

South Carolina Office of Regulatory Staff

STANDARD OPERATING PROCEDURES

SOP-ESF12-ENERGY

Thomas H. Allen, Director ESF12

Issued: April 12, 2019

Effective: April 15, 2019

**STANDARD OPERATING PROCEDURES
ESF12 ENERGY
OFFICE OF REGULATORY STAFF**

Table of Contents	Page Reference
I. INTRODUCTION	3-5
II. ORGANIZATION	6-7
III. RESPONSIBILITIES	7-8
IV. CONCEPT OF OPERATIONS	8-13
V. ADMINISTRATIVE and LOGISTICS	14-16
VI. FEDERAL RESPONSE	17
VII. ATTACHMENTS	18-49
A. ESF12 Staffing- Attachment A	18-20
B. OPGON-5 Normal Operation Activities Attachment B	21-24
C. OPGON 3 ACTIVITIES- Attachment C	25-27
D-1. Manual Method to Gather Energy Provider Data	28-29
D-2. Energy Provider Update by County Data Sheet	30
E. ESF12 Record Keeping Checklist	31
F. ESF12 Fueling and Refueling Plan ATTACHMENT-F	32-37
G. Utilities electric service area map (Google Screen Shot)	38
H. SC Power Lines Map and Transmission Links.	39
I. Natural gas transmission and principal gas mains	40
J. Oil Pipelines that Transverse South Carolina	41
K. Energy Assurance Plan with Enclosures and Appendices- (ESF12 Desk)	42-47
L. Gas Distribution and Transmission System Information	48
M. Usernames and Passwords	49

I. INTRODUCTION

A. **GENERAL:** SOP-ESF12 (ESF12) provides the programmatic controls and steps necessary to implement the requirements set forth in South Carolina's Annex-12 (ESF12-Energy) and the South Carolina Energy Assurance Plan.

1. Emergency Support Function 12 (ESF12) will closely coordinate with the electric utilities, natural gas utilities and petroleum products suppliers operating in the State to ensure the integrity of their energy supply systems is maintained during emergency situations, any damages incurred are repaired, and services restored in an efficient and expedient manner.
2. In accordance with the South Carolina Emergency Operations Plan (SCEOP), ESF12 has primary responsibility to monitor the following:
 - a) Electric utility generating capacity and reserves;
 - b) Supply of natural gas;
 - c) Supply and transportation of generation and transportation fuels
3. ESF12 will also monitor and coordinate the restoration of electric and natural gas services to assist in emergency response needs and to restore normal community functioning.

B. Energy includes producing, refining, transporting, generating, transmitting, conserving, building, and maintaining electric and natural gas energy system components.

C. **PURPOSE:**

1. To assess the extent of damage, provide information, coordinate, monitor, and report the restoration of energy systems during an emergency or disaster in South Carolina.
2. This procedure applies to all personnel assigned to work on ESF12 activities during emergencies or disasters.

D. AUTHORITY:

The Office of Regulatory Staff (ORS), as provided for by Act 175 and as vested with power and jurisdiction by the South Carolina General Assembly, performs the following general functions per SC Code Ann. § 58-4-50:

1. It is the duty and responsibility of the ORS to:
 - a. When considered necessary by the Executive Director of the Office of Regulatory Staff and in the public interest, review, investigate, and make appropriate recommendations to the Public Service Commission (Commission) with respect to the rates charged or proposed to be charged by any public utility;
 - b. When considered necessary by the Executive Director of the Office of Regulatory Staff and in the public interest, make inspections, audits, and examinations of public utilities regarding matters within the jurisdiction of the commission. The ORS has sole responsibility for this duty but shall also make such inspections, audits, or examinations of public utilities as requested by the commission;
 - c. When considered necessary by the Executive Director of the Office of Regulatory Staff and in the public interest, review, investigate, and make appropriate recommendations to the Commission with respect to the service furnished or proposed to be furnished by any public utility;
 - d. Represent the public interest in Commission proceedings, hearings, rulemakings, adjudications, arbitrations, and other regulatory matters unless the Executive Director of the Office of Regulatory Staff chooses to opt out as a participant under the provisions of item j;
 - e. Investigate complaints affecting the public interest generally, including those which are directed to the Commission, Commissioners, or Commission employees, and where appropriate, make recommendations to the Commission with respect to these complaints;
 - f. Upon request by the Commission, make studies and recommendations to the commission with respect to standards, regulations, practices, or service of any public utility pursuant to the provisions of this title;
 - g. Make recommendations to the Commission with respect to standards, regulations, practices, or service of any public utility pursuant to the provisions of this title;

- h. When considered necessary by the Executive Director of the Office of Regulatory Staff and in the public interest, provide legal representation of the public interest before state courts, federal regulatory agencies, and federal courts in proceedings that could affect the rates or service of any public utility;
 - i. To serve as a facilitator or otherwise act directly or indirectly to resolve disputes and issues involving matters within the jurisdiction of the Commission;
 - j. When considered appropriate by the Executive Director of the Office of Regulatory Staff and not adverse to the public interest, choose to not participate in any Commission proceeding; and
 - k. When considered necessary by the Executive Director of the Office of Regulatory Staff and in the public interest, educate the public on matters affecting public utilities which are of special interest to consumers.
2. Subject to the provisions of SC Code Ann. § 58-3-260 and, upon request, the Executive Director of the Office of Regulatory Staff must employ the resources of ORS to furnish to the Commission, or its members, such information and reports or conduct such investigations and provide other assistance as may reasonably be required in order to supervise and control the public utilities of the State and to carry out the laws providing for their regulation.

II. ORGANIZATION

A. Personnel:

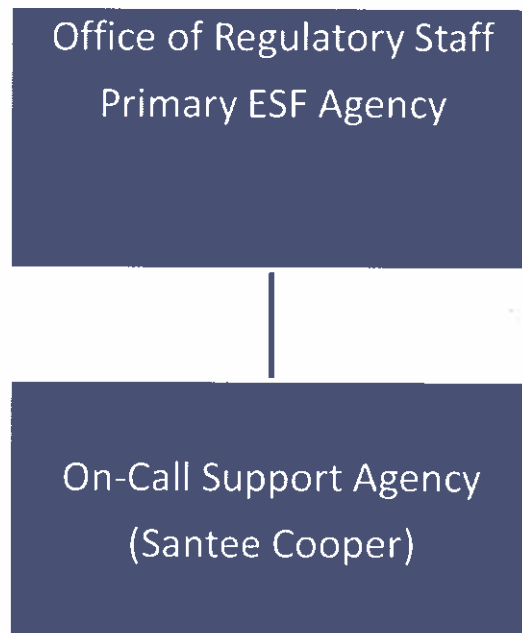
In major emergencies or disasters, the ORS will provide agency staff as directed by the South Carolina Emergency Management Chief of Operations to implement this SOP and coordinate ESF12 with supporting agencies as identified in the State Emergency Operations Plan. ESF12 Staffing Plan and call list is provided on Attachment A. Designated staff members will report as scheduled to the State Emergency Operations Center (SEOC) to interface with state and local government officials and be the primary point of coordination with the Director of the South Carolina Emergency Management Division (SCEMD) and the Governor's Office.

The ESF12 desk at the SEOC is to be manned by representatives from ORS and the utilities. The agency will carry out the purpose and functions of ESF12 as set forth within the Standard Operating Procedures (SOP) under the direction of the ESF12 Director, or his appointed representative, and identify ORS personnel to augment an immediate State response.

B. County Interface:

ESF12 works with SCEMD to address any county-related energy issues and disseminate pertinent energy related data that may affect the county.

C. Organizational Chart:



D. Continuous Operations:

ESF12 will support operations while the SEOC is open, or as required by the SCEMD. Three (3) eight-hour shifts will be maintained depending on the nature of the disaster. Shift personnel must be present at least fifteen minutes prior to shift changes to allow for briefings. Attachment A provides the list of participants and their contact information and a 15-day/24-hour schedule that will be enacted when required.

E. Succession of Authority:

Succession of Authority for ESF12 is through the ESF12 Director or his appointed representative.

III. RESPONSIBILITIES:

The ORS will carry out the responsibilities of ESF12 under the direction of the Executive Director of ORS. Santee Cooper will serve as an on-call support agency. The specific responsibilities are as follows:

A. Office of Regulatory Staff

1. Identify, train, and assign ORS personnel to staff ESF12 in the SEOC.
2. Notify all ESF12 personnel, support agencies, and utilities upon activation.
3. Maintain communications with electric and natural gas utilities in responding to and recovering from emergencies regarding electric generating capacity shortages, electric generating fuel shortages, transmission and distribution line outages, and electrical service outages affecting the public, and natural gas supply disruptions (See Section IV. Concept of Operations).
4. Coordinate with energy providers to establish priorities to repair damaged energy systems and the provision of temporary, alternate, or interim sources of natural gas supply and electric power.
5. Develop protocols to report the following:
 - a. By county and other jurisdictions, number of customers without power, and estimated restoration time.
 - b. Status of major generating unit outages.
 - c. Expected duration of event.

- d. Explanation of utility planned actions and recommendations of agency actions in support of utilities.
 - e. Maintain status of natural gas pipelines to include private sector providers that connect to interstate pipelines.
 - 6. Monitor and coordinate efforts to manage automotive transportation fuels for non-utility fuel supplies in the event of a shortage required for residential, commercial, or industrial purposes in accordance with the State Energy Assurance Plan (EAP).
 - 7. Provide ESF12 coordination between the Hurricane Evacuation Fueling and Refueling procedure, Annex G of the SC Hurricane Plan, Appendix 1, and ESF12 Attachment F- Fueling and Refueling plan.
- B. On-Call Support Agency (Santee Cooper)**
- 1. Identify and assign personnel to maintain contact with and prepare to execute missions in support of ESF12 during periods of activation.
 - 2. Provide equipment and technical assistance.
 - a. Assist in maintaining assessment and coordination efforts with all supporting agencies and energy providers during emergency repair and restoration process until restoration is complete.
 - b. Assist in providing energy emergency information, education and conservation guidance to the public.

IV. CONCEPT OF OPERATIONS

- A.** ORS is responsible for the coordination of all ESF12 administrative, management, planning, training, preparedness, mitigation, response, and recovery activities. These activities include developing, coordinating, and maintaining the ESF12 SOP.
- 1. All ESF12 supporting agencies will assist the ORS in the planning and execution of the above.
 - 2. All ESF12 personnel will be trained on the principles of the National Incident Management System (NIMS) and integrate those principles into all ESF12 planning and response operations.
- B.** Coordination of ESF12 activities with all supporting and other appropriate departments/agencies, organizations, and utilities will be performed to ensure operational readiness.

- C. Owners and operators of investor-owned (private) and public utilities systems are responsible for the activation of their plans for appropriate allocation of resources of personnel, equipment, and services to maintain or restore utility service under their control.
- D. ESF12 will assess the emergency (both pre- and post-event) in coordination with energy providers and local emergency management officials, to develop strategies to respond to the emergency.
- E. ESF12 will coordinate with public and investor-owned and operated electric and natural gas utility services to ensure provision and/or restoration of energy services to the public.
- F. Considerations for allocation of energy resources include but are not limited to:
 - 1. Coordinating with state agencies and emergency response organizations to assist in delivery of consumer fuel supplies
 - 2. Providing technical support and personnel for support of emergency activities being conducted by local EOCs or state ESFs as requested through the SEOC
 - 3. Coordinating with utility representatives to determine emergency response and recovery needs
 - 4. Coordinating with ESF 6 and the SEOC to identify emergency shelter power restoration and emergency power generation status/needs
- G. ESF12 will monitor the overall consumer fueling operations and coordinate requested state assistance in accordance with Attachment F.
 - 1. ESF12 will coordinate with local fuel stop owners of automotive transportation fuels in the event of a shortage to ensure provision and/or restoration of related services to the public.
 - 2. Upon notification from SEOC of impending fuel shortages, ESF12, will implement Attachment F, Fueling and Refueling Operations Plan.
- H. The following summarizes ESF12 approach when working with other state and federal agencies:
 - 1. Federal:
 - a. State ESF12 is supported by National Response Framework ESF12 (Energy).

- b. State ESF12 will coordinate with SCEMD for Federal ESF12 assistance.

2. State:

- a. Coordination with all supporting and other appropriate departments, agencies, and organizations who may support ESF12 to ensure operational readiness prior to, during, or after an incident, emergency, or disaster.
- b. In coordination with SCEMD, ESF12 will assess the emergency (both pre- and post-event), and in coordination with local emergency management officials, develop strategies to respond to the emergency.

- 3. Local/County: ESF12 does not have representatives at the county level but will coordinate any county energy related needs through the SEOC and their respective county Regional Emergency Management (REM) staff.

I. Notification¹:

The SCEMD notifies the ESF12 primary agency of the change in OPGON levels from OPGON-5 to OPGON-1. Upon notification ORS will contact the required technical assistants identified on Attachment A.

J. Operating Conditions:

- 1. OPGON-5 (Normal Operations) – ESF12 will ensure the actions defined in Attachment-B are completed.
- 2. OPGON-4-the ESF12 Director will:
 - a. Establish contact with SCEMD and determine the need for staffing of ESF12.
 - b. Utilize Attachment A to alert appropriate ESF12 personnel if the need for staffing exists.
 - i. Personnel should ensure their families are prepared for the event.
 - ii. Personnel should prepare for extended duty to support the ESF12 shift schedule.
 - c. Initiate a 15-Day/24-hour schedule to be enacted upon OPGON- 3 declaration.

¹ In FY 2019-2020, SCEMD will migrate to a 3 OPGON system. That change will be incorporated into the 2020 ESF 12 SOP.

3. OPGON-3—When activated by SCEMD, ESF12 Director will initiate the following:
 - a. Staff the ESF12 Energy Desk and activate ESF12 contacts.
 - b. Assess storm data to determine possible effects on Energy Provider territory.
 - c. Complete applicable steps of Attachment B (Response to OPGON-3).

4. OPGON-2-ESF12 will be supporting SEOC with 24-hour shift coverage. The ESF12 Director will ensure:
 - a. The implementation of the shift schedule and assist in transportation of assigned ESF12 members.
 - b. Utilization of the steps in Attachment-C to determine the appropriate contacts for:
 - i. Investor Owned Utilities (IOUs)
 - ii. Municipalities and Natural Gas Authorities
 - iii. Cooperatives
 - iv. On-Call Support Agency (Santee Cooper)
 - c. Establishment of the channels of communication between ESF12 and the identified utilities.
 - d. that if the SEOC automated system is unavailable, and the energy provider customer data mapping is required, Attachment-C is utilized to request the data for developing the map.
 - e. Recording of the required information on Attachment-D, if necessary to report the data through Palmetto/EMCOP or will develop an appropriate Excel spreadsheet.
 - f. Initiation of Attachment F- Evacuation fueling and Refueling Operations, as requested by SCEMD.

NOTE: Most Energy providers have web-based reporting systems that automatically update their customer outage data. SCEMD has incorporated their data into Palmetto mapping software which may be used to display the data in the SEOC and at the appropriate County Location.

5. OPCON-1

- a. Provide available energy data as necessary to respond to SEOC requests. This process will continue until restoration of energy resources is complete.
- b. Maintain energy provider customer data to coincide with SEOC reporting by providing updates using SOP-ESF12-Attachment-C & D, if necessary.
- c. Coordinate operational priorities and emergency repairs with utility representatives.
- d. Provide status of energy resources to SEOC Operations Group. ESF12 Representative will continue with the action of Attachment-F, Fueling and Refueling Operations, as required.
- e. Coordinate with SEOC, public and private utilities to determine proper restoration priorities and to ensure coordination with high priority areas.
- f. Coordinate necessary state resources with Energy Providers to include removal of downed power lines/transmission lines that hinder DOT road clearance, and to support energy restoration priorities.
- g. Plan for and coordinate any security needs for vital energy supplies with ESF13.
- h. Provide energy damage assessment data to ESF14.
- i. Recommend energy conservation measures, if appropriate.
- j. When requested, activate actions regarding evacuation fueling/refueling operations, and post impact fueling/refueling operations per Attachment F.
- k. Support the utilities mutual assistance agreements.
- l. Provide ESF12 representation on the Recovery Task Force.
- m. Complete the record keeping and reporting requirements identified on Attachment E.

K. Recovery

1. Maintain coordination with all supporting agencies and organizations on operational priorities, emergency repair, and restoration.
2. Continue to provide energy emergency information, education, and conservation guidance to the public in coordination with the SEOC Public Information (ESF15).
3. Anticipate and plan for arrival of, and coordination with, FEMA, Federal ESF12, and Department of Energy personnel in the SEOC and the Joint Field Office.
4. Continue to monitor restoration operations until all services have been restored.
5. Ensure that ESF12 team members and their support agencies maintain appropriate records of costs incurred during the event.
6. Identify and coordinate alternative energy sources for generation to strengthen energy recovery.

L. Mitigation

1. Review, evaluate, and comment on proposed State Hazard Mitigation Plan amendments.
2. Support requests and directives from the Governor and/or FEMA concerning mitigation and/or re-development activities.
3. Record matters that may be needed for inclusion in agency or state/federal briefings, situation reports and action plans.

V. ADMINISTRATIVE and LOGISTICS

A. Critical Elements of Information:

1. ESF12 Director will keep a record of at least the following:
 - a. Date and time of events requiring action
 - b. Shift Turnover items
 - c. Support requests made by other ESFs
 - d. County issues needing resolution by Energy Provider
 - e. ESF12 action items from status update meetings
2. ESF12 State Emergency Response Team (SERT) will maintain records of incidents' status on the following electronic data input forms found at the Palmetto/EMCOP site:
 - a. Position Log
 - b. Significant Events
 - c. Messages
 - d. Requests
 - e. ESF Status Reports
 - f. Situation Report—recipients of Situation Report are listed at the top of the shift log
 - g. ESF12 will ensure that documentation required on Attachment E-Record Keeping and Reporting Checklist is complete.

B. Briefings:

ESF12 will provide briefings on:

1. The status of energy/power infrastructure affecting the disaster areas
2. The most critical needs affecting disaster response

C. Training:

At the beginning of each fiscal year, ORS will determine the annual training program for ESF12 personnel. At a minimum, the plan may include:

1. New personnel orientation
2. Initial and annual Palmetto training
3. Tabletop exercise participation
4. State exercise participation
5. Ensure all ESF12 personnel integrate NIMS and Incident Command principles. ESF personnel will complete required NIMS training, as outlined in the Department of Homeland Security (DHS) training guidance.

D. Plan Development and Maintenance:

ORS has the overall responsibility for developing and maintaining this SOP and Annex 12 – SCEOP annually. Unless otherwise directed, the following timeline will be used during each revision cycle.

Activity/Responsible Agency or Individual	Date
Conduct internal Annex 12 review and request input from supporting agencies	August 1
Finalize Annex 12 changes and submit to SCEMD	November 1
Conduct internal SOP review	March 1
Finalize SOP update and submit to SCEMD	April 15

- E. Shift schedule will be on an 8-hour basis unless specified otherwise. If an individual is unable to work their shift, the staff member will contact the ESF Director and shift leader or their designee.
- F. The ESF12 log will denote which members are present during each shift. Time and attendance records will be kept by the ESF12 shift leader or designee and turned into the ESF12 Director.
- G. ESF12 Director will assign trained and experienced personnel as SERT members. The ESF12 Director will make a rotation schedule to cover the SEOC. When the SEOC is activated, the ESF12 Director will be notified and will staff that shift.
- H. Resource Management
ESF 12 may maintain records on the following items.
 - a) Personnel costs
 - b) Equipment costs
 - c) Supplies and materials
- I. Contents of ESF12 Energy Emergency Management Folder and Virtual Desk:
 - a. Emergency contacts and telephone numbers
 - b. Physical Map of Public Service Commission of South Carolina's Assigned Electric Distribution Service Area
 - c. Activation checklist
 - d. ESF12 Energy/Utilities Outages Report
 - e. Updated access to Pvision with current Energy Provider contact information accessible on ESF12 Virtual Network
 - f. Updated version of GISO with embedded Energy Provider territory boundary maps with Address/ Longitude/ Latitude access capability
 - g. Updated Palmetto/EMCOP software access with energy provider and fuel stop data available for query
 - h. Current year Electric Cooperatives Member Directory
 - i. Hardbound Recordkeeping log(s) to be used and reviewed for shift turnovers if primary method is not available.

Note 1: All passwords and user names are consolidated on Attachment M.

Note 2: In the event that an Alternate EOC is used, copies of all record keeping, and administrative items can be found in the black briefcase (the "football") located outside of office 914.

VI. FEDERAL RESPONSE

ESF12 will interact with and respond to requests, from National Response Framework, ESF12 Energy, which are relevant to our area.

VII. ATTACHMENTS Pages 18-51

ESF12 Staffing and Schedule

Name	ORS Department	Office Phone	Home Phone	Cell Phone	Email
Allen, Thomas	Director of ESF '12	737-0974			
Jashinsky, Jay	Audit	737-1984			
Schellinger, Matthew	Utility, Rates and Services	737-0154			
Campbell, Chad	Utility, Rates and Services	737-5194			
Bateman, Andrew	Legal	737-8440			
Briseno, Anthony	Audit	737-0836			
Waring, Brittany	Admin	737-0802			
Kirby, Brad	Utility, Rates and Services	737-5206			
Ryder Thompson	Utility, Rates and Services	737-0664			
Hipp, Dawn	Utility, Rates and Services	737-0814			
Jenny Pittman	Legal	737-0794			
Rick Campana	Energy Office	737-5229			
Iglesias, John	Safety, Trans, and ER	737-0875			
McGill, Thomas	Safety, Trans, and ER	737-0863			
Sarrell, Jenna	Safety, Trans, and ER	737-0896			
Sandonato, Anthony	Utility, Rates and Services	737-0221			
Edwards, Nanette	ORS	737-0575			
Energy Providers					

Name	ORS Department	Office Phone	Home Phone	Cell Phone	Email
Fuel Partners					

SOP- ESF12 ATTACHMENT -A

ESF 12 STANDING DUTY SCHEDULE

	<u>Day 1</u>	<u>Day 2</u>	<u>Day 3</u>	<u>Day 4</u>	<u>Day 5</u>	<u>Day 6</u>	<u>Day 7</u>	<u>Day 8</u>	<u>Day 9</u>	<u>Day 10</u>	<u>Day 11</u>	<u>Day 12</u>	<u>Day 13</u>	<u>Day 14</u>	<u>Day 15</u>
0700-1500	Thomas* Brittany	Anthony B John L.*	Anthony B Brad*	*Anthony's Andrew	Jenna Jay	Thomas* Jay	Matthew* Chad	*Anthony's Jenny	Ryder Andrew*	*Anthony's Jay	Thomas* Brittany	Matthew* John L.	Anthony B Brad*	Jenna Andrew	*Dawn Jay
1500-2300	Anthony S Brad*	Jenna Andrew*	*Dawn Jay	Chad *Brittany	Matthew* John L.	Anthony B Brad*	*Dawn Jenna	Chad Jay*	Thomas* Brittany	Matthew* John L.	Brad Andrew	Dawn Jay*	Rick Jay*	Thomas* Brittany	Matthew* John L.
2300-0700	*Matthew Jay	Thomas* Brittany	Matthew* John L.	Rick Brad*	Jenny Andrew*	*Matthew Anthony's	Ryder *Brittany	Rick John L.*	Anthony B Brad*	Dawn Andrew	Jenna Jay	Jenny Brittany*	Matthew* John L.	Ryder Brad*	*Chad Andrew
ESF Director	Tom	Tom	Tom	Thomas	Tom	Tom	Tom	Thomas	Tom	Thomas	Tom	Thomas	Tom	Tom	Tom
On Duty at SEOC															
ESF 12															
Admin	Dawn	Dawn	Thomas	Tom	Dawn	Dawn	Thomas	Tom	Dawn	Dawn	Dawn	Tom	Dawn	Dawn	Thomas
Duty at ORS HQ															
24 Hour	Chad	Ryder	Jenny	Anthony B	Dawn	Jenna	Thomas	Matthew	Jay	Rick	Anthony's	Brad	Andrew	John	Brittany
Alternate															
Duty begins at 0700am															
*denotes shift lead															
# denotes 0745-1945															

SOP-ESF12 ATTACHMENT-B

OPCON-5 Normal Operation activities

1. Annual Review of Energy Provider Data

- A. ESF12 Representative(s) consult with the State Energy Providers (EP) at least annually to verify contact information and total customers served (metered) by county:
 - a. Electrical Providers
 - Four (4) Investor Owned Utilities
 - Twenty (20) Electrical Cooperatives
 - Twenty-Three (23) Municipalities
 - One (1) State Owned Utility
 - b. Natural Gas Providers
 - Seventeen (17) Gas Distributors
 - One (1) Wholesale NG Transmission Company
 - Two (2) Major Pipeline NG Suppliers
- B. Data tables have been developed to collect the following energy provider information.
 - 1. Primary Contact – Name, Telephone, email address
 - 2. Secondary Contact- Name, Telephone, email address
 - 6. Counties served
 - 7. Total Customer count served in each county (note the count is by meter device)

NOTE: The primary method for updating energy provider data is through the EMCOP Pvision software as described in step B below. Step C provides an alternative method to request the annual update from the energy providers by using email.

C. In March of each year ESF12 will request the Energy Provider update by completing one of the following processes:

1. Log in- <http://Pvision-scemd.palmettovision.sc.gov/esf12/login.xhtml>
 - a) User name: esf12Admin
 - b) Password: p@ssw0rd
2. Open “Request for Update” Selector
3. Select “Add New”
4. Enter Date
5. Enter (Campaign) Update Reason- Annual Update Energy Provider Info.
6. Add Update reason to “email Subject line”.
7. Copy and paste the below message.
8. Copy and paste/type out the string literal with brackets {accessLink} at the bottom of page to the end of the message section.
9. Select the “save” button. (Note: campaign will appear in ‘Request for Update Selector’ section.

ESF12 requires that South Carolina's Energy Providers update the following data for our Emergency Management procedures: The Primary and Secondary Contact Data (phone and email), County in which you have customers, and estimated total number of customers in each county.

Please respond by clicking on the ‘return url’ or cut and paste this return address into your browser and return your update information. Alternatively, you may respond by replying to this email with the above information.

Thanks in advance for this assistance.

Tom Allen
tallen@regstaff.sc.gov
 803-622-5308

10. Sending a Blast Energy Provider Update Email
 - a) Select the Request for Update (Campaign)
 - b) Click the message you wish to send from the “Request for update Selector” window.

- c) Select “Add” in the “Manage Request for Update Detail” window to view all providers to which you can send a request
- d) Select the checkbox next to each company you wish to include in the email
- e) Click on the ‘Add Selected’ button to add the company names to the ‘Manage Request for Update Details’ table.
- f) Click on the ‘Send Mass Email’ button
- g) Verify confirmation pop-up window appears
- h) Select ‘Yes’ to send emails.

Note: The POC (Point of Contact) will receive an email that contains a unique URL. The URL is customized for each company’s POC; they need to click on the URL or copy and paste the link into their browser. After the URL is entered, a browser will appear with the Company, POC, and County information as well as the interface to manage an outage event.

11. Should the energy provider reply to the email, it will be directed to the ESF12 email address (ESF12@emd.sc.gov). You may remotely access the email account by:
 - Outlook 365 url: <https://login.microsoftonline.com/>
 - User Name- esf12@emd.sc.gov
 - Password- “Seoc-2014”
12. As information is updated in Pvision, the County Customer map will be updated in EMCOP automatically.
13. An Alternate method of acquiring data is through the Investor Owned Utilities, Santee Cooper, and the larger Cooperatives web sites. The total customer count per county can be pulled from these web sites and recorded on the Master Energy Provider list, if necessary. However, all contact information should be verified through the email response.
14. The ESF12 Rep should review the email response from the energy providers to ensure timely completion of the update and print hard copies for redundancy and place them in the “football” and at the ESF12 desk.

- D. Annual review of Energy Assurance Plan and Petroleum Energy Providers-
1. Each year the ESF12 SCEO Representative will review the Energy Assurance Plan and associated attachments that are utilized by ESF12 and update them.
 2. Specifically, the plans associated with Refueling Operations (SOP-ESF12 Attachment F) must be maintained on a regular frequency. Evaluate the impact of any changes on Annex G, to the SC Hurricane Plan.

OPCON-3- ESF12 ACTIONS

- A. Activation of ESF12 Desk-ESF12 Director arrives at SEOC and initiates the following actions:
1. Log in to Palmetto/EMCOP
 2. Complete steps 1 through 11 of the activation checklists and submit via Palmetto/EMCOP
 3. In the ESF12 file cabinet, verify the location of the following:
 1. Current revision of SOP-ESF12, with attachments
 2. Current revision of Energy Assurance Plan, with attachments
 3. Copy of Utilities Map located in ESF12 Desk Drawer
 4. DOT- District Assignment Map, (with a manual copy of the Energy Provider by County Call List)
 4. Evaluate impact of the pending event on Energy Provider Service Territory and:
 1. Identify potentially affected counties
 2. Consult with DNR Weather analyst to determine the event's location, trajectory and intensity
- B. If necessary, alert potentially impacted Energy Providers of impending event by using EMCOP Pvision software found on Attachment B.
1. Copy and paste the preparation message below in the body of the

There is a pending event that may affect your energy provider area and SCEMD has requested a notification be sent alerting you to prepare. Please respond to this message with your appropriate representative contact information to be used for this event and the status of your preparation. Please respond by clicking on the 'return url' or cut and paste this return address into your browser and return your update information. Alternatively, you may respond to this email with the above information.

Thanks in advance for this assistance.

ESF12 Rep.

C. Establishing ESF12 Representative(s) Shift Duties

1. Shift Lead will assign team members to organize, collect and disseminate energy provider response data for:
 1. Governor's Data request/SEOC reporting
 2. Shift Update Requests
 3. Shift Turnover Requests.
 4. County Emergency Response Requests via SEOC
2. Record keeping
 1. Customize Excel spreadsheet for communicating energy provider response data. If possible, withdraw data time stamped from "Palmetto". If not, customize excel spread sheet, keep to single page for ease of reporting, time and date stamped. Print each report for log keeping.
 2. Establish mailing list for reporting.
 - (1) Work with SCEMD Chief of Operations to identify key recipients and establish report times
 - (2) Establish reporting times with ORS Management
 - (3) Notify Energy Providers of reporting time requirements to synchronize data collection time with reporting time
 3. ESF12 Shift lead will utilize a word document log for recordkeeping and turnover. Basic entries should include:
 - (1) Shift turnover items
 - (2) Shelter Needs- Electrical and Consumer Issues
 - (3) Action items from SEOC shift meetings
 - (4) Downed Electrical lines affecting road clearing (ESF 1)
 - (5) Identified County Electrical Needs

D. The following steps may be used to respond to power outage requests due to downed power lines:

1. Identify the nearest utility pole to the outage- request the pole data information, which contains a pole tracking number and the utility identification. Once this is known, ESF12 will notify the appropriate energy provider.
2. Identify the address of the power outage.
 - (1) Utilize the below URL to enter the power outage address on the SCEMD ARCGIS Energy Provider territory map.
<http://scemd.maps.arcgis.com/apps/PanelsLegend/index.html?appid=75de123bb84451587548080de235f04>

2. Type the address or latitude and longitude into the 'search' block, key stroke 'enter'. The map should 'zoom' to that location
3. Once zoomed to the location, left click mouse inside the colored polygon. A drop down box with one or more utility selections will appear. The following information is provided:
 - (1) Utility name
 - (2) Utility Contact Number
4. Coordinate with the energy provider(s) to resolve the power issue.

If ARCGIS is unavailable, obtain the physical Energy Provider map (stored in the DOT office area in a Map Tube adjacent to the roof support station). There is also a folded Energy Provider map in the ESF12 desk file cabinet located by the copier. Determine the energy provider territory associated with the request. Utilize the ESF12 energy provider call list to contact the appropriate provider for assistance.

Gathering and Displaying Energy Provider Customer Data- The normal method for obtaining and displaying energy provider data is through the SC EMCOP/Palmetto energy provider mapping tool located at Palmetto Website <https://www.palmettoeoc.com/webappviewer/>. When this method is not available, the following manual method may be used, or the use of the standard email system as described later in this attachment.

- A. Manual Method- Calling the affected Energy Provider and requesting data over the phone.
1. ESF12 utilizes the energy provider by County call list. These lists exist in a manual form at the ESF12 file cabinet or may be accessed from the ESF12 "File Library" or obtained by accessing the [ORS "Allshare" Drive→ESF12.]. ESF12 Rep should choose the County(s) that need to be included.
 2. The energy provider contact list provides phone numbers to those who are directly responsible for reporting the conditions of their respective system. The list also provides the total number of customers (meters served) by the provider in each county.
 3. Sign on to EMCOP, Locate the Energy Provider web site on the ESF12 drop down list.
 4. Open the Energy Provider map, select the Outage Table, right click and select print from the dropdown box.
 - a. County
 - b. Incidents
 - c. Customer Outages
 - d. Total # of Customers
 5. Manually collecting energy provider data:
 - a. Determine the affected county(ies)
 - b. Locate the Energy Provider contact information for the applicable county
 - c. Contact the #1 or #2 contact person
 - d. Request customer outage data and record on Attachment D-2 (This attachment is available electronically in the EMCOP File Library--a screen shot of the table is provided as Attachment C-1)
 - e. Provide appropriate data to SEOC Operations

6. Creating an EP Customer Outage map- (Assuming the electronic mapping capability is not available) Use the data collected in step 5 above,
 - a. "Hide" Energy Provider Columns that are not reported on and adjust data sheet and size to provide an email report of effected energy provider outages.
 - b. Determine the appropriate email address distribution.
 - c. Save the excel file to the related "storm" file on the ESF 12 Drive.
 - d. Provide the energy provider outage data to the appropriate distribution
 - e. If an energy provider outage map is required perform the following:
 1. Copy the excel file data:
 2. Open "www. BatchGeo.com"
 3. Delete the existing sample batch data file.
 4. Paste the energy provider outage data file to the Batch Geo Coder. Select the proper fields to display
 5. Initiate the Batch Geo Coder. Verify the correctness of the batching operations.
 6. Accept the Batch Geo Coding and provide the ESF 12 Email address to allow automatic sending of the new Batch Geo Map.
 7. Utilize the ESF 12 email account to send the mapping link to the appropriate address (es)

Sample Manual Energy Provider Update by County Data Sheet (ESF12 File Cabinet)

COUNTY	Code	ENERGY PROVIDER	PRIMARY CONTACT	NUMBER	SECONDARY CONTACT	NUMBER	TOTAL CUSTOMER COUNTS	# CUSTOMER OUTAGES	Duration of Longest Outage	Comments
1	OCONEE	BRE	Blue Ridge Elect Coop	Terry Ballenger	864-437-5983	Alan Blackmon 864-230-2724	28022			
2		DEC	DEC	Barbara Yarbrough	704-900-4510	Tina Worley 704-996-6682	10355			
3		HAE	Haywood Elect Coop	Norman Sloan	828-506-9925	Tom Batchelor 828-507-0397	17			
4		SML	Service Light - Wixmond Elect	Bob Faires	864-710-4649	Greg Dietterick 864-885-864-885	6334			
5		WCP	Westminster PWR Elect	Jeffrey Lord	864-903-2904	Clyde Crowe 864-903-1407	1545			
6		CWE	City of Westminster	Clyde Crowe	864-903-1407	864-647	1519			
7	Total						47,792			

Note: Providers are listed by county. Counties can be found using the tabs along the bottom of the spreadsheet.

RECORD KEEPING AND REPORTING CHECKLIST

Checklists

Open, Complete, Previously Accomplished, Not Applicable

Checklist: **ESF-12 Activation Checklist**

Hide Remarks



Show Remarks

☐

1.

Ensure telephone(s) operational (hunt group and rollover to State Warning Point) and telephone number at your position is correct.

☐

2.

Inventory administrative supplies (inventory sheet with supplies).

☐

3.

Open Operational Journal for your functional area/ESF in WebEOC. Only one operational Journal is required for each functional area/ESF.

☐

4.

Swipe in via security software or sign in on SEOC Sign-In Roster and obtain badge from security personnel

☐

5.

Notify ESF 5 Leader you are present. Locate assigned work area.

☐

6.

Start up the work area computer and insure you have a connection to access the required ESF directories and files for reporting. Also insure your web browser will open and locate the IRIS log in page and WebEOC software.

☐

7.

Establish file of Incoming/ Outgoing messages.

☐

8.

Make initial contact with individuals/agencies. Obtain telephone numbers, FAX, or any other communications available.

☐

9.

Review Functional Area/ESF tasks as outlined in the SEOC SOP, Section III, Annex M (FUNCTIONAL AREA/ ESF REPRESENTATIVE DUTY DESCRIPTIONS) and appropriate ESF/functional area SOPs.

☐

10.

Pass completed checklist to ESF-5 (submit via WebEOC).

☐

11.

NOTE: Only one activation checklist is required for each ESF or designated group.

Fueling and Refueling Operations

SOP-ESF12-IV. J requires ESF12 to implement the Hurricane Evacuation Fueling and Refueling Operations Annex 8.

Note: SCDOT in conjunction with SCEMD has developed specific evacuation routes that include lane reversals to support the flow of traffic away from a possible storm impact. This procedure utilizes the SCDOT routing to link the fuel/refuel operations with the evacuating public (customer). SCEMD holds the overall authority of enacting the fuel/refuel operations.

A. SCEMD requests that ESF12 implement fueling operations by identifying the appropriate SCDOT-Evacuation Routes:

1. Lane Reversal Maps- can be found on the SC-DOT Website at: <http://www.scdot.org/quicklinks.aspx> Click on the "Quicklinks"> Click on the "Evacuation Routes" to locate the appropriate route.
2. If the SC-DOT Website is not available, Contact ESF 1 for appropriate routing.

B. ESF12 initiates the following should Palmetto/EMCOP not be available:

1. Utilize the appropriate evacuation route and select the corresponding fuel stop BATCHGEO -Excel files from the ESF12 Library (20150406-Attachment F-Hurricane Evacuation Fuel Stops for SC Locations-).

NOTE: A hard copy of the Fuel Stop Excel Spreadsheet may be found in the ESF 12 File Cabinet in File ESF 12 Attachment F-Fuel/Refuel Stops or located on the ORS- L:\ESF 12\SOP\20150406-Attachment F-Hurricane Evacuation Fuel Stops for SC Locations-

2. Establish contact with the appropriate Fuel Stop Owner's Representative.

Note: The Fuel Stop Spreadsheet ("FSS") identifies the following: Station Location, type of fuel supplied, hours of operation, and Station Owner Contact Information. The Transporter Information will be supplied by the Station Owner Representative when needed. Use the link directions at the bottom of the spreadsheet to create the map.

- a. Ensure you include the Email address you want to use to send out the map to others. Once the Mapping process is complete, Batch Geo will send the map to the email address.
- b. Request the appropriate distribution of the Fuel Stop Map from Chief of Operations.

(Note all respondents will have to have access to Google Maps to open the map).

3. Initiates the Evacuation Fueling and Refueling Operating Log (SOP-ESF12 Exhibit 7)
 - a. Contacts each affected Fuel Stop Representative to determine tank inventory status.
 - b. Communicate with Fuel Stop Representative(s) to determine if refueling assistance is needed.
 - c. Provides Refueling status update to SEOC.
 - d. If required, requests SEOC assistance to support tanker deliveries.

Note: SCEMD must authorize the use of police escorts.

3. Assist in reallocating fuel terminal inventories to ensure that affected stations can refuel by notifying the appropriate representative(s). (A manual copy of this contact information may be found in the ESF12 File).
 - a. Buckeye Terminal Superintendent- Locate Contact Info at: VIII Attachment "K", Appendix G. SC- Bulk Storage Facilities Call List
 - b. Circle K Regional Director- Locate Contact Info at: VIII. Attachment "K" Appendix F. SC- Fuel/Refuel Plan Coordination Assistance
 - c. (20150406-Attachment F-Hurricane Evacuation Fuel Stops for SC Locations-).
 - d. Speedway, Inc. Marketing Representative- Locate Contact Info at: VIII. Attachment "K" Appendix G. SC- Fuel/Refuel Plan Coordination Assistance
 - f. SC Petroleum Marketers Association (SCPMA) - - Locate Contact Info at: VIII Attachment "K", Appendix F-
 - g. SC Association of Convenience Stores--Locate Contact Info at: VIII Attachment "K", Appendix F. SC Fuel/Refuel Plan Coordination Assistance
 - h. SC Petroleum Council- (SCPC) – Locate contact Info at: VIII Attachment "K", Appendix F. SC- Fuel/Refuel Plan Coordination Assistance
4. Coordinate with Station Representative(s) to reallocate Fuel Inventory to

the affected fuel stops within their normal supply chain. If Station Representative is out of allocated fuel, seek alternative fuel supply for station, or designate another fuel stop in the area that has allocation.

- a. Manager, Buckeye Corp. Allocation of Buckeye Fuel-. - Locate Contact Info at: VIII Attachment "K", Appendix G. SC- Bulk Storage Facilities Call List
 - b. Manager, Speedway Corp. - Locate Contact Info at: VIII Attachment "K", Appendix G. SC- Bulk Storage Facilities Call List
 - c. Manager, Circle K Logistics, - Locate Contact Info at: VIII Attachment "K", Appendix G. SC- Bulk Storage Facilities Call List
5. Coordinate any transaction required with appropriate personnel. Note any contract implications in ESF12 Log. If evacuation traffic hinders fueling operations, advise the County REM to coordinate local resources to assist.
- a. Coordinate with the Fuel Station Representative and Transporter to facilitate tanker access to Fuel Station.
 - b. Inform ESF1 of the location for the designated fuel stops and transporter information associated with the refuel route.
 - c. Review tanker routing with ESF1 Representative to facilitate access from terminal to Fuel Station.
6. Actions to be taken if Terminal(s) is low on Fuel.
- a. Contact Terminal Representative to determine appropriate action. Locate contact Info at: VIII Attachment "K", Appendix G. SC- Bulk Storage Facilities Call List
 - b. If Terminal Allocation issues exist, notify Buckeye/Kinder-Morgan Corp Allocation Representative- Contact info located at: VIII Attachment "K", Appendix G. SC- Bulk Storage Facilities Call List.
 - c. Contact Terminal Superintendent, Contact Info located at: - Locate contact info at: VIII Attachment "K", Appendix G. SC- Bulk Storage Facilities Call List if Charleston Terminal is affected.
 - d. Notify SCEMD of Terminal Inventory Status.
 - e. Determine if Fuel Barge delays are restricting terminal inventories. If so contact USCG-- Request "First right of Passage for affected Fuel Terminal Barges".
 - f. Work with Fuel Stop Representative(s) to obtain additional fuel from external sources-
 - g. Consider utilizing other Fuel Stops that have reserved fuel

- inventory available.
 - h. Inform SCEOC of fuel Inventory Status
- C. ESF12 will manage the evacuation fuel/refuel process and report the required data to SEOC.

Note: Exhibit-7 provides a screen shot of the excel spreadsheet that is located in the ESF12 (Desk for manual copy), or "Library file". Open the file and enter the date/time to begin tracking the Refuel Process.

- 1. Coordinate with Fuel Stops to keep the fueling process functioning.
 - a. Request timely updates of fuel stop inventories for reporting purposes.
 - b. Coordinate with Terminal suppliers, Transporter Representatives, Independent Transporters, and ESF1 to assist tankers in gaining access to fuel stops.
 - c. Coordinate with ESF16/ local County EOC Representatives to support tanker movements.
 - d. Provide SEOC updates every 6 hours until fueling operations are terminated.
 - 2. Coordinate with SCEMD to terminate fueling operation no later than four hours from onset of 39 MPH winds anywhere on the coast of South Carolina.
- D. SCEMD may require ESF12 to initiate a "Reentry and Post-Landfall fuel" process.
 - 1. ESF12 will work with ESF1 and ESF16 Representatives to determine the proper routing for the "Reentry/Post- landfall refueling" process.
 - 2. Identify the appropriate Fuel/Refuel Station Map from step (B.) above.
 - 3. Contact the appropriate Fuel Stop Representative to determine which stations may be available for refueling plan.
 - 4. Establish communications with the SCPA and SCPMA/SCACS Representative's to inform them of the re-entry plan refueling operations.
 - 5. Identify Transporters required to conduct refueling operations.

Note: The Fuel Transporter and the Fuel Terminal Contact information should be available on Exhibit-7 ESF12 Fuel Log located in the ESF12 Library File

6. Coordinate with ESF1 to establish refueling routes:

- a. Provide Transporter data.
- b. Provide Fuel Stop data.

Note- SEOC must approve Law Enforcement escort of bulk fuel trucks.

7. The SCDOT Representative of ESF1 will assist ESF12 to locate each refueling station along the reentry route.

8. Assist in developing alternative routes for bulk fuel transportation to/from the reentry fuel stops.

9. Inform ESF12 of alternative routing for transporters.

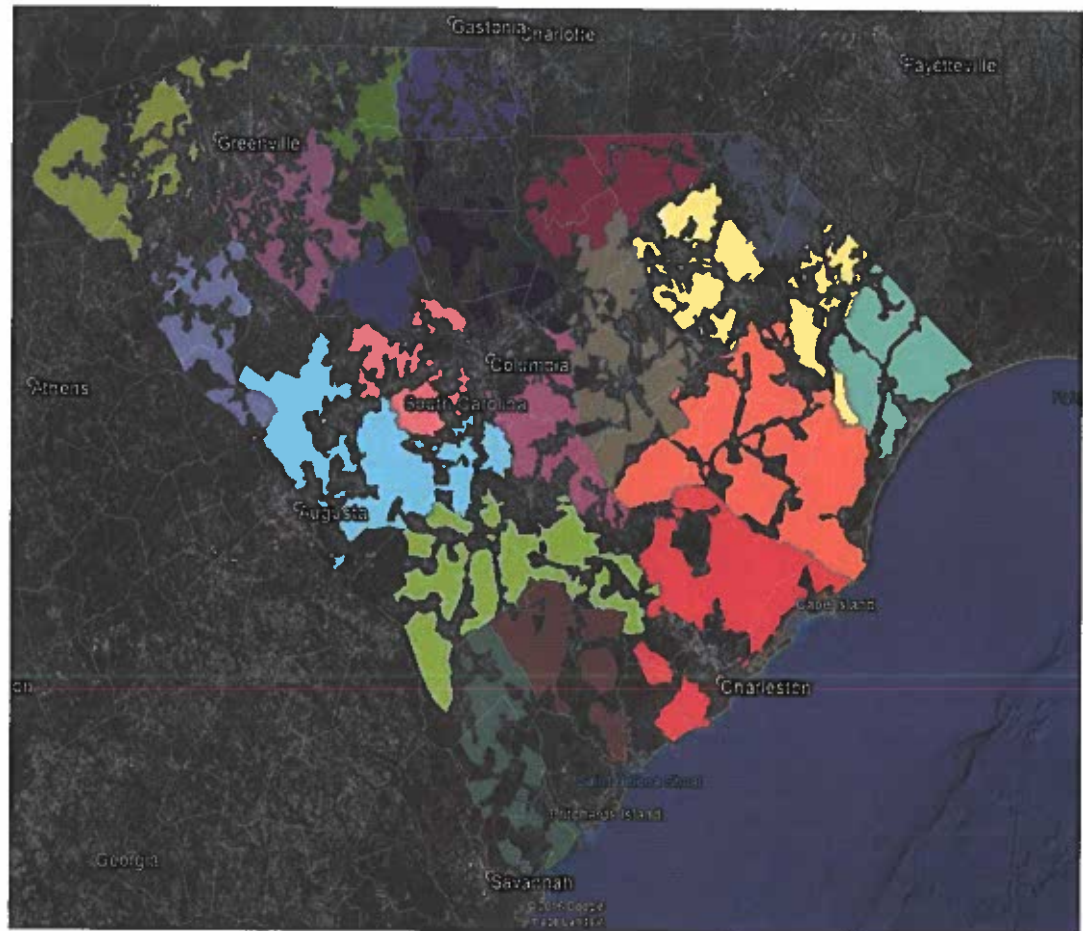
E. ESF12 will coordinate with Refueling Representatives to keep the fueling process functioning.

- 1. Monitor fuel stop inventories.
- 2. Coordinate tanker refueling routes through ESF1.
- 3. Coordinate with ESF16 or local county support when requested by SCEMD to support tanker movements.
- 4. Provide SEOC updates every 6 hours of fuel status availability until fueling operations are terminated.

REFUELING LOG SHEET (Example)-Located in ESF12 “Library File”

SCMDO EVENT Tracking #			SOP-ESF 12-EXHIBIT-7- EVACUATION FUELING AND REFUELING OPER LOG											SEOC Report time (Required every 6 hrs.)		comments
ESF 12 Rep Initial	DATE	TIME	FUEL STOP LOCATION	Fuel Stop Contact #	INVENTORY STATUS	FUEL TYPE	Transporter	Transporter Contact #	Bulk Storage Location	SCDOT Evacuation Map						
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																
25																

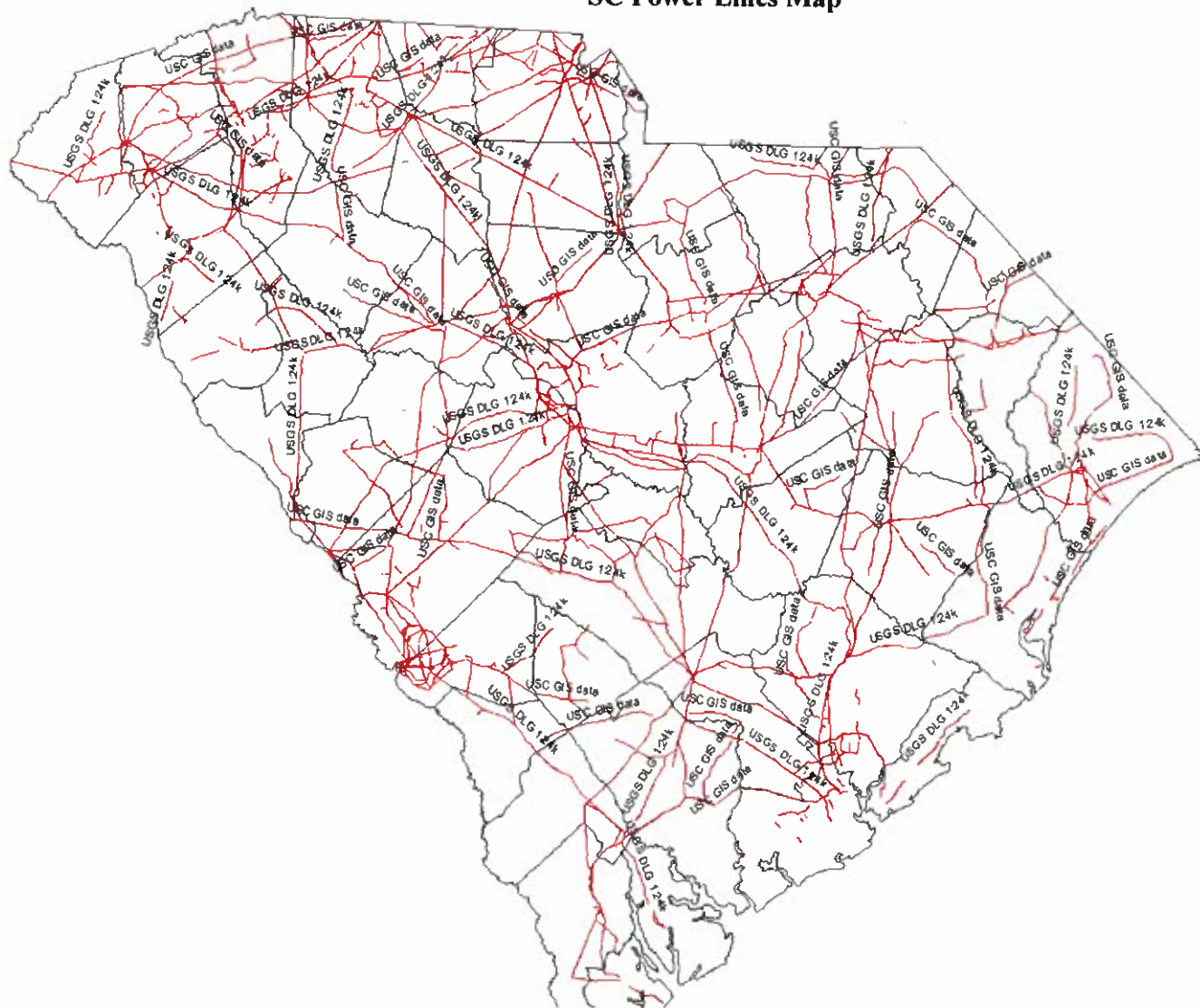
GOOGLE EP MAP SCREEN SHOT



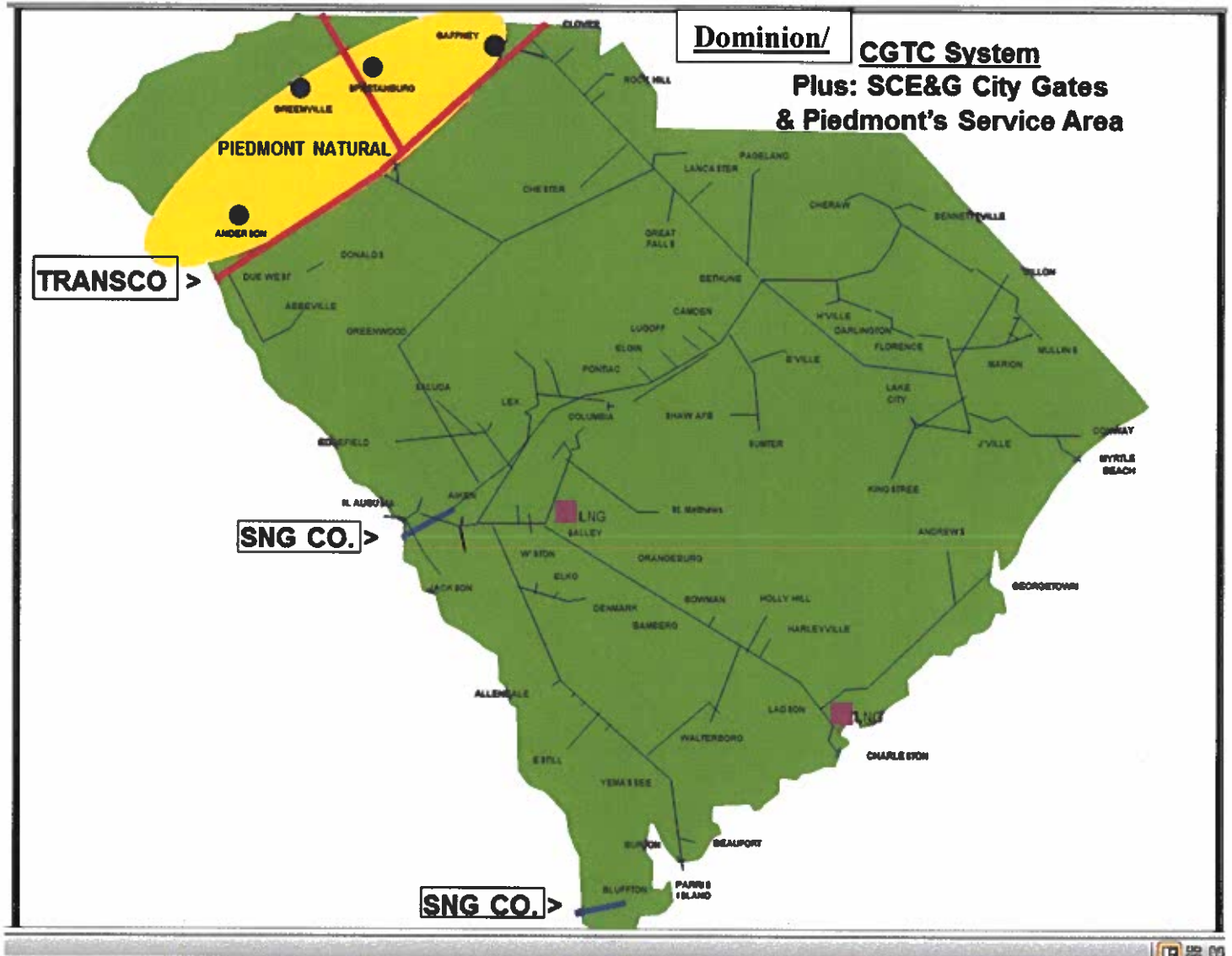
Copy and paste the below URL into your browser to obtain a functional map.

<http://scemd.maps.arcgis.com/apps/webappviewer/index.html?id=08acda04039741bda7303242ed212604>

SC Power Lines Map



Natural Gas Transmission Lines and Principal Gas Mains



Oil Pipelines that Transverse South Carolina



ENERGY ASSURANCE PLAN WITH APPENDICES

- Hard Copy-Located in SEOC-ESF12 files.
- Electronically-EMCOP, sign on-File Library-ESF12-F
- ORS 'Allshare' drive, ESF12 Folder

ENERGY ASSURANCE PLAN ENCLOSURE 1**EAL1: MONITOR & ALERT TABLE (green)**

<u>1.1</u> Electric Generation Stability	<u>1.2</u> Petroleum Product Supply/Delivery	<u>1.3</u> Natural Gas Supply Status	<u>1.4</u> Propane or Essential Energy Related Products	<u>1.5</u> SC-Cyber Security Contact http://www.admin.sc.gov/technology
Evaluate historical data for trends/compare energy provider reports from ORS- determine required action	No notification from SEOC 24/7 desk that a County reported Gas/Diesel shortages - or- Petroleum Association reports possible delays, or pricing spikes curtail purchasing adequate supply.	No alerts from SEOC 24/7 desk concerning Natural Gas shortages/EIA trend indicates there may be regional shortages	No notification from SEOC 24/7 desk of county indicating shortage of Propane/ energy provider notifies of energy related products impacting energy supply chain	Notification from (SC-ISAC) Chief Security Officer of Cyber Security Alert that may impact energy related sector
PROGRAM STEPS EAP-II.A, III. EAL-1.1 Initiate call list-1, if necessary SOP-ESF-12-III.A.3	PROGRAM STEPS EAP-II.C, III. EAL 1-2 Initiate call list-2, if necessary SOP-ESF-12.III.A.6	PROGRAM STEPS EAP-II.B, III.EAL-1-3 Initiate call list-3, if necessary SOP-ESF-12 III.A.3	PROGRAM STEPS EAP-II.D, EAL-1.4 Initiate call list-4, if necessary SOP-ESF-12-IV.E,F.	PROGRAM STEPS EAP II.F,EAL-1.5 Initiate call list-5, if necessary SOP-ESF-12-IV.E,F.

ENERGY ASSURANCE PLAN ENCLOSURE 2**EAL-2: MILD ENERGY SHORTAGE TABLE**

<u>2.1</u> Electric Generation Stability	<u>2.2</u> Petroleum Product Supply/Delivery	<u>2.3</u> Natural Gas Supply Status	<u>2.4</u> Propane or Essential Energy Related Products	<u>2.5</u> SC-ISAC Cyber Security Status
Energy Provider Outage Reporting Exceeds 10% Outage Reporting in 2 Counties	Notification from SEOC 24/7 Desk of County Petroleum Problems- or- Petroleum Association Reports Significant Supply Reduction for 2 weeks	24/7 Desk Alert that County Reports/ NG curtailed to Interruptible Customers, Energy Providers Report Intermediate Base Generation Affected	Notification from SEOC 24/7 Desk of more than one County shortage of Propane/ Energy Provider notifies of energy related products impacting energy supply chain for Electrical Generation	Notification from SC- Chief Security Officer of Cyber Security Elevated Threat to Energy Related Sector
PROGRAM STEPS EAP-III. EAL-2.1 Initiate Call List-1, if necessary SOP-ESF-12-III.C., E	PROGRAM STEPS- EAP-III- EAL-2.2 Initiate Call List-2, if necessary SOP-ESF-12.III.G Through I steps	PROGRAM STEPS EAP- III.EAL-2.3 Initiate Call List- 3, if necessary SOP-ESF-12 III.A.4.C.E	PROGRAM STEPS EAP- EAL-2.4 Initiate Call List-4, if necessary SOP-ESF-12-IV.F	PROGRAM STEPS EAP-EAL-2.5 Initiate Call List-5, if necessary SOP-ESF-1 2-IV.F

ENERGY ASSURANCE PLAN ENCLOSURE 3
EAL-3: MODERATE ENERGY SHORTAGE TABLE (Yellow)

<u>3.1</u> Electric Generation Stability	<u>3.2</u> Petroleum Product Supply/Delivery	<u>3.3</u> Natural Gas Supply Status	<u>3.4</u> Propane or Essential Energy Related Products	<u>3.5</u> SC-ISAC Cyber Security Status
Energy provider outage reporting exceeds 20% customers in any county served	Notification from SEOC 24/7 desk reports Counties out of Gas/Diesel products -or- Petroleum Association reports a moderate shortage of 10-15% in petroleum product supply for three or more weeks	24/7 desk alert that County reports natural gas curtailed to residential customers, energy providers report intermediate base generation curtailed	Notification from SEOC 24/7 desk of more than one County shortage of Propane. Energy provider notifies of disruption of energy related products that will impact energy supply chain for electrical generation	Notification from SC-(ISAC) Chief Security Officer of Cyber Security attack has penetrated critical infrastructure systems that impact the energy related sector
PROGRAM STEPS EAP-III. EAL-3.1 Initiate Call List-1, if necessary SOP-ESF-12-III.B.2. if activated	PROGRAM STEPS- EAP-III- EAL-3.2 Initiate Call List-2, if necessary Provide Gas/Diesel Rationing Plan to Governor SOP-ESF-12.IV.G Through I steps	PROGRAM STEPS EAP- III.EAL-3.3 Initiate Call List-3, if necessary SOP-ESF-12 IV.B.D.E.F and L if ESF-12 is activated	PROGRAM STEPS EAP- EAL-3.4 Initiate Call List-4, Provide media briefings for Governor, if necessary SOP-ESF-12-IV.B.F.	PROGRAM STEPS EAP-EAL-3.5 Initiate Call List-5, if necessary SOP-ESF-12-IV.B.C, as required for energy provider support

ENERGY ASSURANCE PLAN ENCLOSURE -4
EAL-4: MODERATE ENERGY SHORTAGE TABLE (RED)

<u>4.1</u> Electric Generation Stability	<u>4.2</u> Petroleum Product Supply/Delivery	<u>4.3</u> Natural Gas Supply Status	<u>4.4</u> Propane or Essential Energy Related Products	<u>4.5</u> SC-ISAC Cyber Security Status
Energy Provider outage reporting major transmission outages> 20,000 customers in multiple counties	Notification from SEOC 24/7 desk reports Counties out of Gas/Diesel products -or- Petroleum Association reports a severe shortage of 20-30% in petroleum products that are affecting in-state supply.	24/7 desk alert that County reports natural gas curtailed to residential customers in multiple counties/ Energy Providers report natural gas reserved supply to intermediate base generation cannot be met	Notification from SEOC 24/7 desk of more than one County shortage of Propane. Energy provider notifies of disruption of energy related products impacting energy supply chain for electrical generation	Notification from SC-ISAC Chief Security Officer of Cyber Security attacks have penetrated critical infrastructure causing unreliable generation service resulting in multiple outages
PROGRAM STEPS EAP-III. EAL-4.1 Initiate Call List-1, If necessary SOP-ESF-12-IV.J.5.a-m.	PROGRAM STEPS- EAP-III- EAL-4.2 Initiate Call List-2, If necessary, enact Gas/Diesel Rationing Plan upon request of Governor SOP-ESF-12.IV.J.5.d Through I steps	PROGRAM STEPS EAP- III.EAL-4.3 Initiate Call List-3, If necessary SOP-ESF-12 IV.J.a-m. if ESF-12 is Activated	PROGRAM STEPS EAP- EAL-4.4 Initiate Call List-4, Provide media briefings for Governor, if necessary Assist in preparing waivers for energy providers, if necessary SOP-ESF-12-IV.J.5.a-m	PROGRAM STEPS EAP-EAL-4.5 Initiate Call List-5, If necessary SOP-ESF-12-IV.L, as required for energy provider support

ENERGY ASSURANCE PLAN ENCLOSURE 5
EAL-5 RECOVERY FROM ENERGY SHORTAGES: (Blue)

<u>5.1</u> Electric Generation Stability	<u>5.2</u> Petroleum Product Supply/Delivery	<u>5.3</u> Alternative Generation Supply Status	<u>5.4</u> Emergency Backup Generation	<u>5.5</u> SC-Cyber Security Status
Energy Providers utilize detailed recovery procedures to protect employees, customers, the general public, and utility equipment, while systematically restoring their energy service.	No Notification from SEOC 24/7 Desk that a County reported Gas/Diesel Shortages- or- Petroleum Association Reports Possible Delays, or Pricing Spikes Curtail Purchasing adequate Supply.	Alternative Generation available to augment the recovery process. Santee Cooper operates the following LFG units 5.3.1 Anderson County 5.3.2 Horry County 5.3.3 Lee County 5.3.4 Richland County 5.3.5 Coastal Carolina University 5.3.6 Georgetown County 5.3.7 Berkeley County	Emergency Generators play a key part in restoration efforts. SC has a number of EG's installed that may provide assistance: 5.4.1- Medical Facilities 5.4.2- EOC Facilities 5.4.3 SC-Schools 5.4.4 SC Fire Stations 5.4.5 Portable EG's –may be contracted for use	SC-ISAC and network providers utilize disaster recovery plans to restore their portion of the SC cyber network. SEOC coordinates between all ESF's to assist in restoration efforts.
PROGRAM STEPS 5.1.1- PEC Restoration Plan- EMG-Subs-0006. 5.1.2 DEC- Emergency Response Manual- 5.1.3 SCE&G- Emergency Response Manual 5.1.4 Santee Cooper- Emergency Response Manual- Initiate Call List-1, If necessary SOP-ESF-12-V.A.B	PROGRAM STEPS- EAP-II.C, III. EAL 1-2 Initiate Call List-2, If necessary SOP-ESF-12.IV.F.G-I Attachment-F...	PROGRAM STEPS EAP-III: EAL-5 Initiate Call List-5, If necessary SOP-ESF-12.IV.K.6	PROGRAM STEPS EAP-V. EAL-5.0, Appendix I Initiate Call List-5, if necessary SOP-ESF-12-IV.N.5/V.A	PROGRAM STEPS EAP-V Initiate Call List-5, If necessary SOP-ESF-12.V.B

GAS DISTRIBUTION AND TRANSMISSION SYSTEM INFORMATION CY 2018			
GAS OPERATORS	TOTAL Number Services	TOTAL Miles of Main	TOTAL Miles Transmission Pipelines
Ameresco Palmetto	N/A	N/A	8.77
Bamberg BPW	1555	83	N/A
Bennettsville, City of	3281	86	N/A
Cherokee Co. CoGen.	N/A	N/A	2
Chester Co. NGA	10180	599	N/A
Clinton-Newberry NGA	16782	761	103
First Quality	N/A	N/A	2
Fort Hill NGA	53056	1893	N/A
Fountain Inn, City of	9563	342	N/A
Greenwood CPW	24542	756	50
Greer CPW	24472	775	43
Kimberly Clark	N/A	N/A	4
Lancaster NGA	29787	893	N/A
Laurens CPW*	8057	412	N/A
Lockhart Power (Sp. Cty.)	N/A	N/A	6
MP Greenwood	N/A	N/A	6
Orangeburg DPU	10062	382	N/A
Patriot Energy Group	0	17	69
Piedmont Natural Gas	162451	3786	78
SCE&G	415045	9748	454
SCE&G LNG	N/A	N/A	0
Siemons Industries	N/A	N/A	16
Union, City of	7495	421	N/A
Winnsboro, Town of	2920	140	N/A
York Co. NGA	69544	1763	N/A
TOTALS	848,792	22,857	842

Username and Passwords

Computer Login: Username: [REDACTED] (based on computer name in top right-hand corner)
Password: [REDACTED]

EMCOP: Username: [REDACTED]
Password: [REDACTED]

Pvision: Username: [REDACTED]
Password: [REDACTED]

ESF Email: URL: <https://outlook.office365.com/owa/>
Username: [REDACTED]
Password: [REDACTED]

Palmetto: Username: Your personalized account info created in training
Password: Your personalized account info created in training