

SITE SPECIFIC PLAN

PART 1, SCORERP



OCONEE NUCLEAR STATION

December 2024

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I. INTRODUCTION

The Oconee Nuclear Station (ONS) Site Specific Plan, Part 1, South Carolina Operational Radiological Emergency Response Plan (SCORERP), provides for the guidance, coordination and utilization of state and other resources in support of local governments in the event of a radiological incident at ONS, located in Oconee County. The ONS Site Specific Plan forms an integral part of the SCORERP and addresses matters pertaining directly to ONS not already addressed in the SCORERP Basic Plan.

II. PURPOSE

To protect the populace and property in areas that may be affected by a radiological incident at ONS and to provide for off-site recovery.

III. SITUATION AND ASSUMPTIONS

A. Situation

1. ONS is located near the eastern border of Oconee County, just north of Highway 183 on Lake Keowee. The geographic coordinates are: 34° 47' 38.2" N, 82° .53' 55.4" W (See Figure 1). ONS is owned and operated by Duke Energy Corporation, whose corporate headquarters is in Charlotte, North Carolina.
2. In operation since 1973, ONS has three pressurized water reactors that were manufactured by the Babcock and Wilcox Corporation. ONS has a production capability of 2.6 million kilowatts of power. It is a vital component of the Keowee-Toxaway Complex, which is additionally comprised of two hydroelectric developments that jointly produce 760,000 kilowatts of power.
3. Portions of Oconee and Pickens County are within the 10-mile Emergency Planning Zone (EPZ) (See Figure 1). Both counties have formulated detailed radiological emergency response annexes as part of their county Emergency Operations Plans (EOPs), and these annexes fully support the operational framework of the SCORERP.
4. Oconee, Pickens, Anderson, Abbeville, Laurens, Greenville, Greenwood and Spartanburg Counties of South Carolina, plus Rabun, Towns, White, Hall, Habersham, Stephens, Banks, Franklin, Jackson, Madison, Hart and Elbert Counties in Georgia, lie within the 50-mile Ingestion Exposure Pathway Emergency Planning Zone (IPZ). Clay, Macon, Swain, Jackson, Haywood, Transylvania, Henderson, Buncombe and Polk Counties of North Carolina are also within the IPZ of ONS (See Figure 2).
5. ONS prevailing winds are from the west.

B. Assumptions

1. A radiological incident could occur at ONS that may cause an off-site hazard to residents and property. Planning for a radiological incident will facilitate an effective response.

2. Retention of existing licenses for Nuclear Power Plants (NPPs) is dependent on effective emergency operations of state and local jurisdictions and of the licensee, in accordance with NUREG-0654, FEMA-REP-1 REV. 2.
3. A radiological incident at ONS that presents off-site radiological hazards will involve the governments of Oconee and Pickens counties. Therefore, state government will be required to provide direction, coordination, and support in accordance with the State Code of Regulations 58-1 and 58-101.

IV. CONCEPT OF OPERATIONS

A. General

Under the direction of the Governor, the South Carolina Emergency Management Division (SCEMD) and Oconee, Pickens, Anderson, and Greenville Counties will coordinate off-site response to a radiological incident at ONS. Through the SCEMD Director and the State Emergency Operations Center (SEOC), the Governor will exercise direction and control of state emergency operations. The SCEMD Director will coordinate all state agencies, departments and local emergency response organizations mobilized pursuant to this plan. The South Carolina Emergency Operations Plan (SCEOP) designates Emergency Support Functions (ESF) to ensure adequate response and efficient use of state resources. ESF responsibilities and procedures are contained in the SCEOP and its supporting Standard Operating Procedures (SOP). In the event of a radiological incident at ONS, federal agencies will provide support to the State under the provisions of the Nuclear/Radiological Incident Annex (NRIA) to the Response and Recovery Federal Interagency Operational Plans.

B. Specific

1. Alert and Notification

- a. See Annex 1 (Alert and Notification).
- b. Alert and Notification procedures are designed to inform and instruct the populace in EPZs, and to notify federal, state and local Radiological Emergency Response (RER) forces.

(1) Notification Method to the Offsite Response Organizations (ORO)

- (a) In the event of an incident at ONS, the primary means for notifying off-site response forces is Duke Emergency Management Network (DEMNet), which is a teleconferencing system that operates using both VoIP (primary) and satellite phone technology. Only one technology is required to consider the system functional.
- (b) Backup systems for DEMNet is a commercial telephone.

(2) Notification Method to the Public

- (a) A fixed siren system is the primary means of alerting the public within the 10-mile EPZ.
- (b) Route alerting is the backup to the sirens.
- (c) IPAWS messages will be coordinated through Emergency Support Function-15 (ESF-15) with the State Warning Point utilizing existing plans and procedures for the system. (South Carolina IPAWS Plan, ESF-15 SOP, State Warning Point SOP)

2. State Emergency Operations Center (SEOC)

- a. The SEOC, located at 2779 Fish Hatchery Road, West Columbia, SC 29172, may be activated upon notification of an Alert Emergency Classification Level (ECL). Direction and control of State emergency response forces will emanate from the SEOC.
- b. The South Carolina Department of Public Health (SCDPH) and South Carolina Department of Environmental Services (SCDES), under the auspices of ESF-8 and ESF-10, will be co-located in the SEOC. A SCDES technical representative will be dispatched to the Duke Energy Emergency Operations Facility (EOF) located at 9700 David Taylor Dr, Charlotte, NC 28262, as well as to the affected county or counties.
- c. ONS will provide a technical representative to the SEOC and the county EOCs.
- d. SCEMD will provide Radiological Emergency Preparedness (REP) and/or REM (Regional Emergency Manager) liaison officers to both host and risk county EOCs and the Duke Energy Corporation Emergency Operations Facility (EOF).

3. Local

County/Municipal governments are responsible for local radiological emergency response within their jurisdictions, except for technical radiological assessment. County/Municipal governments will coordinate with the Governor of SC or his/her designee (normally the director if SCEMD) along with state agencies, departments and local emergency response organizations pursuant to this plan. Once the SEOC personnel have validated the request and verified available resources, additional assets may be furnished to aid local agencies.

4. Traffic Management

- a. Upon declaration of a Site Area Emergency (SAE) ECL, ESF-16 (Emergency Traffic Management) led by the South Carolina Highway Patrol (SCHP) will coordinate the occupation of designated Traffic and Access Control Points (TACPs) with the County Sheriff or Chief law enforcement officer within the 10-mile EPZ.

The purpose of TACPs is to provide assistance during an evacuation and prevent access to restricted areas. TACP locations are depicted in Figure 1 as Traffic Control Points.

- b. The SC Department of Natural Resources (SCDNR) will patrol Lake Keowee and Lake Hartwell to prevent water transportation access to the facility and to initiate lake clearing and evacuation procedures
 - c. Duke Energy security personnel will control entrance to the site property and to the plant's EOF and the utility JIC.
 - d. Only pre-designated forms of identification will be honored at security check points as outlined in the SCORERP Basic Plan, Attachment D.
 - e. Local authorities are responsible for security and traffic control within their jurisdiction during all phases of a radiological incident. ESF-13 (Law Enforcement) will coordinate requests from local authorities when additional personnel or equipment are required.
5. Radiological Monitoring and Decontamination
- a. See SCORERP Basic Plan, Annex 6 (Radiological Exposure Control)
 - b. Properly trained County teams will conduct radiological monitoring and decontamination of evacuees and emergency workers, emergency vehicles and equipment with technical assistance provided by SCDES, as required.
 - c. Oconee, Pickens, Anderson, and Greenville Counties have designated radiological monitoring and decontamination points. The location of each monitoring and decontamination point is contained in county EOPs.
 - d. SCEMD maintains its own radiological laboratory. SCEMD is responsible for the calibration and maintenance of radiological equipment for Oconee, Pickens, Anderson, and Greenville Counties emergency workers.
 - e. The South Carolina Radiological Equipment and Personnel Redistribution Standard Operating Procedures can be activated to provide personnel and equipment support in the event of an incident at ONS.
6. Evacuation
- a. When a State of Emergency has been declared, the Governor may issue orders to evacuate all or portions of the 10-mile EPZ surrounding ONS (See Figure 1). Orders for evacuation of the 2-mile EPZ may precede orders for evacuation of other zones within the 10-mile EPZ.
 - b. Evacuation will be ordered at the General Emergency ECL unless it is deemed unsafe or unfavorable due to a hostile action based (HAB) incident or other impediment. Evacuation could be ordered at the Site Area

Emergency or ALERT ECLs if the potential for further degradation of plant conditions appears imminent.

- c. During a rapidly progressing incident, ONS officials may recommend evacuation to county authorities who may then recommend and coordinate the evacuation of impacted zones.
- d. The Sheriff (as chief law enforcement officer of the affected county) will, in conjunction with the SCHP and other law enforcement agencies, coordinate evacuation activities in accordance with the affected county's EOP.
- e. Clemson University, located in Zone C-2, has its own evacuation plan which may be found in Pickens County EOP Annex Q, FNF/RERP", Attachment 4, "Emergency Evacuation Plan for Clemson University. A liaison from Clemson University will be at the Pickens EOCs to coordinate the evacuation of Clemson University students.
- f. Residential Population based on the 2020 Census Data

(1) Population Densities and Evacuation Times:

Zone	Population
A-0	971
A-1	972
A-2	2,648
B-1	3,341
B-2	6,830
C-1	612
C-2	33,327
D-1	1,293
D-2	24,242
E-1	1,950
E-2	13,540
F-1	2,626
F-2	3,991
Entire EPZ	96,343

NOTE: Clemson University in Zone C-2 has a full-time student population of approximately 25,000 and approximately 6,000 full and part-time employees, with over 85,000 people expected on campus during fall football weekends. The worst-case evacuation time with peak Clemson University population would take approximately seven hours. Please see the Evacuation Time Estimate (ETE) study for complete evacuation information.

- (2) Evacuation time is 5-6 hours.
- (3) Population Distribution Map (See Figure 3).
- g. Evacuation Zone, Landmark and Boundary Descriptions (see Table 1)

- h. Oconee and Pickens Counties have designated evacuation routes for persons living, working, and transiting the 10-mile EPZ. These routes funnel into state evacuation routes that commence at the EPZ periphery and lead to shelter areas (See Figure 1).
 - i. The affected county/counties will provide transportation to those evacuees who are without transportation and to individuals with functional needs requiring special transportation. The number of individuals needing transportation will be determined through the special assistance card in the Duke Emergency Preparedness Information mailer. State assistance may be requested. Special transportation needs are addressed in the Pickens and Oconee County EOPs.
 - j. All evacuees will be processed through the reception centers/shelters as outlined in Annex 2 (Reception Centers and Shelters). Each evacuee, including those who elect not to accept temporary shelter, will be monitored, registered and processed. For control and re-entry purposes, each county will maintain records for contacting evacuees. Temporary housing should be located at least five miles from the EPZ outer boundary (15 miles from ONS).
 - k. See SCORERP Basic Plan for reentry, return, and relocation information.
- 7. Radiological Exposure Control

See SCORERP Basic Plan, Annex 6 (Radiological Exposure Control).
- 8. Transportation
 - a. The ONS 10-mile EPZ is covered by a road system that provides multiple primary and alternate routes for evacuation and access to the area. There are no obstacles that would impede rapid evacuation or response.
 - b. Counties and municipal governments have plans for acquiring emergency transportation in the event of a radiological incident. The means for evacuating schools, jails, hospitals, nursing homes, individuals with functional needs and residents without private transportation are identified in county plans.
 - c. State transportation resources may be requested to augment county transportation requirements.
- 9. Medical
 - a. See Annex 3 (ONS Medical & Public Health Support).
 - b. See SCORERP Basic Plan, Annex 5 (Medical & Public Health Support).
- 10. Communications

- a. In the event of an emergency at ONS, the site is capable of notifying state and local emergency response networks on a 24-hour basis. The ONS Emergency Coordinator or designee is responsible for notifying the State Warning Point (SWP)/SEOC and the Pickens and Oconee County Warning Points or EOCs. Communication between ONS and the State and local EOCs are through the following means:
 - (1) DEMNet connects the ONS Control Room, Technical Support Center (TSC) and EOF with the SWP/SEOC and Pickens and Oconee County EOCs and County Warning Points. DEMNet is used to provide initial and updated information concerning ONS status.
 - (2) Standard commercial and satellite telephone lines.
 - (3) A conference bridge line will be established by SCEMD as the primary means for OROs protective action discussion and decision making.
 - (4) A DEMNet decision line (DL) is located in the Duke Energy EOF, SEOC, Pickens and Oconee County EOCs, and the EAS LP-1 Station (WFBC-Greenville). This DL is the secondary communication line for decision making on protective actions and/or coordination for siren activation.
- b. County communications officers are responsible for communications within their jurisdiction during a radiological emergency. Their responsibilities include the activation of communications systems, the maintenance and operation of primary and alternate systems on a 24-hour basis and reporting the system's status during an emergency. The responsible parties are:
 - (1) Pickens County: Communications Officer, responsible to the Director, Pickens County Emergency Management Department. Back-up communications exist at the county 911 center.
 - (2) Oconee County: Communications Officer, responsible to the Oconee County Sheriff.
- c. Communications with local governments in the 10-mile EPZ will be tested weekly. Communications with federal emergency response organizations shall be tested quarterly. The Duke Energy EOF will test DEMNet on a monthly basis and the DL on a quarterly basis. Communications between the nuclear station, State, and local EOCs, and field assessment teams shall be tested annually. Communication drills will also include the aspect of understanding the content of messages.

11. Training

County directors and directors of State agencies are responsible for assuring Radiological Emergency Response (RER) training is conducted in accordance with the SCORERP Basic Plan, Annex 2 (Training).

12. Drills and Exercises

- a. See SCORERP, Basic Plan, Annex 4 (Exercises and Drills).
- b. Exercises are designed to test all elements of emergency preparedness plans pertaining to ONS and the capability of support elements in the 10-mile EPZ cited in such plans. A biennial exercise will be conducted and will involve mobilizing state and local government personnel and resources adequate to verify the capability to respond to an incident scenario (simulated emergency) at ONS. The exercise will be evaluated and critiqued by FEMA.
- c. Drills are supervised periods of instruction designed to test, develop and maintain skills of individuals who form a part of radiological emergency response organizations. County directors shall ensure that drills are conducted by qualified drill instructors in the frequency listed below:
 - (1) Fire Drills: Annual fire drills at ONS will involve the participation of the Oconee County Rural Fire Protection Association.
 - (2) Medical Service Drills (MSD):
 - (a) Annually, ONS is evaluated by the NRC. A simulated, contaminated/injured casualty from ONS will be treated and transported by Oconee/Pickens EMS, commonly known as MS-1 drill.
 - (b) Annually, the State and county EMS are evaluated by FEMA. A simulated, radiologically contaminated/ injured casualty from the ONS 10-mile EPZ general population will be treated and transported to AnMed Cannon Pickens County or Oconee Memorial Hospital/Greenville Hospital System (OMH/GHS), Oconee County, alternately. (Known as MSD)

V. ORGANIZATION AND ASSIGNMENT OF RESPONSIBILITIES

- A. State (See SCORERP Basic Plan, paragraph VIII)
- B. Local (See Anderson, Greenville, Oconee, and Pickens County EOPs)
- C. Organizational Relationships (See Figure 4)

VI. ADMINISTRATION AND LOGISTICS

- A. See the South Carolina Emergency Operations Plan (SCEOP), Annex XII (Finance and Administration), Attachment A – SC Logistics Plan
- B. Counties provide their own administrative and logistic support. Requests for augmentation may be submitted in accordance with the SCEOP.

VII. DIRECTION AND CONTROL

A. SEOC

The SEOC is located at 2779 Fish Hatchery Road, West Columbia, SC 29172.

B. County Emergency Operations Centers

- 1. Pickens: 222 McDaniel Ave, B-17, Pickens, SC 29671. The alternate EOC is located at 1509 Walhalla Highway, Pickens, SC 29671.
- 2. Oconee: Oconee County Law Enforcement Center, 300 S. Church Street, Walhalla, SC. The alternate EOC is located at Westminster Fire Headquarters, 216 Emergency Lane, Westminster, SC 29693
- 3. Greenville: City Hall, 206 South Main Street, Greenville, SC. The alternate EOC is located at Greenville County Square, 301 University Ridge Suite 400, Greenville, SC 29601.
- 4. Anderson: 200 Bleckley Street, Anderson, SC 29625.

C. Oconee Nuclear Station

- 1. The Duke Energy EOF is located at 9700 David Taylor Drive, Charlotte, NC 28262

TABLE 1 – 10-MILE ONS EPZ MAP DESCRIPTIONS

ZONES	LANDMARK DESCRIPTIONS	BOUNDARY DESCRIPTIONS
A-0	Gap Hill, East Cove South of ONS, north of ONS, Keowee Key	Mid-stream Lake Keowee, 2 miles north of ONS, east on two mile radius arc from ONS to junction of War Path Rd and Walhalla Highway (SC 183); southeast on two mile arc to a point east of junction of Dan Ross and Ridgeland Rds; south on two mile arc to Jones Mill Rd (SSR 160); SSR 160 east to junction with Old Seneca Rd (SSR 291); SSR 291 southwest to junction with Brown Bottom Rd; northwest to two mile arc south of ONS; west to Rochester Highway (SC 130); Rochester Highway south to junction with Katelynn Lane; Katelynn Lane north to two mile arc; northwest to junction of Ellenburg and Knox Campground Rds; two mile arc north to junction of High Falls Rd and Jubie Lane; two mile arc northeast to SC 183 bridge (west of Flagship Drive); two mile arc northeast to a point south of junction Highway 130 and South Craggmore Drive; two mile arc east to midstream of Lake Keowee two miles north of ONS
A-1	Mile Creek, Mile Creek County Park	Midstream of Lake Keowee at midstream of Cedar Creek Inlet east to and along Lakeside Drive to junction with 30th Street, then east to junction with Crowe Creek Rd (SC 133); SC 133 south to junction with Hunting Hollow Rd; east to junction with Love And Care Rd; southeast overland to junction of Walhalla Highway (SC 183) and High Hope Rd; southwest along SC 183 to junction with War Path Road; two mile radius arc from ONS west to midstream of Lake Keowee; north to midstream of Cedar Creek Inlet
A-2	Shady Grove, Crowe Creek, Mountain View, Piney Grove, Cedar Creek	Mid-span SC 11 bridge over Lake Keowee east to junction of SC 11 and Crowe Creek Road (SC 133); SC 133 east to junction with Shady Grove Rd (SSR 32); SSR 32 east to junction with Concord Church Rd; south to junction with Prison Camp Rd; southeast along Prison Camp Rd, then overland to Holder Knob Rd at Walhalla Highway (SC 183); SC 183 southwest to junction with High Hope Rd; north overland to junction of Duncan Rd and Love And Care Rd; to Hunting Hollow Road northwest to junction with Crowe Creek Rd (SC 133); SC 133 north to junction with 30th Street; 30th Street west to Lakeside Drive, then along Lakeside Drive; west to lake shore; west midstream of Cedar Creek to midstream of Lake Keowee; north mid-stream of Lake Keowee to mid-span SC 11 bridge; junction of War Path Rd and Walhalla Highway (SC 183) northeast along SC 183 to junction with Cedar Hill Rd; south to junction with Lusk Rd; southeast to junction with Holliday Rd; northeast along Holliday Rd to junction with North Main St (SC 137) south along N. Main St to junction with Belle Shoals Rd (SSR 267); SSR 267 southeast to junction with Ridgeland Dr; southeast to junction with Liberty Highway (SSR 137); SSR 137 west to junction with John Holliday Rd (SSR 125); SSR 125 south to junction with Norris Highway (SC 137); SC 137 southeast to junction with Camp Creek Rd (SSR 65); SSR 65 southwest to junction with Maw Bridge Rd (SSR 337); SSR337 south to junction with Brookbend Rd ; west to junction with Six Mile Highway

		(SC 133)and Pleasant Hill Church Road; Pleasant Hill Church Road west to Jones Mill Rd (SSR 160); SSR 160 northwest to two mile radius arc from ONS; two mile radius arc north to Junction of War Path Rd and Walhalla Highway (SC 183)
B-2	Norris, Cateechee, Praters Roanoke, Golden Creek Terrapin Crossing	Junction Walhalla Highway (SC 183) and Cedar Hill Rd east to crossing of Cannon Creek; southeast along Cannon Creek to Twelve Mile Creek; south along Twelve Mile Creek to Wolf Creek; southeast overland to junction of Daniel Boone Trail and Belle Shoals Rd (SSR 267); SSR267 east to Roanoke Rd (SSR 223); along SSR 223 (Roanoke, Campground, McAlister Rds) to junction with Summit (SSR158) and Hunter Mill Rd; Hunter Mill Rd west to Liberty city limit; southeast along Liberty city limit to Greenville Highway (SC 93); SC 93 southwest to Old Norris Road; southeast to Farmers Hill Rd; south to Pine Thicket Rd; southwest to Gavin Rd (SSR 270); south to Chastain Rd (SSR 395); SSR 395 west to junction with SC 93; junction west along an unnamed creek to the junction of Blue Jay Rd and Johnson Rd; southwest on Blue Jay Rd to Maw Bridge Rd (SSR 337); SSR 337 north to Camp Creek Rd (SSR 65); SSR 65 east to Norris Highway (SC 137); SC 137 northwest to John Holliday Rd (SSR 125); SSR 125 north to Liberty Highway; (SSR 137); east to Ridgeland Drive; northwest to Belle Shoals RD (SSR 267); northwest to North Main Street (SC 137); SC 137 north to Holliday Rd; west to Lusk Rd; northwest to Cedar Hill Rd; Cedar Hill Rd north to junction with Walhalla Highway (SC 183).
C-1	Pleasant Hill	Midstream of Seneca River on two mile arc south of ONS east to Brown Bottom Rd; south on Brown Bottom Rd to Old Seneca Rd (SSR 291); SSR 291 northeast to Jones Mill Rd (SSR 160); SSR 160 southeast to Six Mile Highway (SC 133); SC 133 southwest to Issaqueena Dam Rd; Issaqueena Dam Rd west to outlet of Issaqueena Lake; west and north along Seneca River to two mile arc south of ONS.
C-2	Central, Town of Clemson	Seneca River at outlet of Issaqueena Lake along Issaqueena Dam Rd to Six Mile Highway (SC 133); north to Brookbend Rd; southeast to Maw Bridge RD (SSR 337); SSR 337 south and east to Blue Jay Rd; southeast and east to junction with Johnson Rd (SSR 52); east along unnamed creek to junction of Greenville Highway (SC 93) and Chastain Rd (SSR 395); SSR 395 east to White Oak Rd (SSR 91); SSR 91 south to US Highway 123; US Highway 123 southwest to Issaqueena Trail (SSR 30); south and southwest to Pendleton Rd (SC 28); SC 28 northwest to US 76; US 76 south to Old Stone Church Rd; west to Old Cherry Rd (SSR 37); SSR 37 to mid-span of bridge at Lake Hartwell; north along mid-steam Seneca River to outlet of Lake Issaqueena
D-1	Fairview	Junction SC188 and Petty Rd (SSR589) east and north on Clyde Crenshaw Rd to Frenge Branch Rd (SSR 61; SSR 61 northeast to Lake Keowee west shore; northeast to two mile arc southwest of ONS; southeast along arc to Doug Hollow Rd; south and east to Rochester highway (SC 130); north on SC 130 for 0.75 mile; east to mid-stream of Seneca River; downstream to a point due east of Dodd Farm Rd; west overland to Dodd Farm Rd across Lawrence Bridge Rd and overland to mid-stream of little River; Little River west to Little River spillway; west

		northwest across Lake Keowee to east end of Maughan Trail; northwest to Harbor Way; west to Mallard Bend Rd; north to Fairview Church Rd; west-northwest to a point between Hampton Shores and Fairview Shores developments; north overland to mid-stream of Crooked Creek; northwest to mid-span Keowee School Rd bridge (SC 188); SC 188 northwest to junction with Biggerstaff Rd (SSR 589)
D-2	Bayshore, Newry, Utica, Port Santorini, Boutyland, Tanglewood, Seneca, Hanover, Keowee Subdivision	Junction of SC 188 and Biggerstaff Rd (SSR 46); southeast along Biggerstaff Rd Fairview Church Rd northeast and east to Mallard Bend Rd; south to Harbor's Way; southeast to Maughan Trail; southeast to west shore of Lake Keowee; southeast across Lake Keowee to the Little River spillway on SC 130; east along the Little River to a point west of junction of Lawrence Bridge Rd (SSR 225) and Dodd Farm Rd; east to the junction and northeast along Dodd Farm Rd to mid-stream Seneca River; downstream to mid-span of Old Cherry Rd (SSR 37) bridge; SSR 37 west to J P Stevens Rd (SSR 37); south Curry Drive (SSR 65); SSR 65 west and south to mid-span of bridge over Lake Hartwell at Martin Creek; west mid-stream to west shore, east to junction of Seneca Springs Landing and Singing Pines Rd (SSR 137); SSR 137 north to Wells Highway (SSR 488); SSR 488 west and northwest to Sandifer Blvd (US 76-123); US 76-123 southwest to Richland Rd (SSR 13); SSR 13 west to Poplar Springs Rd (SSR 35); SSR 35 north to West Halfway Branch Rd; east to Blue Ridge Blvd (SC 28); east northeast overland to a point on Keowee School Rd (SC 188) halfway between the junctions with Old Walhalla Highway (SSR 60) and Mt Olive Church Rd (W A66); SC 188 northeast to junction with Biggerstaff Rd (SSR 46)
E-1	Keowee, New Hope	Junction Jones Rd (SSR 24) and Old Station (SSR 40) north on Alexander Rd to Burnt Tanyard Rd (SSR132); SSR 132 northeast to mid-span Tanyard Bridge; east mid-stream of Little River to mid-stream Stamp Creek Inlet (Fork Bottom Bend); southeast to two mile arc northwest of ONS; south along arc across junction of High Falls Rd and Jubie Lane; south along arc across Ellenburg Rd and the east end of Knox Landing to mid-stream of Lake Keowee; south west to the northwest end of Fenge Branch Rd; southwest to Clyde Crenshaw Rd; west to junction of Keowee School Rd (SC 188) and Petty RD (SSR 589); south on SC 188 to mid-span of the bridge over Crooked Creek; Crooked Creek northwest to the Wolf Stake Church Rd (SSR 223) creek crossing; SSR 223 northeast and north to junction SC 183 and Old Station Rd (SSR 40); SSR 40 northwest to the junction with Jones Rd (SSR 24)
E-2	Walhalla, Forest Acres, Wolf State, Ebenezer, West Union, Poplar Springs	Junction White Cut Rd (SSR 174) and Oconee Station Rd (SSR 95) east along SSR 95 to junction with SC 11 and LeCroy Rd (SSR 198); SSR 198 (LeCroy, Deaton, Jones Rds) east to Old Station Rd (SSR40); SSR 40 to junction with Pickens Highway (SC 183); and Wolf Stake Church Rd (SSR223); SSR 223 south to crossing of Crooked Creek; southeast along mid-stream of Crooked Creek past Tanyard Bridge (on SC 188) to a point midstream, north of the midpoint between Hampton Shores and Fairview Shores developments on Fairview Church Rd; south along the line formed by the points, then west on Fairview Church Rd to Biggerstaff Rd (SSR 46); northwest to Keowee School Rd (SC 188);

		<p>southwest along SC 188 to a point due east of the junction of Blue Ridge Blvd (SC 28) and Halfway Branch Rd; west overland to the junction and along Halfway Branch Rd to Poplar Springs Rd (SSR 35); south to Levi Lane; northwest to junction with SC 11; north to West Bear Swamp Rd (SSR 220); northwest to junction with Sc-S-37-241 and SC 183; south to Flat Rock Rd; south to Flat Rock Rd; south to Skyview Drive; northwest along the intermittent creek bed of the Negro Fork to the junction of Coffee Rd and SC-S-37-176; along a line overland to the west end of Boomer Rd, then north paralleling Zion Rd (SC-S-37-176) to the junction of Highlands Highway (SC 28) and W A3 road; northeast along a line overland to the junction of Playground Road and Kyle Drive; east northeast along a line overland to the junction of Picket Post Rd and Twin Branch Drive; north along Picket Post Rd to White Cut Rd(SC-S-37-174); north to junction with Oconee Station Rd (SSR 95)</p>
F-1	Stamp Creek	<p>Tanyard Bridge on Burnt Tanyard Rd (SSR 132) northeast to Collins Rd; east and north to Rochester Highway (SC 130); northwest to Stamp Creek Rd east to Nimmons Bridge Rd (SSR 128); south to Keowee Town Landing Rd (SSR 98); SSR 98 to west shore of Lake Keowee; east to mid stream of Lake Keowee; south along midstream to two mile arc north of ONS; southwest along the arc to mid-stream of Stamp Creek Inlet; northwest mid-stream to mid-stream of the Little River Inlet; west to the Tanyard Bridge on Burnt Tanyard Rd (SSR 132)</p>
F-2	Tamassee, Salem, Pickett post, Oconee Creek, DAR, Fall Creek, Flat Shoals	<p>Junction White Cut Rd (SSR 174) and Oconee Station RD (SSR 95)northwest along SSR 95 to Rocky Ford Rd; north to Sc-S-37-95; north to Tamassee Knob Rd; north and east to junction with Cherokee Valley Rd; east overland to Mud Creek; north up Mud Creek to the creek crossing of Lewin Way; Lewin Way north to Whitmire Church Rd; southeast to Baineridge Drive; northeast overland to the shore of Whitewater Lake ; north overland to Little River Rd; southeast to Little River Rd creek crossing of the Whitewater Lake outfall; northeast overland to a point midway between North Fork Little River and Ridge Rd; southeast to Smeltzer Creek; north along Smeltzer Creek to a point due west of the junction of Whitewater Falls Rd (SC 130) and Smeltzer Mtn. Rd; east to the junction; Smeltzer Mtn Rd east overland to Boone Trail: east to Shallow Shack Rd; north to Jocassee Lake Rd; northeast to the junction with Patterson Ridge Rd; due east overland to Jocassee Rd; Jocassee Rd southwest to west shore of Lake Keowee; southeast to mid-stream of Lake Keowee; south to Keowee Town Landing; Keowee Town Landing Rd west to Nimmons Bridge Rd (SSR 128); north to Stamp Creek Rd (SSR 200); west to SC 130; south to Collins Rd; south and west to Burnt Tanyard Rd (SSR 132); southwest to Alexander Springs Rd; southwest to Old Station Rd (SSR 24); northwest on Jones, Denton and LeCroy Rd (SSR198) to Oconee Station Rd (SSR95); northwest to junction with White Cut Rd (SSR 174)</p>

STATE TRAFFIC CONTROL POINTS	
ST-01	Intersection of Gap Hill Road and SC 183
ST-02	Intersection of Ridgedale Road and Dan Ross Road
ST-03	Intersection of Seneca Road and Toby Hills Road
ST-04	Intersection of Seneca Road and Jones Mill Road
ST-05	Intersection of SC 130 and Katelynn Lane
ST-06	Intersection of SC 130 and SC 183

PRIMARY EVACUATION ROUTES

OCONEE COUNTY (Oconee County residents evacuate to Anderson County)

- A-0 **South of ONS**-South on SC 130 to US 123, right on US 123 to SC 11, left on SC 11 to SC 24, left on SC 24 to SC 28 Bypass, left on SC 28 Bypass, 1.2 miles to Westside High School on right.
- A-0 **North of ONS**-North on SC 130 to SC 11, left on SC 11 to SC 24, left on SC 24 to SC 28 Bypass, left on SC 28 Bypass, 1.2 miles to Westside High School on right.
- D-1 **Fairview**-SC 188 to SR 135, SR 135 to SC 183, left on SC 183, SC 183 to US 76/123, left on US 76/123 to SC 24, right on SC 24 to N. Murray Ave, left on N. Murray Ave to Greenville Hwy (0.7 miles), right on Greenville Hwy to Westside High School.
- D-2 **Bayshore, Newry, Hanover Hills**-US 76/123 to SC 11, left on SC 11 to US I-85, north on I-85 to Exit 27 (SC 81), right on SC 81, 4.8 miles to T.L. Hanna High School on left.
- D-2 **Utica, Port Santorini, Bountyland, Tanglewood, Seneca, Keowee Subdivision**-US 76/123 to SC 11, left on SC 11 to I-85, north on I-85 to Exit 19-A (US 76), right on US 76, 3.2 miles to Martin Luther King Blvd, right on Martin Luther King Blvd, 0.9 miles to Civic Center on right.
- E-1 **Keowee, New Hope**-SC 188 to SC 183, left on SC 183 to US 76/123, left on US 76/123 to SC 24, right on SC 24 to SC 28 Bypass, left on SC 28 Bypass, 1.2 miles to Westside High School on right.
- E-2 **Walhalla, Forest Acres**-SC 183 to US 76/123, left on US 76/123 to SC 24, right on SC 24 to Whitner, continue on Whitner, 1.8 miles to N Murray Ave, left on N Murray Ave to Greenville Hwy (0.7 miles), right on Greenville Hwy to Westside High School on right.
- E-2 **Wolfs Stake, Ebenezer, West Union, Poplar Springs**-SC 11 to SC 183 to US 76/123, left on US 76/123 to SC 24, right on SC 24 to Whitner, continue on Whitner, 1.8 miles to N Murray Ave, left on N Murray Ave to Greenville Hwy (0.7 miles), right on Greenville Hwy to Westside High School on right.
- F-1 **Stamp Creek**-SC 11 to SC 183, right SC 183 to US 76/123, left on US 76/123 to SC 24, right on SC 24 to SC 28 Bypass, left on SC 28 Bypass 1.2 miles to Westside High School on right.
- F-2 **Tammasee, Salem, Picket Post, Oconee Creek, DAR, Fall Creek, Flat Shoals**-SC 11 to SC 183, right on SC 183 to US 76/123, left on US 76/123 to SC 24, right on SC 24 to SC 28 Bypass, left on SC 28 Bypass, 1.2 miles to Westside High School on right.

PICKENS COUNTY (Pickens County residents evacuate to Greenville County)

- A-0 **Gap Hill, East Cove**-SC 183 through Pickens to SC 183 east to US 25 Bypass (White Horse Road), right on US 25 Bypass for approx 1.3 miles, left onto Burdine Dr, Berea High School on left.
- A-1 **Mile Creek, Mile Creek Community Park**-SC 11 to US 276, turn right on US 276 to Intersection of US 276 and Secondary Road 940 (Langford Rd.), turn left onto Langford Rd., Travelers Rest High School on left.
- A-2 **Shady Grove, Mountain View, Piney Grove, Cedar Creek, Crowe Creek**-SC 11 to US 276, turn right on US 276 to Intersection of US 276 and Secondary Road 940 (Langford Rd.), turn left onto Langford Rd., Travelers Rest High School on left.
- B-1 SC 183 through Pickens to SC 183 east to US 25 Bypass (White Horse Road), right on US 25 Bypass for approx 1.3 miles, left onto Burdine Dr, Berea High School on left.
- B-2 SC 183 through Pickens to SC 183 east to SC 253, turn left onto SC 253 to SC 291, SC 291 (Pleasantburg Dr.) to US 29, turn left onto US 29 to Pine Knoll Dr, turn left onto Pine Knoll Dr to Wade Hampton High School.
- C-1 US 123 through Easley to SC 153, right onto SC 153 to I-85 north on I-85 to Exit 46B (291), SC 291 (Pleasantburg Dr.) to Tower Dr, right on Tower Dr to Greenville Convention Center.
- C-2 **Central**-US 123 through Easley to SC 153, right onto SC 153 to I-85 north on I-85 to Exit 46B (291), SC 291 (Pleasantburg Dr.) to Tower Dr, right on Tower Dr to Greenville Convention Center.
- C-2 **Clemson**-US 123 through Easley to SC 153, right onto SC 153 to US I-85 north on US I-85 to exit 46B (291), SC 291 (Pleasantburg Dr.) to Tower Drive, right on Tower Drive to Greenville Convention Center.
- C-2 **Clemson University**-US 76 out of Clemson, (Anderson Civic Center is Clemson University processing Center for Students without transportation).

See Figure 1 for school pickup points, shelters, boat ramps and other points on map.

See Annex 3 for map of hospitals.



FIGURE 2 – ONS 50-MILE INGESTION EXPOSURE PATHWAY EMERGENCY PLANNING ZONE

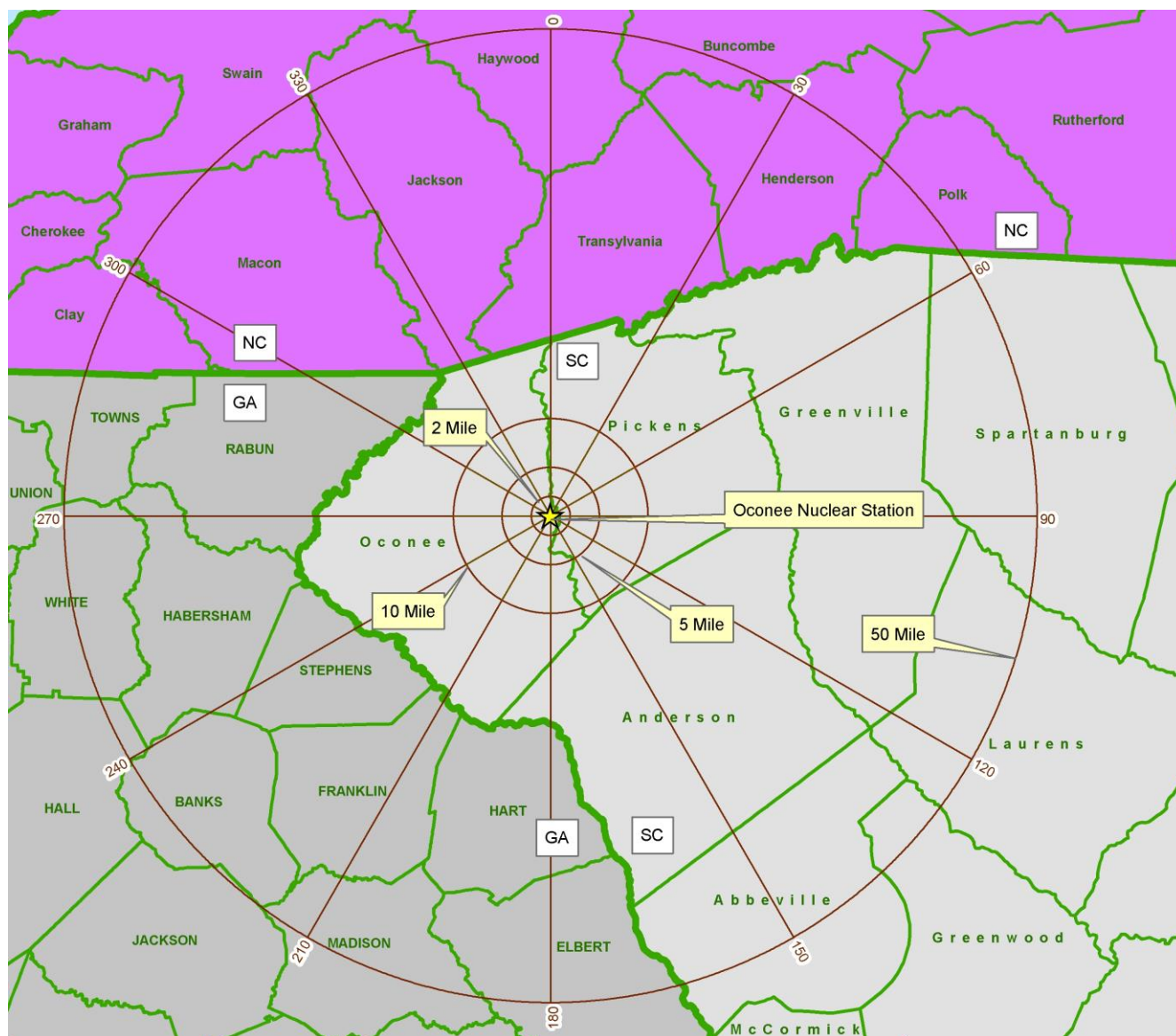


FIGURE 3 – ONS 10-MILE EPZ POPULATION DISTRIBUTION MAP

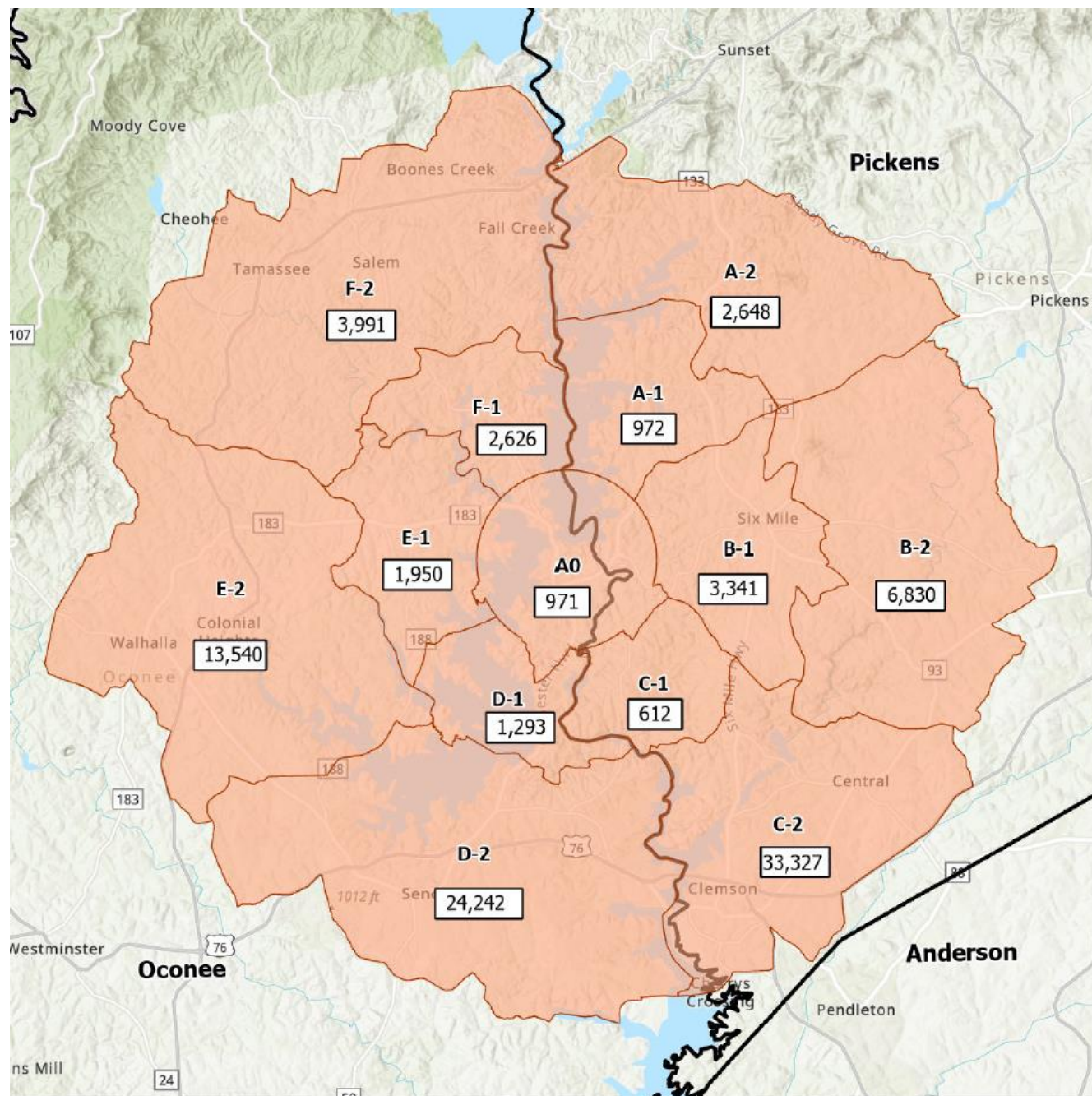
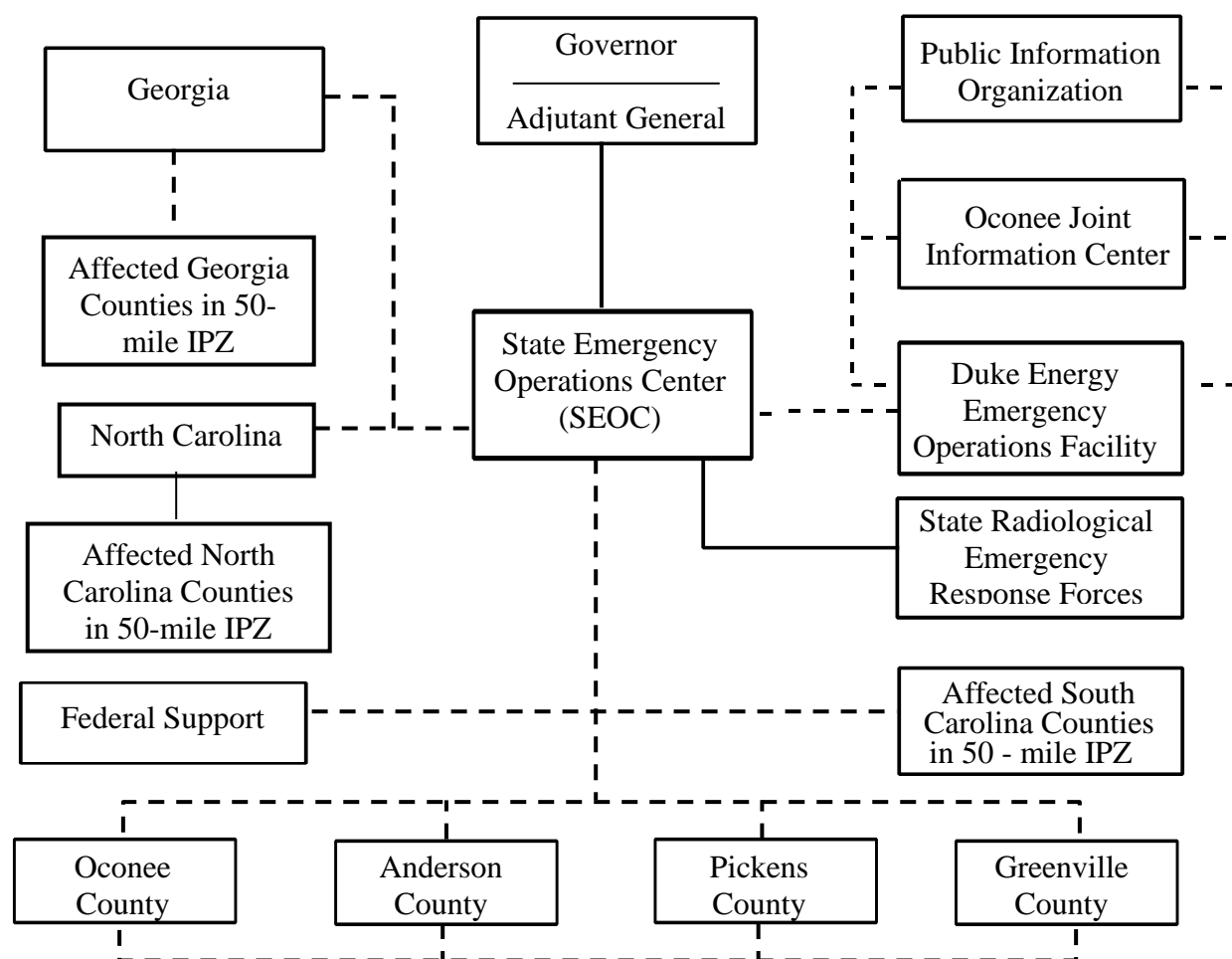


FIGURE 4 – ORGANIZATIONAL RELATIONSHIPS



Affected Counties in 50 - mile IPZ:

South Carolina

Abbeville
Anderson
Greenville
Greenwood
Laurens
Oconee
Pickens
Spartanburg

North Carolina

Buncombe
Clay
Haywood
Henderson
Jackson
Macon
Polk
Swain
Transylvania

Georgia

Banks	Jackson
Elbert	Madison
Franklin	Rabun
Habersham	Stephens
Hall	Towns
Hart	White

_____ Control

- - - - - Coordination

FIGURE 5 – EMERGENCY NOTIFICATION FORM

NUCLEAR POWER PLANT EMERGENCY NOTIFICATION FORM

MESSAGE # _____ Confirmation Phone #: _____ AUTHENTICATION CODE #: _____

Lines 1 – 6 are required for INITIAL Notifications

1. EVENT: <input type="checkbox"/> DRILL <input type="checkbox"/> ACTUAL DECLARATION <input type="checkbox"/> TERMINATION (ONLY Lines 1, 2, & 4 required)			
2. AFFECTED SITE:			
<input type="checkbox"/> BRUNSWICK	<input type="checkbox"/> CATAWBA	<input type="checkbox"/> HARRIS	<input type="checkbox"/> MCGUIRE <input type="checkbox"/> OCONEE <input type="checkbox"/> ROBINSON
3. EMERGENCY CLASSIFICATION			
<input type="checkbox"/> UNUSUAL EVENT	<input type="checkbox"/> ALERT	<input type="checkbox"/> SITE AREA EMERGENCY	<input type="checkbox"/> GENERAL EMERGENCY
4. EAL # _____		Declaration Date: ____/____/____ Time: _____	
		Termination Date: ____/____/____ Time: _____ (mark "N/A" for EAL # & Description)	
EAL DESCRIPTION: _____			
5. RELEASE TO THE ENVIRONMENT (caused by the emergency): <input type="checkbox"/> NONE <input type="checkbox"/> IS OCCURRING <input type="checkbox"/> HAS OCCURRED			
6. PROTECTIVE ACTION RECOMMENDATIONS:			
<input type="checkbox"/> NONE			
<input type="checkbox"/> EVACUATE: _____			
<input type="checkbox"/> SHELTER: _____			
<input type="checkbox"/> CONSIDER THE USE OF KI (POTASSIUM IODIDE) IN ACCORDANCE WITH ORO PLANS AND POLICIES			
<input type="checkbox"/> OTHER: _____			

Lines 7-11 are NOT required for INITIAL notifications. Lines 7-11 may be provided separately for follow-up notifications.

7. PROGNOSIS: Upgrade in classification or PAR change is likely before the next follow-up notification ☐ Yes ☐ No

8. SITE UNIT(S) STATUS:

AFFECTED UNIT

☐ YES Unit 1 - _____ % Power Shutdown: Date ____/____/____ Time _____

☐ YES Unit 2 - _____ % Power Shutdown: Date ____/____/____ Time _____

☐ YES Unit 3 - _____ % Power Shutdown: Date ____/____/____ Time _____

9. METEOROLOGICAL DATA:

Wind direction from: _____ degrees Wind Speed: _____ mph Precipitation: _____ inches

Stability Class: ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G

Lines 10 - 11 are completed for follow-up notifications, IF Line 5 IS OCCURRING or HAS OCCURRED is selected

10. AIRBORNE RELEASE CHARACTERIZATION: ☐ GROUND ☐ MIXED ☐ ELEVATED

MAGNITUDE UNITS: ☐ Ci ☐ Ci/sec ☐ µCi/sec

Noble Gases: _____ Iodines: _____ Particulates: _____

11. DOSE PROJECTION: Projection period: _____ Hours Estimated Release Duration _____ Hours

Performed: Date ____/____/____ Time: _____	DISTANCE	TEDE (mrem)	Thyroid CDE (mrem)
	Site Boundary		
	2 Miles		
	5 Miles		
	10 Miles		

12. REMARKS (As Applicable): _____

13. APPROVED BY: _____ TITLE: _____ Date ____/____/____ Time _____

14. NOTIFIED BY: _____ Date ____/____/____ Time _____

15. RECEIVED BY (ORO use only): _____ Date ____/____/____ Time _____

EM-78 / Nuclear Power Facility Emergency Notification Form / March 2016 revision