Hwy 377
Roanoke, TX 76262
Dean Pence – Area Manager Dallas
800.829.4530 - office
817.925.2752 - cell
dtpence@teamfishel.com
www.teamfishel.com

Norstar
3340 Roy Orr Blvd Suite 100
Grand Prairie, TX 75050
****Frank Ingram III** – Estimator/Project Mgmt
254.644.9271 – cell
972.894.9308 – direct office
972.894.9309 - fax
Jim Switzer – CEO
972.484.4344 – office
972.979.4503 - Jim cell
jswitzer@can-fer.com
fingram3@can-fer.com

MasTec North America, Inc.
4351 Dale Earnhardt Way
North Lake, TX 76262
Glenn Travis – Division VP
214.571.2542 – office
214.535.7235 - cell
Glenn.Travis@mastec.com

Utility Resource Group
3524 FM 322
Palestine, TX.75801
Russell Prater – CEO
817.680.7028 - cell
russellprater42@yahoo.com

Infratech Corporation
2036 Baker Ct.
Kennesaw, GA 30144
Steve Mitchell – Vice President
770.792.8700 – office
770.826.2827 - cell
770.792.8788 - fax
smitchell@infratechcorp.com

JW Powerline Construction
2713 South Cr. 1208
Midland, TX 79706
Justin Fortmayer
504-234-8175 – Cell
432.684.4388 - office
432.684.7607 - fax

Higher Power, LLC
14301 Caliber Drive
Suite 210
Oklahoma City, OK 73134
Attn: bids
Dave Wulke
515-537-5568
dwulke@hpeservices.net

Bobcat Contracting, LLC
PO BOX 663
Hillsboro, TX 76645
254.582.0205 – office
866.582.3199 – fax
Jeremy Moore
254-580-3670 – Cell
jmoore@bobcatcontracting.com

Reyes Utilities Construction
8405 Orleans Ln.
Ft. Worth, TX. 76123
Noe Reyes – Owner
214.284.4758
Gerardo Macias – Vice President
817.723.4369
reyesnoe521@yahoo.com

TSU 1 (Texas State Utilities, Inc.)
3112 Wichita Ct.
Fort Worth, TX 76140
Walter Cheatle
817-812-5172 – Office
817-480-5336 - Cell
Gerardo Macias – Sr. Dir. of Bsn Ops.
817.665.9000
682.438.1362
WC@tsu1.com

Great Southwestern Construction Co.
4632 S. I-35W
Alvarado, TX. 76009
www.gswc.us
Robert Harris
972-750-6222 – cell
rharris@myrgroup.com
(NO BID AT THIS TIME, PLEASE KEEP ON LIST)

Dixie Electric
801 NW Mustang Dr.
Andrews, TX 79714
Josh Corbin – Project Manager
Cell – 575.749.3534
josh.corbin@dixielectric.com

Aztlan Utilities & Construction
12456 Red Stag Ct.
Conroe, TX 77303
Jimmy Webster – General Partner
Cell – 832.928.5419
jwebster@aztlanco.com
David Ponder – General Partner
Cell – 409.429.6699
dponder@aztlanco.com
www.aztlanco.com

Altitude Energy
7000 Cr. 1001
P.O. Box 537
Godley, TX. 76044
James Coladipietro
817-240-7232 - Cell
Aracely Malley
Office: 682-245-9005
www.altitudeenergy.com

Renegade Group
Jacob Percifull---CEO
7501 Cr. 1128
Godley, TX. 76044
Office: 817-389-2745
Cell: 817-240-7895
Jacob.percifull@renegadegroupllc.com

Fort Trench and Bore
Michael Craine
6809 Running Deer Ct.
Gby. TX. 76049
682-999-4137 – Cell
michael@forttb.com

Transition Power LLC.
7570 FM. 417 West

Center, TX. 75935
John Henry Cagle
936-488-9001 – Cell
Jhcagle@transitionpower.net

Services Unlimited
5401 Hemphill St. Ft. Worth, TX. 76115
Ryan Shada- President/CEO
Office Phone 817-923-1955
Cell Phone – 817-233-0540
Address – 5401 Hemphill St. Ft. Worth, TX 76115
Email – ryan@servicesunlimitedtx.com
Website – servicesunlimitedtx.com
David Coffey---817-923-1955

Substation #	Subname	Line	Active Meters	Key Accounts	Safety	Infrastructure	Medical
67	ABBY BEND 1	11	9	0	0	0	0
67	ABBY BEND 1	12	2	0	0	1	0
67	ABBY BEND 1	13	15	0	0	0	0
10	ACTON	1	194	3	1	5	0
10	ACTON	3	320	2	0	0	1
10	ACTON	4	248	0	2	1	1
10	ACTON	5	498	2	0	5	1
10	ACTON	6	749	3	1	2	1
10	ACTON	11	1	0	0	0	0
69	BLUFF DALE 1	11	922	12	0	3	1
69	BLUFF DALE 1	13	287	2	0	0	3
11	BONO 1	11	282	3	1	3	1
11	BONO 1	12	145	0	0	1	0
11	BONO 1	13	382	2	0	2	2
11	BONO 1	14	505	0	0	3	0
62	BONO 2	21	2	0	0	2	0
12	BURLESON	2	1	0	0	0	0
12	BURLESON	12	116	0	0	2	0
12	BURLESON	13	473	0	0	0	3
12	BURLESON	14	365	0	0	1	0
12	BURLESON	15	594	2	2	2	3
12	BURLESON	21	1	0	0	0	0
70	BURLESON 2	1	1	0	0	0	0
70	BURLESON 2	21	291	2	0	1	3
70	BURLESON 2	22	1109	9	1	4	0
40	CARLTON	1	701	4	0	0	3
40	CARLTON	2	300	30	0	0	1
40	CARLTON	3	415	0	0	0	0
40	CARLTON	4	322	0	0	6	0
13	CONLEY	1	208	0	0	0	0
13	CONLEY	3	396	11	0	0	4
13	CONLEY	4	157	0	0	0	0
13	CONLEY	5	322	10	1	1	3
13	CONLEY	6	488	0	0	0	5
32	COVINGTON	1	1	0	0	0	0
32	COVINGTON	6	245	0	0	0	0
32	COVINGTON	7	355	0	0	4	0
41	CRANFILLS GAP	1	730	8	0	3	1
41	CRANFILLS GAP	2	527	1	0	3	1
41	CRANFILLS GAP	3	377	0	0	2	1
35	CROWLEY 1	11	1243	1	0	4	3
35	CROWLEY 1	12	867	0	0	2	6
35	CROWLEY 1	21	1	0	0	0	0
35	CROWLEY 1	4	1	0	0	0	0
71	CROWLEY 2	21	1547	5	3	6	9
73	DOMINO	3	1	0	0	0	0
73	DOMINO	11	279	0	0	3	1
73	DOMINO	12	917	0	1	5	0
73	DOMINO	14	352	11	0	0	0
25	EGAN	1	628	3	0	2	5

25	EGAN	2	567	0	0	2	3
25	EGAN	3	207	0	0	0	0
25	EGAN	4	1185	7	0	6	3
23	FALL CREEK 1	1	1	0	0	0	0
23	FALL CREEK 1	11	329	4	1	0	0
23	FALL CREEK 1	12	269	0	1	0	0
23	FALL CREEK 1	14	456	0	0	0	2
23	FALL CREEK 1	15	565	5	0	1	1
23	FALL CREEK 1	21	1	0	0	0	0
23	FALL CREEK 1	22	1	0	0	0	0
63	FALL CREEK 2	6	1	0	0	0	0
63	FALL CREEK 2	15	1	0	0	0	0
63	FALL CREEK 2	21	244	0	0	1	2
63	FALL CREEK 2	22	58	1	0	3	0
63	FALL CREEK 2	23	1257	0	0	6	5
24	FRIENDSHIP	1	562	0	0	0	0
24	FRIENDSHIP	2	651	0	0	0	0
24	FRIENDSHIP	21	1	0	0	2	0
14	GEORGES CREEK	1	307	15	0	0	2
14	GEORGES CREEK	2	423	1	0	0	1
14	GEORGES CREEK	3	4	4	0	0	0
14	GEORGES CREEK	4	42	9	0	0	0
14	GEORGES CREEK	3	1	4	0	0	0
43	GLEN ROSE	1	550	0	0	0	0
43	GLEN ROSE	2	477	0	0	0	0
43	GLEN ROSE	3	208	0	0	0	0
42	GRANBURY	3	1	0	0	0	0
42	GRANBURY	11	362	0	0	1	0
42	GRANBURY	12	410	3	0	0	1
42	GRANBURY	13	157	4	0	1	0
36	GRIFFITH	1	10	0	0	0	0
36	GRIFFITH	2	428	25	1	1	1
36	GRIFFITH	3	1084	8	2	7	2
44	HILL CITY	2	338	0	0	0	0
44	HILL CITY	3	417	0	0	0	0
44	HILL CITY	2	1	0	0	0	0
44	HILL CITY	32	1	0	0	0	0
39	HOOD	1	538	0	0	1	3
39	HOOD	2	361	1	0	5	0
39	HOOD	3	437	2	0	3	0
39	HOOD	11	1	0	0	0	0
61	JESSICA	12	142	20	0	2	0
61	JESSICA	13	631	3	0	1	2
61	JESSICA	14	138	0	0	0	0
61	JESSICA	15	750	0	0	2	2
46	JOHNSVILLE	1	472	19	0	0	1
46	JOHNSVILLE	2	378	10	0	0	0
46	JOHNSVILLE	3	224	0	0	1	0
15	JOSHUA A	11	993	6	0	3	9
15	JOSHUA A	12	1013	15	0	2	2
15	JOSHUA A	13	355	0	1	0	4

15	JOSHUA A	24	1	0	0	0	0
37	JOSHUA B	1	1	0	0	0	0
37	JOSHUA B	21	462	0	0	1	0
37	JOSHUA B	22	312	4	1	0	1
37	JOSHUA B	23	402	0	0	0	1
16	KEENE	2	492	2	0	6	1
16	KEENE	3	810	0	0	2	3
16	KEENE	4	1017	0	0	2	0
16	KEENE	2	1	2	0	6	1
27	LAKE ALVARADO	2	340	1	0	5	0
27	LAKE ALVARADO	3	369	1	0	1	1
27	LAKE ALVARADO	4	444	2	0	5	3
27	LAKE ALVARADO	21	1	0	0	0	0
28	LAKEWOOD 1	2	1	0	0	0	0
28	LAKEWOOD 1	11	1061	2	1	6	1
28	LAKEWOOD 1	12	604	0	1	4	2
64	LAKEWOOD 2	21	1	0	0	0	0
64	LAKEWOOD 2	23	321	1	1	2	0
64	LAKEWOOD 2	24	468	1	1	2	2
18	LILLIAN A	11	1066	0	0	4	4
18	LILLIAN A	12	813	1	2	1	1
18	LILLIAN A	13	306	0	0	0	0
29	LILLIAN B	21	768	2	0	1	10
29	LILLIAN B	22	522	0	0	2	0
29	LILLIAN B	23	251	0	0	0	0
29	LILLIAN B	24	943	0	0	1	6
47	LINGLEVILLE	1	402	37	0	0	3
47	LINGLEVILLE	2	435	12	0	0	0
47	LINGLEVILLE	3	474	1	0	2	1
47	LINGLEVILLE	12	1	0	0	0	0
59	LITTLE HOSS 1	1	1	0	0	0	0
59	LITTLE HOSS 1	12	111	6	0	1	0
65	LITTLE HOSS 2	21	156	3	0	1	0
65	LITTLE HOSS 2	22	479	0	0	2	1
48	LONG	1	1	0	0	0	0
48	LONG	2	1096	2	0	7	1
48	LONG	3	977	0	0	6	0
49	MERIDIAN	1	191	4	0	2	1
49	MERIDIAN	2	731	0	0	3	1
49	MERIDIAN	3	190	1	0	0	3
77	MORGAN	11	1	0	0	0	0
77	MORGAN	12	3	0	0	1	0
77	MORGAN	13	577	1	0	0	3
77	MORGAN	14	1	0	0	0	0
77	MORGAN	2	1	0	0	0	0
50	MOUNTARY	4	1	0	0	0	0
50	MOUNTARY	11	6	1	0	0	0
50	MOUNTARY	12	246	15	0	0	0
50	MOUNTARY	14	643	35	0	0	2
17	NASSAU BAY	1	518	1	0	1	2
17	NASSAU BAY	2	263	0	0	0	0

17	NASSAU BAY	3	804	0	0	0	5
17	NASSAU BAY	4	669	2	0	2	4
17	NASSAU BAY	21	1	0	0	0	0
26	NEW HOPE LIME	12	3	2	0	0	0
19	NEW HOPE RES	1	1	0	0	0	0
19	NEW HOPE RES	21	493	1	0	1	1
19	NEW HOPE RES	22	62	1	0	0	0
19	NEW HOPE RES	23	308	0	0	0	1
51	NORFORK	11	34	2	1	0	2
51	NORFORK	12	990	1	1	0	0
51	NORFORK	13	1120	7	0	4	1
52	PK LAKE	11	957	0	0	4	0
52	PK LAKE	12	623	2	0	1	0
52	PK LAKE	14	860	6	0	1	0
52	PK LAKE	15	410	4	1	2	0
72	PK LAKE 2	14	1	0	0	0	0
72	PK LAKE 2	21	1355	15	0	16	1
20	PORT ROYAL	11	176	0	1	3	1
20	PORT ROYAL	12	1059	0	0	4	1
20	PORT ROYAL	13	1040	0	0	1	1
20	PORT ROYAL	14	359	0	0	0	0
20	PORT ROYAL	15	380	0	0	0	0
20	PORT ROYAL	16	234	0	0	3	2
20	PORT ROYAL	21	1	0	0	0	0
53	POWELL	1	516	0	0	0	3
53	POWELL	2	317	0	0	3	2
53	POWELL	3	185	20	0	0	0
74	RAILPORT	2	6	0	0	0	0
21	RETTA	1	375	0	0	0	0
21	RETTA	2	261	5	0	0	0
21	RETTA	3	659	0	0	3	2
21	RETTA	4	209	0	0	2	3
21	RETTA	5	220	2	0	2	0
21	RETTA	14	1	0	0	0	0
45	RICOCHET	11	121	0	0	0	0
45	RICOCHET	12	8	1	0	0	0
45	RICOCHET	13	25	1	0	0	0
22	SAND FLAT	1	385	0	0	2	0
22	SAND FLAT	2	261	0	0	2	1
22	SAND FLAT	3	336	0	0	0	1
22	SAND FLAT	4	647	1	0	0	4
22	SAND FLAT	23	1	0	0	0	0
54	SELDEN	1	819	1	0	9	0
54	SELDEN	2	935	8	0	9	2
54	SELDEN	4	613	19	0	0	1
34	ST PAUL	4	1	0	0	0	0
34	ST PAUL	21	851	2	0	2	2
34	ST PAUL	22	817	0	0	0	7
55	STEPHENVILLE	1	575	3	0	0	1
55	STEPHENVILLE	2	490	11	1	1	0
55	STEPHENVILLE	3	865	17	0	0	5

55	STEPHENVILLE	13	1	0	0	0	0
31	TENASKA A	11	5	1	0	0	0
31	TENASKA A	12	51	4	0	1	0
31	TENASKA A	13	34	0	0	0	0
31	TENASKA A	14	1	0	0	0	0
58	TENASKA B	21	928	0	0	6	6
58	TENASKA B	22	1	12	0	1	0
33	TIMBERGREEN	1	1004	2	2	3	3
33	TIMBERGREEN	2	298	0	0	0	0
33	TIMBERGREEN	3	428	0	0	0	0
33	TIMBERGREEN	4	323	0	0	1	0
33	TIMBERGREEN	12	1	0	0	0	0
38	VALLEY BRANCH	3	1	0	0	0	0
38	VALLEY BRANCH	12	437	0	0	2	0
38	VALLEY BRANCH	13	222	0	0	0	0
38	VALLEY BRANCH	14	323	0	0	1	1
66	WILDCAT	21	124	32	0	0	0
66	WILDCAT	23	481	2	0	4	2
66	WILDCAT	31	6	0	0	2	0
66	WILDCAT	32	1	0	0	1	0
66	WILDCAT	33	1	0	0	1	0
66	WILDCAT	34	1	0	0	1	0
56	WRIGHT	1	624	4	0	0	1
56	WRIGHT	2	1586	5	0	2	4
56	WRIGHT	3	3	3	0	0	0
56	WRIGHT	2	1	5	0	2	4

UNITED COOPERATIVE SERVICES

EMERGENCY RESPONSE PLAN/EMERGENCY OPERATIONS PLAN

Version 1.2022

Pages 527 through 554 redacted due to confidentiality.