

Supplement 1

Grand Gulf Nuclear Station

Evacuation Time Estimate

Table of Contents, Page ii:

- Change the title of Appendix H to “Evacuation Regions”.

Table of Contents, Page iii:

- Change the title of Figure 2-1 to “Assumed Regional Evacuation Percentages”.
- Change the title of Figure 7-1 to “Assumed Regional Evacuation Percentages”.
- Change the title of Figure 7-3 to “Areas of Traffic Congestion 30 Minutes after the Advisory to Evacuate (Region R3, Scenario 11)”.
- Change the title of Figure 7-4 to “Areas of Traffic Congestion 1 Hour after the Advisory to Evacuate (Region R3, Scenario 11)”.
- Change the title of Figure 7-5 to “Areas of Traffic Congestion 3 Hours after the Advisory to Evacuate (Region R3, Scenario 11)”.
- Change title of Table 5-3 to “Time Distribution for Employees to Prepare to Leave Work.”
- Change title of Table 5-4 to “Time Distribution for Commuters to Travel Home.”
- Change title of Table 5-5 to “Time Distribution for Population to Prepare to Evacuate.”
- Change title of Table 8-4 to “Medical Facility Transit Demand.”

Executive Summary, Page ES-7

- Replace Figure 3-1; see enclosed Figure 3-1.

Executive Summary, Page ES-11

- Table 7-1C – change the season for Scenario 12 (final column) from “Winter” to “Summer”.

Executive Summary, Page ES-12

- Table 7-1D – change the season for Scenario 12 (final column) from “Winter” to “Summer”.

Page 1-3:

- Add the following paragraphs to item 5:

“NUREG-0654 and NUREG/CR-6863 discuss Evacuation Regions and the use of quadrant based areas, and 3-sector based keyholes, respectively. The irregular shapes of the Grand Gulf ERPAs (e.g., ERPA 8 extends from about 4 miles from the plant to 12.5 miles from the plant) are at a variance with the symmetrical shapes of quadrants and circular areas. As a result, it is possible for a small piece of an ERPA (with little or no population) to lie within a quadrant or circular area. Under these circumstances, situations arose where an ERPA extending to a

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distance of as much as 12 miles from GGNS could be included with an area within 5 miles of the plant.”

“The decision of whether to evacuate an entire ERPA under these circumstances must be based on evaluating the trade-offs between the benefits of evacuating the few people who are located within the subject Region (quadrant or circular area), in contrast to the potential disadvantages of unnecessarily evacuating a much larger population located outside the Region. To address this situation, the following methodology was developed to determine whether to include an ERPA within the subject Region when these circumstances are present.”

“The acceptance criteria for including an ERPA in a Region are the following: (1) at least 15 percent of the general population (residents, employees commuting into the EPZ, and transients) within the ERPA must be within the Region; or (2) at least 75, or so persons of the general population are within the Region.”

Page 1-6:

- Add labels to Figure 1-1 for communities, for major roadways and for bodies of water within the study area. See enclosed Figure 1-1.

Page 1-15:

- Change “Topic” in final row of Table 1-1 to “Evacuation Time Estimates for the entire EPZ: General Population”.
- Add two additional rows to Table 1-1.

Topic	Treatment	
	Previous ETE Study	Current ETE Study
Evacuation Time Estimates for Special Facilities	Not provided separately. Grouped with General Population ETE	One-Wave, Good weather = 3:10 One-Wave, Rain = 3:40
Evacuation Time Estimates for Transit-Dependent Population	Not provided separately. Grouped with General Population ETE	One-Wave, Good weather = 2:35 One-Wave, Rain = 2:50 Two-Wave, Good weather = 4:50 Two-Wave, Rain = 5:35

Page 2-1:

- Change “2004 census estimates” under item 1 to “2005 census estimates”.

Page 2-2:

- Change “NUREG 0654” to “NUREG/CR-6863” under item 4 of Section 2.2.

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Page 2-3:

- Replace Figure 2-1. Changed title of Figure 2-1 to “Assumed Regional Evacuation Percentages”. See enclosed Figure 2-1.

Page 2-4:

- Change the “Season” entry for Scenario 12 in table to “Summer”.

Page 2-5:

- Replace item 3 with: “Based on the results of the telephone survey, 61% of the households in the EPZ have at least one commuter – 67% of which would await the return of a commuter before evacuating. Thus, 41% (61% x 67%) of households within the EPZ will await the return of a commuter prior to evacuating.

Page 2-7:

- Add item 12, reading “Given the limited size of ERPA 6 (Alcorn State University), its close proximity to ERPA 5B and the use of the same evacuation route (Route 552 eastbound) by evacuees from both ERPA, it is assumed that ERPA 6 should always evacuate when ERPA 5B evacuates.”

Page 3-3:

- Change “2006 Census estimates” in first paragraph under “Special Events” to “2005 Census estimates”.

Page 3-4:

- Add labels to Figure 3-1 for major communities, for major roadways and for bodies of water within the study area. Also added county/parish boundaries and labeled the counties/parishes in the study area. See enclosed Figure 3-1.

Page 3-10:

- Revise final sentence of the “Lake Bruin State Park” discussion to read, “The peak day attendance is estimated at 519 persons, evacuating in 192 vehicles.”

Page 3-16:

- Replace Table 3-4 with enclosed table.

Page 3-19:

- Revise the final two sentences of the “Total Demand in Addition to Permanent Population” discussion to read: “It is assumed that traffic will continue to enter the EPZ during the first 90 minutes following the Advisory to Evacuate. This procedure produces an estimate of 2,700 vehicles (1,800 vehicles per hour x 1.5 hours) entering the EPZ as external-external trips during this period.”

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Page 5-4:

- Delete “to return home” from the Event Description for Event 3.
- Add two bullets to the bottom of the page. Bullet 1: “An Event is a ‘state’ that exists at a point in time (e.g., depart work, arrive home).” Bullet 2: “An Activity is a ‘process’ that takes place over some elapsed time (e.g., prepare to leave work, travel home).”
- Add a paragraph after the 2 bullets, reading: “As such, an Activity changes the ‘state’ of an individual (e.g. the activity, ‘travel home’ changes the state from ‘depart work’ to ‘arrive home’). Therefore, an Activity can be described as an ‘Event Sequence’; the elapsed times to perform an event sequence varies from one person to the next and are described as statistical distributions on the following pages.”

Page 5-5:

- Change “Prepare to leave for evacuation trip” to “Prepare to leave to evacuate” in the last row of Table 5-1.
- Replace the second paragraph with the following discussion: “An employee who lives outside the EPZ will follow sequence (c) of Figure 5-1. A household within the EPZ that has one or more commuters at work, and will await their return before beginning the evacuation trip will follow the first sequence of Figure 5-1(a). A household within the EPZ that has no commuters at work, or that will not await the return of any commuters, will follow the second sequence of Figure 5-1(a), regardless of day of week or time of day. Note that event 5, “Leave to evacuate the area,” is conditional either on event 2 or on event 4. For this study, we adopt the conservative posture that all activities will occur in sequence.”

“Households with no commuters on weekends or in the evening/night-time, will follow the applicable sequence in Figure 5-1(b). Transients will always follow one of the sequences of Figure 5-1(b). Some transients away from their residence could elect to evacuate immediately without returning to the residence, as indicated in the second sequence.”

Page 5-7:

- Revise Figure 5-1 to agree with the text edits on pages 5-4 and 5-5. See enclosed Figure 5-1.

Page 5-8:

- Change title of Table 5-3 to “Time Distribution for Employees to Prepare to Leave Work.”

Page 5-9:

- Change title of Table 5-4 to “Time Distribution for Commuters to Travel Home.”

Page 5-10:

- Change title of Table 5-5 to “Time Distribution for Population to Prepare to Evacuate.”

Page 5-11:

- Change “Notification” to “Receive Notification” in legend for Figure 5-2.

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- Change “Prepare Home” to “Prepare to Leave Home to Evacuate” in legend for Figure 5-2.

Page 5-13:

- Add “(Event 4)” to the end of the description of Distribution B in Table 5-7.
- Add “(Event 5)” to the end of the description of Distribution C in Table 5-7.
- Add “(Event 5)” to the end of the description of Distribution D in Table 5-7.
- Add the following discussion:

As shown in Figure 5-2, the mobilization activity distributions have long tails. Combining multiple distributions with long tails results in an even longer tail. Thus, the 100th percentile of the combined distribution is indistinct and difficult to quantify. Given these characteristics, a statistical analysis on the mobilization distributions was performed to quantify a ‘confidence band’ about the distribution. This band serves as the basis for establishing the point in time where the long tail should be ‘truncated’.

The ETE for the vast majority of evacuees should not be distorted for those few stragglers (typically less than 2 percent of households) who take considerably longer to prepare to evacuate. As such, the combined distributions are ‘truncated’ to avoid biasing the ETE. In ‘truncating’ these distributions, the mobilization of the stragglers is advanced. Therefore, the stragglers are not eliminated from the ETE.

Page 6-3:

- Add labels to Figure 6-1 for major communities, for major roadways and for bodies of water within the study area. Also added county/parish boundaries and labeled the counties/parishes in the study area. See enclosed Figure 6-1.

Page 6-4:

- Table 6-2 – changes “Season” entry for Scenario 12 to “Summer”.

Page 6-6:

- Modify the External Traffic and Total Scenario Vehicles Columns in Table 6-4 based on the changes noted on page 3-19 above. See enclosed Table 6-4.
- Delete the paragraph under Table 6-4.
- Insert footnote 1 after the title of the table. Footnote 1 reads: “The numbers presented are for an evacuation of the full EPZ (Region R3).”
- Insert footnote 2 after the values input for “Residents with Commuters”, “Residents without Commuters” and “Shadow” for Scenarios 11 and 12. Footnote 2 reads: “The projected construction year is 2015. Based on discussion with Enercon Services, the permanent resident population and shadow population have not been extrapolated to 2015. Comparison of the 2000 Census and 2005 Census estimates indicate that population is actually decreasing within the EPZ (See Table 3-1); however, the 2007 population estimates have been maintained for 2015 as a conservative basis.”

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Page 7-2:

- Add discussion before Section 7.2, reading: “The population and number of evacuating vehicles in the Shadow Evacuation Region were estimated using the same methodology that was used for permanent residents within the EPZ (see page 3-2). It is estimated that 4,543 people reside in the Shadow Evacuation Region (Year 2007) and that they will evacuate in 2,463 vehicles. The 2000 Census data indicate a permanent resident population of 4,710 people within the Shadow Evacuation Region; therefore, the population in the Shadow Evacuation Region is decreasing.”

Page 7-3:

- Add a paragraph before the last paragraph, reading: “The following table shows the average delay per vehicle (minutes/vehicle) for selected links identified in Figures 7-3 through 7-5.” Inserted table “Average Delay for Selected Roadways in the GGNS Analysis Network” after the paragraph; see enclosed table.

Page 7-4:

- Replace the opening paragraph of section 7.3 with the following: “Evacuation is a dynamic process, as illustrated in Figures 7-3 through 7-6. The evolving nature of traffic congestion is shown in Figures 7-3 through 7-5, while Figure 7-6 indicates the rate at which traffic flows out of the indicated areas for the case of an evacuation of the full 10-mile Region R3 (i.e., entire EPZ) under the indicated conditions. Appendix J presents these plots for all Evacuation Scenarios for Region R3”

Page 7-9:

- Table 7-1A – change the season for Scenario 12 (final column) from “Winter” to “Summer”.

Page 7-10:

- Table 7-1B – change the season for Scenario 12 (final column) from “Winter” to “Summer”.

Page 7-11:

- Table 7-1C – change the season for Scenario 12 (final column) from “Winter” to “Summer”.

Page 7-12:

- Table 7-1D – change the season for Scenario 12 (final column) from “Winter” to “Summer”.

Page 7-14:

- Replace Figure 7-1. Change title of Figure 7-1 to “Assumed Regional Evacuation Percentages”. See enclosed Figure 7-1.

Page 7-16:

- Label the major evacuation routes and identified congestion points in Figure 7-3. Congestion points reference table “Average Delay for Selected Roadways in the GGNS EPZ,” which is added to page 7-3. See enclosed Figure 7-3 and table “Average Delay for Selected Roadways in the GGNS EPZ.”

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- Change the title of Figure 7-3 to “Areas of Traffic Congestion 30 Minutes after the Advisory to Evacuate (Region R3, Scenario 11).”

Page 7-17:

- Label the major evacuation routes and identified congestion points in Figure 7-4. Congestion points reference table “Average Delay for Selected Roadways in the GGNS EPZ,” which is added to page 7-3. See enclosed Figure 7-4 and table “Average Delay for Selected Roadways in the GGNS EPZ.”
- Change the title of Figure 7-4 to “Areas of Traffic Congestion 1 Hour after the Advisory to Evacuate (Region R3, Scenario 11).”

Page 7-18:

- Labeled the major evacuation routes and identified congestion points in Figure 7-5. Congestion points reference table “Average Delay for Selected Roadways in the GGNS EPZ,” which is added to page 7-3. See enclosed Figure 7-5 and table “Average Delay for Selected Roadways in the GGNS EPZ.”
- Change the title of Figure 7-5 to “Areas of Traffic Congestion 3 Hours after the Advisory to Evacuate (Region R3, Scenario 11).”

Page 8-1:

- Revise the opening paragraph of Section 8 to: “This section details the analyses applied and the results obtained in the form of evacuation time estimates for transit vehicles (buses). The demand for transit service reflects the needs of two population groups: (1) residents with no vehicles available who do not ride-share; and (2) residents of special facilities such as schools, health support facilities and institutions.”

Page 8-6:

- Add the following text before the paragraph beginning, “Table 8-3...”:

Discussions with officials in Claiborne County and Tensas Parish ascertained that bus resources would be sufficient for a one-wave school evacuation (see updated Table 8-2):

- Claiborne County: 30 buses are in daily use. A memorandum of understanding (MOU) with neighboring Warren County would provide the additional 9 buses estimated in the ETE report.
- Tensas Parish: 8 buses are in daily use. There are letters of agreement with Madison, Franklin and Concordia Parish school systems that could provide as many as 20 additional buses within 2 hours; thus, the additional 9 buses needed are available.

Tables 8-5A and 8-5B (updated as attached) and Table 8-6 provide for at least 2 hours for buses to mobilize and travel to the EPZ which is consistent with the information provided above. Thus, schools can be evacuated in a single wave.

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Page 8-11:

- Add sub-heading, “Evacuation of Transit-Dependent Special Needs Population”
- Add following text below subheading, “Evacuation of Transit-Dependent Special Needs Population”:

Interviews were completed with Claiborne County and Tensas Parish Emergency Management officials to quantify the extent of home-bound special needs persons in households that are not equipped to evacuate such persons. This inability to evacuate a special needs person may reflect the unavailability of a privately owned vehicle and the absence of ridesharing opportunities, or the need of special transport (e.g., an ambulance). In such situations, members of the public are asked, through yearly emergency information mailings to EPZ residents, to register with the local emergency response organizations so that an appropriate vehicle may be dispatched during the emergency to provide evacuation transport. Discussions with emergency management officials indicate that the following number of persons have registered:

- A total of 4 persons in Tensas Parish.
- A total of 6 persons in Claiborne County.

It is reasonable to expect that one or more household members will accompany the special needs person. Data from the telephone survey yields an average household size of about 4 persons for those households of 2 or more persons with no cars. Assuming one special needs person per household yields a total of 16 persons in Tensas Parish and 24 persons in Claiborne County who will require pick-up service and transport in the event of an evacuation.

To compute ETE for this service, it is assumed:

- One bus is required for each community.
- These buses will be assigned after they deliver the school children to the reception center.

The components of ETE for good weather are:

Community	Buses Available (hr:min)	Unload School Buses (min)	Driver Rest (min)	Travel back to EPZ (min)	Number of Stops	Travel between each Stop(min)	Loading per Stop (min)	Travel to EPZ Boundary (min)
Claiborne County	3:00	5	15	50	6	6	2	10
Tensas Parish	2:40	5	15	28	4	6	2	10

The ETE (rounded up to the nearest 5 minutes) are:

Good Weather:

- Claiborne County: $3:00 + 5 + 15 + 50 + 6 \times (6 + 2) + 10 = 5:10$

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- Tensas Parish: $2:40 + 5 + 15 + 28 + 4 \times (6 + 2) + 10 = 4:10$

Rain:

- Claiborne County: $3:25 + 10 + 15 + 55 + 6 \times (7 + 2) + 12 = 5:55$
- Tensas Parish: $3:00 + 10 + 15 + 31 + 4 \times (7 + 2) + 12 = 4:45$

The time buses are available is the minimum time presented in the final column of Table 8-5A for each county/parish, as those will be the first buses available to return to the EPZ. Unload time and driver rest time are 5 minutes and 15 minutes, respectively, as shown in Table 8-6 (unload time is 10 minutes in rain). The estimated travel time back to the EPZ from the reception center is the same as the average travel time to the reception center; see next to last column in Table 8-5A. Traffic within the EPZ is free-flowing at 3 hours after the advisory to evacuate (see Figure 7-5 of the ETE report). Therefore, an estimate of 6 minute travel between stops translates to an average separation of 4 miles at 40 mph, which is reasonable. Normally, bus loading time for 4 persons, including the delay associated with stopping and starting is on the order of 1 minute. The loading time of 2 minutes used here takes into account special needs factors. The travel time to the EPZ boundary of 10 minutes implies a distance of about 7 miles at 40 mph. Travel speed is diminished by 10% in rain (see page 2-6 of the ETE report) resulting in a speed of 36 mph; travel time between stops is 7 minutes and travel time to the EPZ boundary is 12 minutes, in rain.

It is possible that a special needs person may require a specially equipped medical vehicle (e.g., an ambulance or wheelchair van). Therefore, local emergency management agencies maintain and update a roster of homebound special needs persons, as this roster and the transport needs change over time. The yearly distribution of informational calendars within the EPZ, which include special needs registration cards accomplishes this goal.

The ETE provided in this response is based on reasonable expectation.

Page 8-12:

- Replace “Emergency Medical Service (EMS) Vehicles” discussion with:

Telephone interviews with local emergency management officials were conducted to update Table 8-4 of the Evacuation Time Estimate (ETE) report, which is attached to the response to RAI 13.03-27, and to acquire information on ambulance availability. The survey produced the following results:

- Claiborne County has 2 on-call ambulances at all times. Additional support from the Mississippi State Health Officer guarantees 40 ambulances within 4 hours.
- Tensas Parish has 2 on-call ambulances at all times. Additional support from Northeast Louisiana Ambulance Service, located in the neighboring parish of Franklin, includes an additional 13 ambulances that service several nearby parishes.

The 9 additional ambulances needed in Claiborne County (11 ambulances indicated in Table 8-4 minus 2 on-call ambulances) would be requisitioned from nearby counties. It is reasonable to assume that 9 ambulances would arrive within 2 hours after the Advisory to Evacuate, given that 40 ambulances are guaranteed within 4 hours. Ambulances on-call outside of the Emergency Planning Zone (EPZ) should average at least 50 mph. Ambulances travelling from Vicksburg and Jackson, MS would be traveling less than 100 miles and would therefore be available within 2 hours. According to pages F-3 and F-4 of the Port Gibson/Claiborne County Radiological Emergency Preparedness Plan, the Port Gibson Nursing Home will

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be evacuated to Natchez Regional Hospital in Natchez, Mississippi, while Claiborne County Hospital will be evacuated to River Region Medical Center in Vicksburg, Mississippi.

Tensas Parish requires one additional ambulance (3 ambulances indicated in Table 8-4 minus 2 on-call ambulances). An arrival time of 2 hours for the nearest ambulance out of the 13 available in neighboring parishes is reasonably expected. A telephone interview with the Tensas Care and Rehabilitation Center indicated that the patients in the facility evacuate to a host facility, Legrand Healthcare and Rehabilitation Center, in Bastrop, Louisiana.

On this basis, the ETE are calculated as follows:

Activity	Claiborne County	Tensas Parish
Arrival	2:00	2:00
Loading	0:30	0:30
Travel to EPZ Boundary	0:20	0:15
ETE (hr:min)	2:50	2:45

Note: The distance from Claiborne County Hospital to the EPZ Boundary along Route 61 northbound towards the host hospital in Vicksburg is about 12 miles, while the distance from the Claiborne County Nursing Center to the EPZ boundary along Route 61 southbound towards the host hospital in Natchez is about 7 miles. Because there is no congestion (see Figure 7-5) at the time ambulances are ready to evacuate (2:30), a conservative speed estimate of 40 mph yields about 20 minutes (12 miles ÷ 40 miles per hour x 60 minutes per hour) of travel time to exit the EPZ for the Claiborne County medical facilities (the distance from Claiborne County Hospital is used as the vehicles evacuating this facility travel the farthest, have a later departure time from the EPZ and will dictate the ETE for medical facilities in Claiborne County). In Tensas Parish, Newellton is about 10 miles from the EPZ boundary along Route 65 southbound towards the host facility in Bastrop; travel time is approximately 15 minutes at 40 mph. Loading time is conservatively assumed to be 30 minutes.

Page 8-13 and 8-14:

Replace the first two paragraphs on page 8-13 under the heading "J.B. Evans Correctional Center" with the following:

- The J.B. Evans Correctional Center (JBECC) is located in ERPA 9 near the northwest boundary of the EPZ, nearly 12 miles from the power station. In the unlikely event that an evacuation of the facility is ordered, it will be necessary to assign transit vehicles to provide transportation.
- Delete the heading "Single Wave" and the remainder of the text on Page 8-13 and 8-14.
- Replace the deleted text with

The following provisions exist for evacuating the JBECC inmate population:

- Secure buses are located within Tensas Parish at the Tensas Parish Detention Center in Waterproof, LA, 22 miles from the JBECC.

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- These buses can be at the JBECC within 30-45 minutes and evacuate 200 inmates (at a time) to the Tensas Parish Detention Center in Waterproof.
- Additional buses, controlled by sheriffs in neighboring parishes, could be available at the JBECC within 2 hours.
- Inmate census varies between 350 and 485 inmates.

Secure buses from Waterproof, LA would arrive onsite at 45 minutes after the Advisory to Evacuate, board 200 inmates over a 30-minute period, then travel southbound along Route 65 back to Waterproof at an average speed of 40 mph (traffic is free-flowing along Route 65, as shown in Figure 7-3 through 7-5 of the ETE report). The inmates would exit the buses over a 30-minute period. After a 15-minute rest, these buses can return (traveling at 40 mph) to the JBECC for a second wave evacuation. If the number of inmates exceeds 400, then it is assumed that the necessary additional buses would be requisitioned from neighboring parishes. These buses would arrive prior to those on the second wave from Waterproof. All buses will then evacuate the Emergency Planning Zone (EPZ) with the remaining inmates. The distance from the JBECC to the EPZ boundary southbound along Route 65 is approximately 10 miles; assuming a travel speed of 40 mph, travel time to the EPZ boundary is approximately 15 minutes.

The ETE are computed below:

First Wave					
Mobilization (min)	Loading Time (min)	Travel to Waterproof (min)	Unload (min)	Driver Rest (min)	Total (hr:min)
45	30	35	30	15	2:35

Second Wave			
Travel back to JBECC (min)	Loading Time (min)	Travel to EPZ Boundary (min)	Total (hr:min)
35	30	15	1:20

The total ETE (hr:min) to evacuate all inmates at JBECC is 2:35 + 1:20 = 3:55.

Page 8-17:

- Replace Table 8-2 with enclosed table.
- Table 8-2 – Change “Tensas Parish Totals:” in the 10th row of the table to “Claiborne County Totals:”
- Replace Table 8-3 with enclosed table.

Page 8-18:

- Table 8-4 – Change “Franklin Medical Rural Health Clinic” and “Tensas Parish Health Unit” to read “Outpatient Healthcare facility”. All data was removed for these facilities as they will not

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need to be evacuated by transit. All data totals have been updated accordingly. See enclosed Table 8-4.

Page 8-19:

- Replace Table 8-5A with enclosed table.

Page 8-20:

- Replace Table 8-5B with enclosed table.

Page 9-2:

- Add the following sentence: “All transit trips and other responders entering the EPZ to support the evacuation are assumed to be unhindered by personnel manning TCP,” before “The implementation...”

Page E-2:

- Change N.A. to “0” for Port Gibson Police Department in the Correctional Facilities table.
- Delete “N.A. = Not Available” below the Correctional Facilities table.
- Replace “Grand Gulf EPZ: State Parks & Overnight Camps” table with enclosed “Grand Gulf EPZ: Parks and Overnight Camps” table.

Page E-3:

- Replace “Grand Gulf EPZ: Day Care Centers (As of December 2006)” table with enclosed, expanded “Grand Gulf EPZ: Day Care Centers (As of December 2006)” table.

Page E-4:

- Replace “Grand Gulf EPZ: Hotels/Motels” table with enclosed “Grand Gulf EPZ: Lodging Facilities” table.
- Replace “Grand Gulf EPZ: Major Employers” table with enclosed table.

Page E-5:

- Change all N.A. to “Outpatient Only”.

Page E-6:

- Replace “Grand Gulf EPZ: Schools (As of December 2006)” with enclosed table.

Page E-8:

- Add “Figure E-2. Schools within the GGNS EPZ.” See enclosed Figure E-2.

Page E-9:

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- Add “Figure E-3. Day Care Centers within the GGNS EPZ.” See enclosed Figure E-3.

Page E-10:

- Add “Figure E-4. Medical Facilities within the GGNS EPZ.” See enclosed Figure E-4.

Page E-11:

- Add “Figure E-5. Major Employers and Lodging Facilities within the GGNS EPZ.” See enclosed Figure E-5.

Page E-12:

- Add “Figure E-6. Parks, Camps and Correctional Facilities within the GGNS EPZ.” See enclosed Figure E-6.

Appendix H:

- Change title of the appendix to “Evacuation Regions”.

Page H-1:

- Change heading to “APPENDIX H: EVACUATION REGIONS”
- Revise sentence to read, “This appendix presents a table indicating the percent of ERPA population evacuating for each Evacuation Region, as well as maps of all Evacuation Regions.”

Page H-2:

- Insert “Table H-1. Percent of ERPA Population Evacuating for Each Evacuation Region”. See enclosed Table H-1. All subsequent pages have been moved down one page.

Page I-2:

- Add sentence to the end of the first paragraph, reading: “As discussed on page 7-2, it is estimated that 4,543 people reside in the Shadow Evacuation Region and that they will evacuate in 2,463 vehicles.”
- Add two columns to Table I-2 to show the number of people and vehicles voluntarily evacuating from within the Shadow Evacuation Region for each case. See enclosed Table I-2.

Page J-5:

- Table J-1A – change the season for Scenario 12 (final column) from “Winter” to “Summer”.

Page J-6:

- Table J-1B – change the season for Scenario 12 (final column) from “Winter” to “Summer”.

Page J-7:

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- Table J-1C – change the season for Scenario 12 (final column) from “Winter” to “Summer”.

Page J-8:

- Table J-1D – change the season for Scenario 12 (final column) from “Winter” to “Summer”.

Page J-21:

- Change the second line of the title of Figure J-12 to “Summer, Midweek, Midday, Good Weather, Plant Construction”.

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Table 3-4. Summary of Non-EPZ Employees and Employee Vehicles

Facility	County	ERPA	Total Employees	Max Shift Employees	Non-EPZ Employees	Employee Vehicles
GGNS Workforce	Claiborne	1	750	750	443	418
Claiborne County Hospital	Claiborne	4A	35	35	21	20
Port Gibson High School Faculty	Claiborne	4A	60	60	35	33
Port Gibson Middle School Faculty	Claiborne	4A	47	47	28	26
Watson Elementary School Faculty	Claiborne	4A	89	89	53	50
Chamberlain-Hunt Academy Faculty	Claiborne	4A	58	58	34	32
Claiborne Educational Foundation Faculty	Claiborne	4A	9	9	5	5
Alcorn State University Faculty	Claiborne	6	205	205	121	114
Alcorn State University Commuting Students	Claiborne	6	1,242	1,242	1,242	1,172
Piggly Wiggly	Claiborne	4A	25	25	15	14
M&M Superstore	Claiborne	4A	16	12	7	7
Claiborne County Nursing Center	Claiborne	3A	82	34	20	19
Tensas Elementary School Faculty	Tensas	11	52	52	26	25
Tensas/Davidson High School Faculty	Tensas	11	18	18	9	8
Tensas Academy Faculty	Tensas	11	26	26	13	12
Newellton Elementary School Faculty	Tensas	9	30	30	15	14
Newellton Christian Academy Faculty	Tensas	9	6	6	3	3
J.B. Evans Correctional Center	Tensas	9	15	15	8	8
Tensas Care & Rehab Center	Tensas	9	68	20	10	9
TOTALS:			2,833	2,733	2,108	1,989

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Grand Gulf Nuclear Station

Evacuation Time Estimate

**Table 6-4. Vehicle Estimates for
Various Combinations of Regions and Scenarios¹**

Scenarios	Residents with Commuters	Residents without Commuters	Employees	Transients	Shadow	Special Events	School Buses	Transit Buses	External Traffic	Total Scenario Vehicles
1	4,458	2,754	1,909	637	934	-	12	38	2,700	13,442
2	4,458	2,754	1,909	637	934	-	12	38	2,700	13,442
3	446	6,766	955	1,274	837	-	-	38	2,700	13,016
4	446	6,766	955	1,274	837	-	-	38	2,700	13,016
5	446	6,766	199	319	759	-	-	38	1,620	10,147
6	4,458	2,754	1,989	191	943	-	124	38	2,700	13,197
7	4,458	2,754	1,989	191	943	-	124	38	2,700	13,197
8	446	6,766	955	319	837	-	-	38	2,700	12,061
9	446	6,766	955	319	837	-	-	38	2,700	12,061
10	446	6,766	199	127	759	-	-	38	1,620	9,955
11	446 ²	6,766 ²	955	319	837 ²	9,925	-	38	2,700	21,986
12	4,458 ²	2,754 ²	1,909	637	934 ²	2,925	12	38	2,700	16,367

¹ The vehicle estimates presented are for an evacuation of the full EPZ (Region R3).

² The projected construction year is 2015. Based on discussion with Enercon Services, the permanent resident population and shadow population have not been extrapolated to 2015. Comparison of the 2000 Census and 2005 Census estimates indicate that population is actually decreasing within the EPZ (See Table 3-1), and within the Shadow Region (see Page 7-2); however, the 2007 population and vehicle estimates have been maintained for 2015 as a conservative basis.

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Average Delay for Selected Roadways in the GGNS EPZ						
Congestion Point Number ¹	Link		Description	Average Delay (min/veh) at Indicated Time after the Advisory to Evacuate		
	From Node	To Node		30 minutes	1 hour	3 hours
1	237	225	State Highway 4 westbound at the intersection with US Route 65	0.0	9.0	0.0
2	292	228	State Highway 128 westbound at the intersection with US Route 65	0.0	9.5	0.0
3	56	48	State Highway 552 eastbound at the interchange with Natchez-Trace Parkway	0.6	4.9	3.1
4	34	35	State Highway 552 eastbound at the interchange with US Route 61	0.9	1.0	1.0
5	180	181	State Highway 547 eastbound through Pattison, Mississippi	0.0	1.1	0.0
6	147	41	Grand Gulf Road eastbound at the intersection with US Route 61	0.4	1.1	0.0
7	152	151	Grand Gulf Road eastbound near the proposed construction site	0.0	9.8	0.0

¹ See Figures 7-3 through 7-5.

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Grand Gulf Nuclear Station

Evacuation Time Estimate

Table 8-2. School Population Demand Estimates							
ERPA	Distance (miles)	Direction	School Name	Municipality	Enrollment	Staff	Bus Runs Req'd
Claiborne County Schools							
2B	7.5	ESE	Reachout Foundation	Port Gibson	10	3	1
4A	4.2	SE	A.W. Watson Elementary School	Port Gibson	889	89	13
4A	5.5	SE	Chamberlain-Hunt Academy	Port Gibson	101	58	3
4A	5.7	SE	Claiborne Educational Foundation	Port Gibson	36	9	1
4A	5.2	SE	Port Gibson High School	Port Gibson	578	60	12
4A	5.4	SE	Port Gibson Middle School	Port Gibson	431	47	9
Claiborne County Totals:					2,045	266	39
Tensas Parish Schools							
9	11.9	WNW	Newellton Christian Academy	Newellton	36	6	1
9	12.3	WNW	Newellton Elementary	Newellton	225	52	4
11	12.6	WSW	Tensas Academy	Saint Joseph	194	26	4
11	12.9	WSW	Tensas Elementary	Saint Joseph	202	13	3
11	12.8	WSW	Tensas/Davidson High School	Saint Joseph	225	35	5
Tensas Parish Totals:					882	132	17
EPZ Totals:					2,927	398	56

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Grand Gulf Nuclear Station

Evacuation Time Estimate

Table 8-3. School Reception Centers				
School	Reception Center	Address	Municipality	State
All Claiborne County Schools	Hazlehurst High School	101 S Haley St	Hazlehurst	MS
Tensas Academy	Ferriday High School	801 E Wallace Blvd	Ferriday	LA
Tensas Elementary				
Tensas/Davidson High School				
Newellton Elementary	Tallulah High School	600 Bayou Dr	Tallulah	LA
Newellton Christian Academy				

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Grand Gulf Nuclear Station

Evacuation Time Estimate

Table 8-4. Medical Facility Transit Demand

ERPA	Distance (miles)	Direction	Facility Name	Municipality	Capacity	Current Census	Ambulatory	Wheel-chair Bound	Bed-ridden	Ambulance Runs	Wheel-chair Bus Runs	Bus Runs
Claiborne County												
4A	5.5	SE	Claiborne County Hospital	Port Gibson	32	32	22	0	10	5	0	1
4A	4.9	SE	Claiborne County Nursing Center	Port Gibson	77	64	15	38	11	6	10	1
Claiborne County Totals:					109	96	37	38	21	11	10	2
Tensas Parish												
9	12.4	WNW	Franklin Medical Rural Health Clinic	Newellton	Outpatient Healthcare facility							
9	12.7	WNW	Tensas Care & Rehabilitation Center	Newellton	102	55	25	24	6	3	6	1
11	12.4	WSW	St. Joseph Rural Health Clinic	Saint Joseph	Outpatient Healthcare facility							
11	12.7	WSW	Tensas Community Health Center	Saint Joseph	Outpatient Healthcare facility							
11	12.8	WSW	Tensas Parish Health Unit	Saint Joseph	Outpatient Healthcare facility							
Tensas Parish Totals:					102	55	25	24	6	3	6	1
EPZ Totals:					211	151	62	62	27	14	16	3

N/A = Data Not Available

Supplement 1 Grand Gulf Nuclear Station Evacuation Time Estimate

Table 8-5A. School Evacuation Time Estimates - Good Weather											
School	Driver Mobilization Time(min)	Travel Time from Depot (min)	Loading Time (min)	Dist. to EPZ Boundary (mi.)		Travel Time to EPZ Bdry (min)	ETE (hr:min)	Dist. EPZ Bndry to R.C.		Travel Time EPZ Bdry to RC (min)	ETE to R.C. (hr:min)
				Major Road	Local Road			Major Road	Local Road		
Claiborne County Schools											
A.W. Watson Elementary School	90	30	5	4.2	2.8	11	2:20	38.1	0.7	48	3:05
Chamberlain-Hunt Academy	90	30	5	3.9	0.8	7	2:15	41.1	0.7	51	3:05
Claiborne Educational Foundation	90	30	5	3.9	0.6	6	2:15	41.1	0.7	51	3:05
Port Gibson High	90	30	5	4.2	2.2	10	2:15	38.1	0.7	48	3:05
Port Gibson Middle School	90	30	5	3.9	1.0	7	2:15	41.1	0.7	51	3:05
Reachout Foundation	90	30	5	2.6	0.3	4	2:10	38.1	0.7	48	3:00
Average ETE:							2:15	Average:		50	3:04
Tensas Parish Schools											
Tensas/Davidson High School	90	30	5	3.1	0.2	5	2:10	27.6	0	34	2:45
Newellton Christian Academy	90	30	5	7.5	1.3	12	2:20	17.2	0	21	2:40
Newellton Elementary	90	30	5	7.5	0.8	11	2:20	17.2	0	21	2:40
Tensas Academy	90	30	5	3.1	0.2	5	2:10	27.6	0	34	2:45
Tensas Elementary	90	30	5	2.4	0.2	4	2:10	27.6	0	34	2:45
Average ETE:							2:14	Average:		29	2:43

Supplement 1 Grand Gulf Nuclear Station Evacuation Time Estimate

Table 8-5B. School Evacuation Time Estimates - Rain											
School	Driver Mobilization Time(min)	Travel Time from Depot (min)	Loading Time (min)	Dist. to EPZ Boundary (mi.)		Travel Time to EPZ Bdry (min)	ETE (hr:min)	Dist. EPZ Bdry to R.C.		Travel Time EPZ Bdry to RC (min)	ETE to R.C. (hr:min)
				Major Road	Local Road			Major Road	Local Road		
Claiborne County Schools											
A.W. Watson Elementary School	100	35	10	4.2	2.8	12	2:40	38.1	0.7	53	3:30
Chamberlain-Hunt Academy	100	35	10	3.9	0.8	7	2:35	41.1	0.7	57	3:30
Claiborne Educational Foundation	100	35	10	3.9	0.6	7	2:35	41.1	0.7	57	3:30
Port Gibson High	100	35	10	4.2	2.2	11	2:40	38.1	0.7	53	3:30
Port Gibson Middle School	100	35	10	3.9	1.0	8	2:35	41.1	0.7	57	3:30
Reachout Foundation	100	35	10	2.6	0.3	5	2:30	38.1	0.7	53	3:25
Average ETE:							2:35	Average:		55	3:29
Tensas Parish Schools											
Tensas/Davidson High School	100	35	10	3.1	0.2	5	2:30	27.6	0	37	3:10
Newellton Christian Academy	100	35	10	7.5	1.3	13	2:40	17.2	0	23	3:05
Newellton Elementary	100	35	10	7.5	0.8	12	2:40	17.2	0	23	3:00
Tensas Academy	100	35	10	3.1	0.2	5	2:30	27.6	0	37	3:10
Tensas Elementary	100	35	10	2.4	0.2	4	2:30	27.6	0	37	3:10
Average ETE:							2:34	Average:		31	3:07

Supplement 1 Grand Gulf Nuclear Station Evacuation Time Estimate

Grand Gulf EPZ: Parks & Overnight Camps								
ERPA	Distance (miles)	Dir- ection	Facility Name	Street Address	Municipality	Phone	Persons	Total Vehicles
Claiborne County								
1	1.2	NNW	Grand Gulf Military Park	12006 Grand Gulf Road	Port Gibson	601-437-5911	1,310	483
2A	3.5	ENE	Warner-Tulley YMCA Camp	5184 Y Camp Road	Port Gibson	601-437-4391	90	4
2A	3.1	E	Lake Claiborne	Lake Claiborne Road	Port Gibson	601-437-4922	399	147
Sub-total							1,799	634
Tensas Parish								
10	10.1	WSW	Lake Bruin State Park Campground	State Highway 604 & Robertson	Saint Joseph	318-766-3530	135	75
Sub-total							135	75
Overall Total							1,934	709

Grand Gulf EPZ: Hotels / Motels								
ERPA	Distance (miles)	Dir- ection	Facility Name	Street Address	Municipality	Phone	Persons	Vehicles
Claiborne County								
2A	5.4	SE	Grand Gulf Inn	Rte 61 & Grand Gulf Rd	Port Gibson	601-437-8811	88	44
Sub-total							88	44
Tensas Parish								
10	10.1	WSW	Lake Bruin Motel & Grill	State Highway 604 & Robertson	Saint Joseph	318-766-6007	30	11
11	12.1	WSW	Shilo Lake Bruin Resort	State Highway 605 & Washam Rd	Saint Joseph	318-766-3334	354	106
Sub-total							384	117
Overall Total							472	161

Supplement 1 Grand Gulf Nuclear Station Evacuation Time Estimate

Grand Gulf EPZ: Day Care Centers (As of December 2006)									
ERPA	Distance (miles)	Direction	Name	Street Address	Municipality	Phone	Enrollment	Employees	Transportation Assets
Claiborne County									
3A	4.9	SE	Loving Arms Daycare & Pre-School	Elm St & Northside Sub Rd	Port Gibson	601-437-8262	48	9	1 Van
4A	5.2	SE	All God's Children Pre-School & Nursery	509 Walnut Street	Port Gibson	601-437-3588	17	3	None
4A	4.9	SE	Child Day Care Kindergarten	301 Market Street	Port Gibson	601-437-5144	7	3	None
4A	5.3	SE	Claiborne County Vo-Tech	College St & Jackson St	Port Gibson	601-437-3800	7	2	Share buses with Richardson Headstart
4A	5.4	SE	Concerned Citizens Daycare	1402 College Street	Port Gibson	601-437-3677	19	4	None
4A	5.1	SE	Heavenly Angels Daycare	Church St & Orange St	Port Gibson	601-437-3200	10	5	None
4A	5.2	SE	Little Kids College	904 Farmer Street	Port Gibson	601-437-5715	24	4	Share 2 Vans and 1 SUV
4A	5.6	SE	Little Kids University	Rte 61 & Sunset Hill Rd	Port Gibson	601-437-8576	28	6	SUV
4A	4.6	SE	Richardson Headstart	Osage St & Oil Mill Rd	Port Gibson	601-437-4094	190	51	11 buses
4B	9.1	SE	Amazing Grace Day Care	Tillman Rd & Moore Rd	Port Gibson	601-437-4010	21	7	None
5A	6.3	SSE	Brite Minds Inc	Rte 61 & Bridgewell Ln	Port Gibson	601-437-5353	5	2	None
5A	6.3	SSE	Open Arms Christian Center	Rte 61 & Bridgewell Ln	Port Gibson	601-437-8506	7	2	1 Van
Sub-total							383	98	4 Vans, 11 buses, 1 SUV
Tensas Parish									
11	12.6	WSW	Little Green Nursery	Pauline Street & State Highway 128	Saint Joseph	318-766-3380	12	2	None
11	12.6	WSW	Right Start Child Care	12th St & State Highway 128	Saint Joseph	318-766-7764	25	3	1 Van
Sub-total							37	5	1 Van
Overall Total							420	103	5 Vans, 11 buses, 1 SUV

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Evacuation Time Estimate

Grand Gulf EPZ: Major Employers							
ERPA	Distance (miles)	Direction	Facility Name	Street Address	Municipality	Phone	Non-EPZ Employees
Claiborne County							
1	0.0	N/A	GGNS Workforce				443
3A	4.9	SE	Claiborne County Nursing Center	2124 Old Hwy 61	Port Gibson	601-437-8737	20
4A	5.5	SE	Patient's Choice Medical Center of Claiborne County	123 McComb Ave	Port Gibson	601-437-5141	21
4A	5.2	SE	Port Gibson High School Faculty	159 Old Hwy 61	Port Gibson	601-437-4190	35
4A	5.4	SE	Port Gibson Middle School Faculty	161 Ramsey Drive	Port Gibson	601-437-4251	28
4A	4.2	SE	Watson Elementary School Faculty	880 Anthony St	Port Gibson	601-437-5070	53
4A	5.5	SE	Chamberlain-Hunt Academy Faculty	124 McComb Avenue	Port Gibson	601-437-4291	34
4A	5.7	SE	Claiborne Educational Foundation Faculty	602 Horton Drive	Port Gibson	601-437-4097	5
4A	4.9	SE	Piggly Wiggly	1002 Main St	Port Gibson	601-437-4205	15
4A	5.1	SE	M&M Superstore	410 Church St	Port Gibson	601-437-4191	7
6	10.5	SSW	Alcorn State University Faculty	1000 ASU Drive	Alcorn State	601-877-6100	121
6	10.5	SSW	Alcorn State University Commuting Students	1000 ASU Drive	Alcorn State	601-877-6100	1,242
Sub-total							2,024
Tensas Parish							
11	12.9	WSW	Tensas Elementary School Faculty	192 Hwy 897-6	Saint Joseph	318-766-3346	26
11	12.6	WSW	Tensas/Davidson High School Faculty	720 Plank Rd	Saint Joseph	318-766-3585	9
11	12.6	WSW	Tensas Academy Faculty	418 HWY 128	Saint Joseph	318-766-4384	13
9	12.3	WNW	Newellton Elementary School Faculty	400 Verona Street	Newellton	318-467-5109	15
9	11.9	WNW	Newellton Christian Academy Faculty	1016 Verona St	Newellton	318-467-5755	3
9	11.8	WNW	J.B. Evans Correctional Center	Routh St & Burnside St	Newellton	318-467-3355	8
9	12.7	WNW	Tensas Care & Rehab Center	901 Verona Ln	Newellton	318-467-5117	10
Sub-total							84
Overall Total							2,108

Supplement 1 Grand Gulf Nuclear Station Evacuation Time Estimate

Grand Gulf EPZ: Schools								
ERPA	Distance (miles)	Dir- ection	School Name	Street Address	Municipality	Phone	Enrollment	Staff
Claiborne County								
2B	7.5	ESE	Reachout Foundation	1027 Romola Rd	Port Gibson	601-437-9600	10	3
4A	4.2	SE	A.W. Watson Elementary School	880 Antony St	Port Gibson	601-437-5070	889	89
4A	5.5	SE	Chamberlain-Hunt Academy	124 McComb Avenue	Port Gibson	601-437-4291	101	58
4A	5.7	SE	Claiborne Educational Foundation	602 Horton Drive	Port Gibson	601-437-4097	36	9
4A	5.2	SE	Port Gibson High	159 Old Hwy 61	Port Gibson	601-437-4190	578	60
4A	5.4	SE	Port Gibson Middle School	161 Ramsey Drive	Port Gibson	601-437-4251	431	47
Sub-total							2,045	266
Tensas Parish								
9	11.9	WNW	Newellton Christian Academy	1016 Verona St	Newellton	318-467-5755	36	6
9	12.3	WNW	Newellton Elementary	400 Verona Street	Newellton	318-467-5109	225	52
11	12.6	WSW	Tensas/Davidson High School	720 Plank Rd	Saint Joseph	318-766-3585	225	35
11	12.6	WSW	Tensas Academy	418 Hwy 128	Saint Joseph	318-766-4384	194	26
11	12.9	WSW	Tensas Elementary	192 Hwy 897-6	Saint Joseph	318-766-3346	202	13
Sub-total							882	132
Overall Total							2,927	398

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Evacuation Time Estimate

Table H-1. Percent of ERPA Population Evacuating for each Evacuation Region

ERPA	REGION								
	2-Mile Ring, 5-Mile Ring, Entire EPZ			2-Mile Radius and Downwind to 5-Miles		5-Mile Radius and Downwind to EPZ Boundary			
	R1	R2	R3	R4	R5	R6	R7	R8	R9
1	100%	100%	100%	100%	100%	100%	100%	100%	100%
2A	35%	100%	100%	100%	50%	100%	100%	100%	100%
2B	35%	35%	100%	35%	35%	100%	50%	50%	50%
3A	35%	100%	100%	50%	100%	100%	100%	100%	100%
3B	35%	35%	100%	35%	35%	50%	100%	50%	50%
4A	35%	100%	100%	50%	100%	100%	100%	100%	100%
4B	35%	35%	100%	35%	35%	50%	100%	50%	50%
5A	35%	100%	100%	50%	100%	100%	100%	100%	100%
5B	35%	35%	100%	35%	35%	50%	100%	50%	100%
6	35%	35%	100%	35%	35%	50%	100%	50%	100%
7	35%	35%	100%	35%	35%	100%	50%	100%	50%
8	35%	35%	100%	35%	35%	50%	50%	100%	50%
9	35%	35%	100%	35%	35%	50%	50%	100%	50%
10	35%	35%	100%	35%	35%	50%	50%	50%	100%
11	35%	35%	100%	35%	35%	50%	50%	50%	100%
12	35%	35%	100%	35%	35%	50%	50%	100%	50%

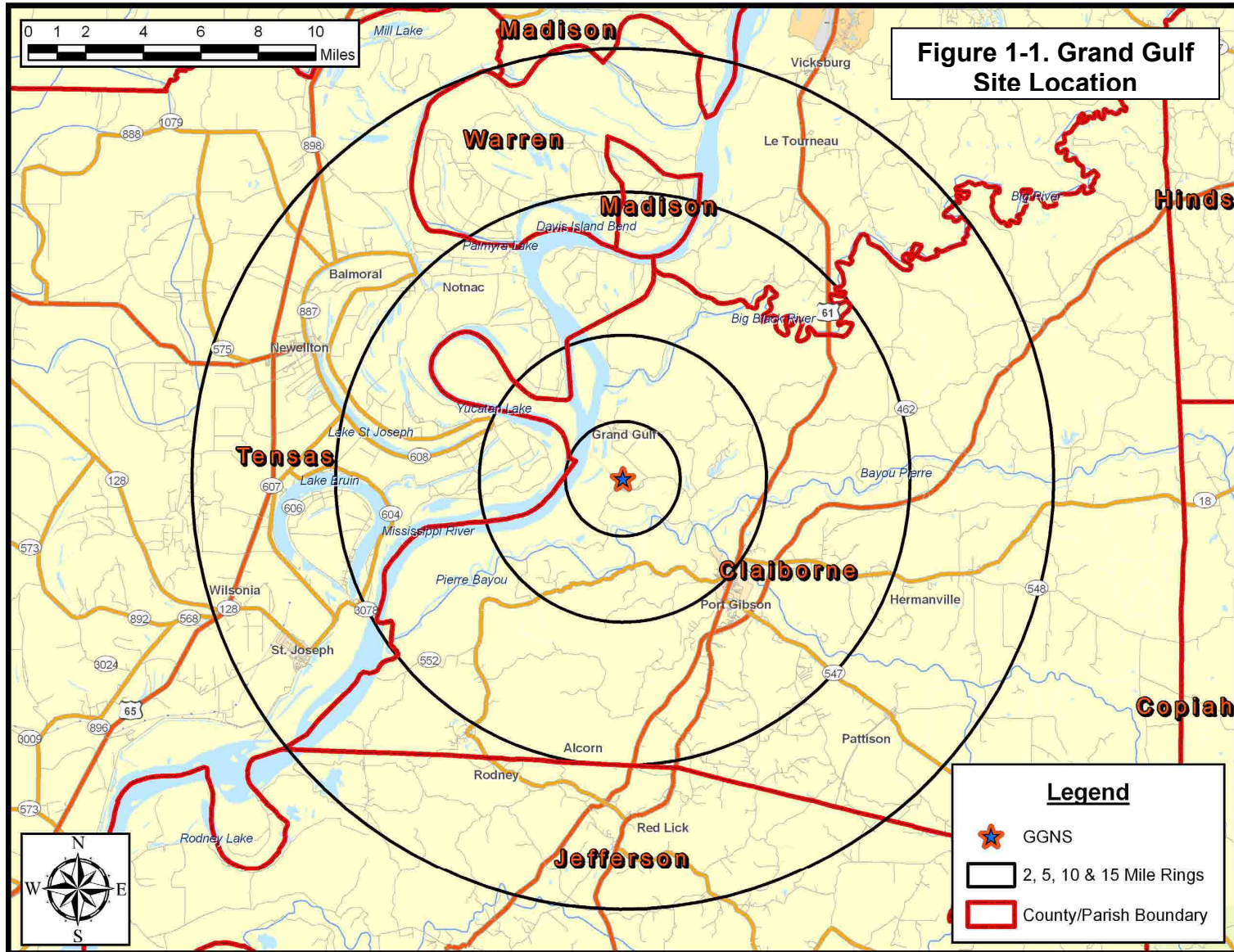
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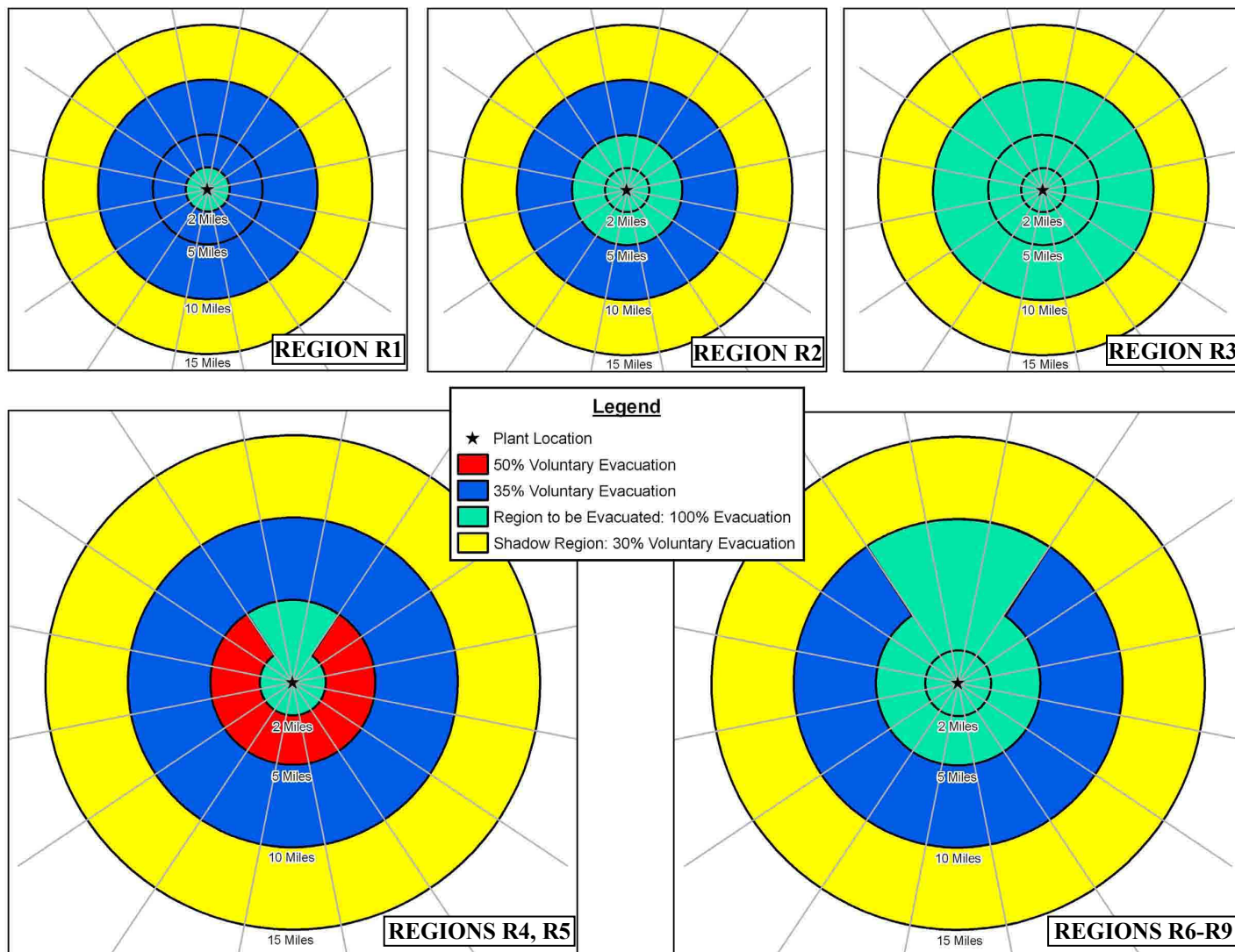
Evacuation Time Estimate

Table I-2. Evacuation Time Estimates for Shadow Sensitivity Study					
Shadow Data			Evacuation Region		
Percent Shadow Evacuation	Number of Shadow Residents	Number of Shadow Resident Vehicles	2-Mile Region (R01)	5-Mile Region (R02)	Entire EPZ (R03)
15	682	370	3:00	4:00	4:10
30 (Base)	1,363	739	2:50	4:00	4:10
60	2,726	1,478	3:00	4:00	4:10

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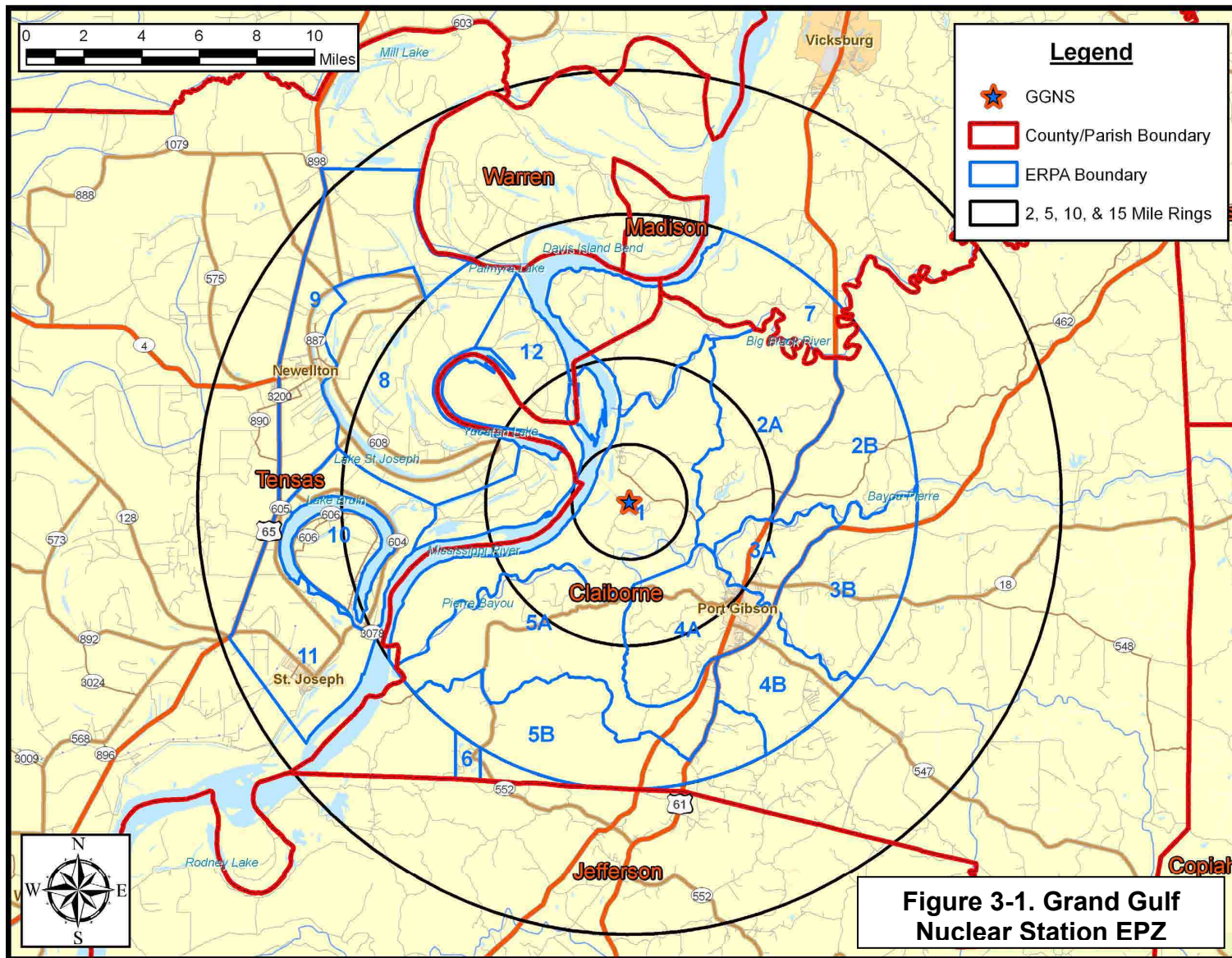


**Figure 2-1. Assumed
Regional Evacuation**

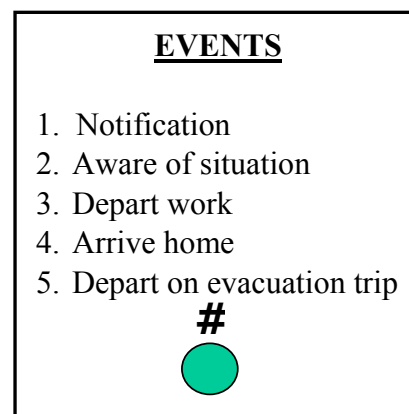
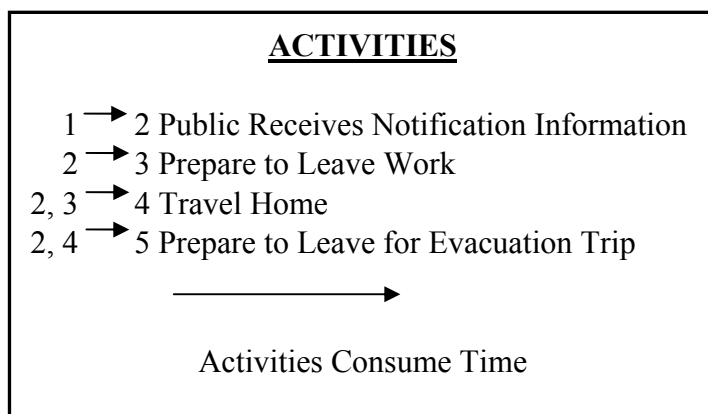
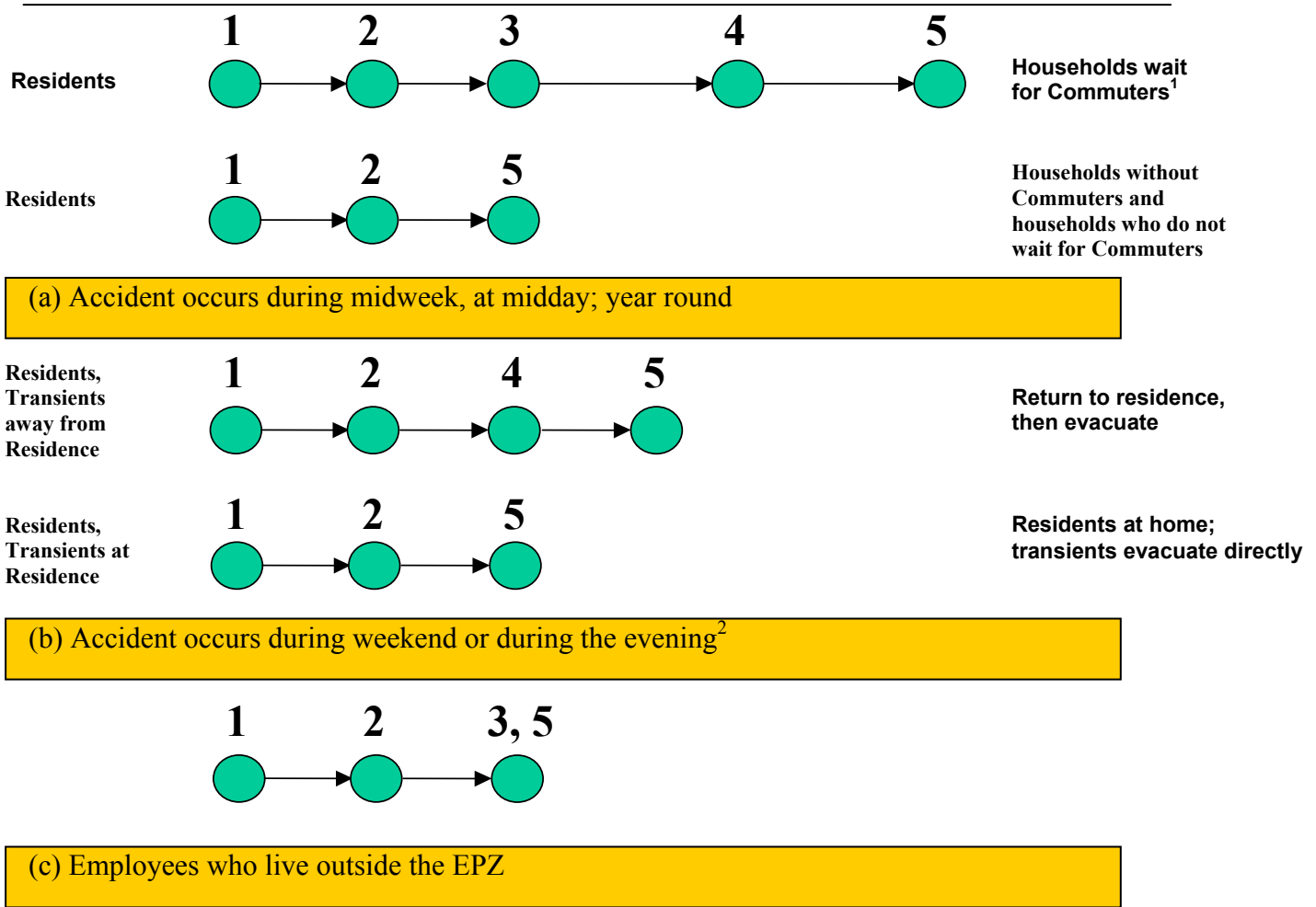
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Evacuation Time Estimate



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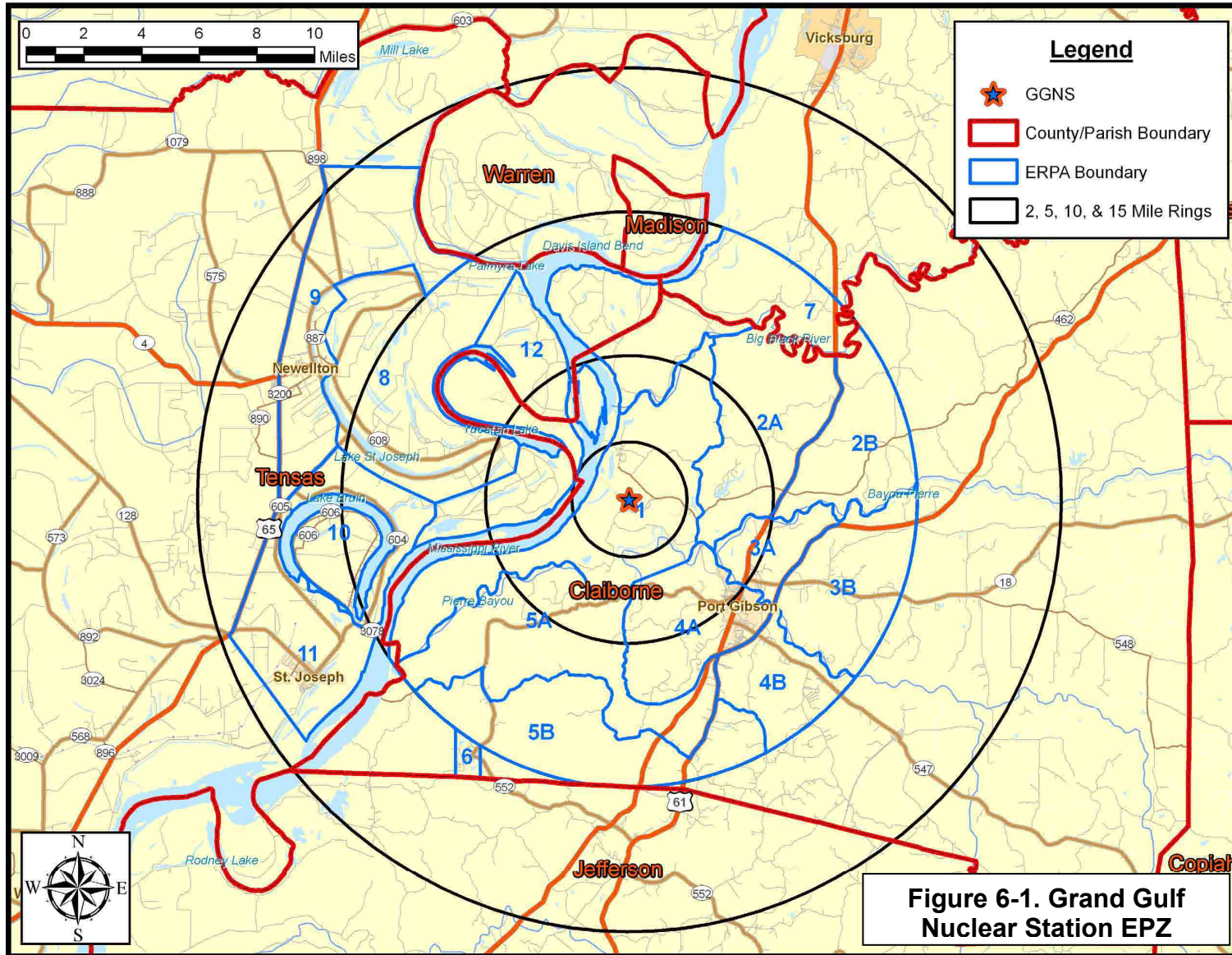


¹ Applies for evening and weekends also if commuters are at work.

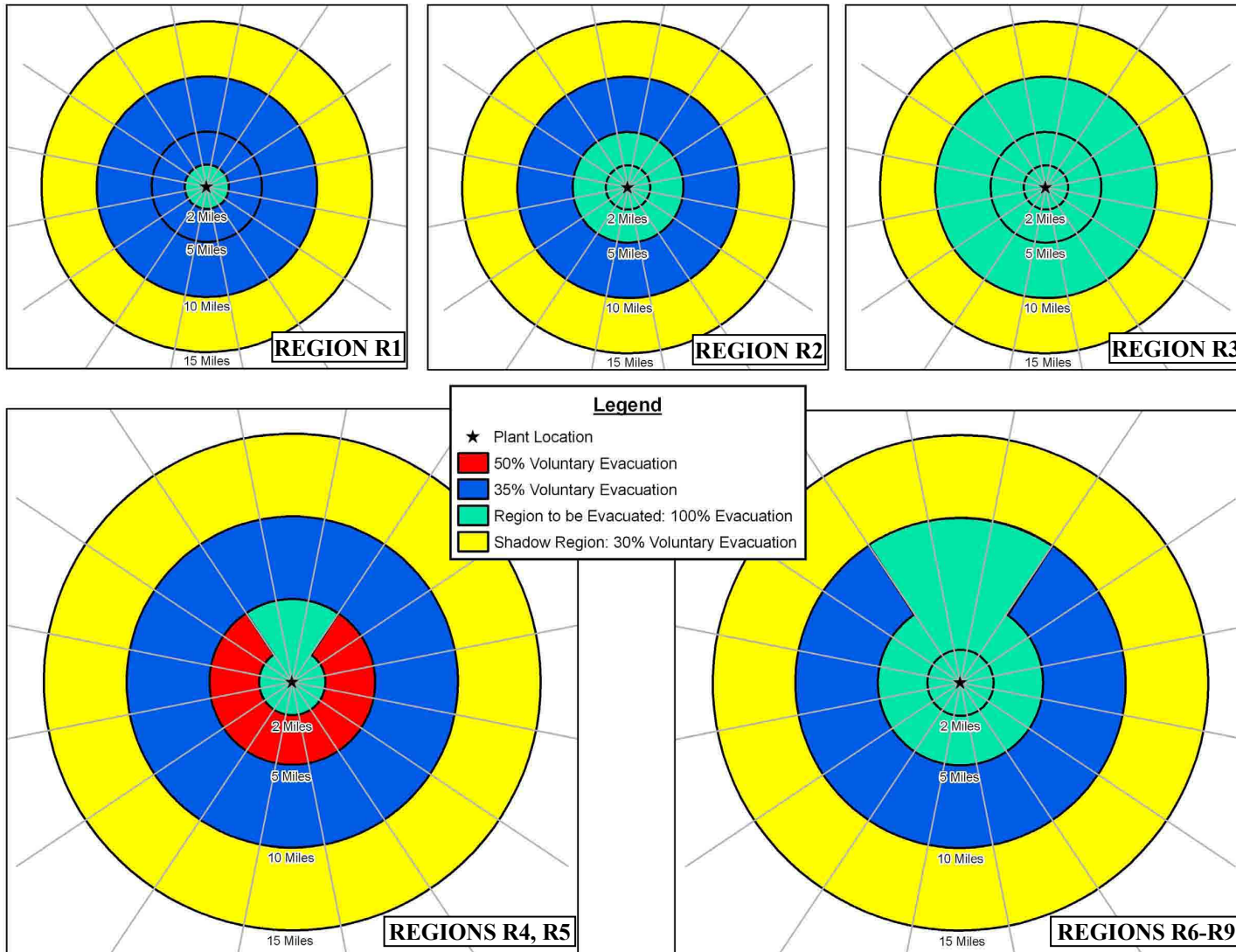
² Applies throughout the day, week, and year for transients.

Figure 5-1. Events and Activities Preceding the Evacuation Trip

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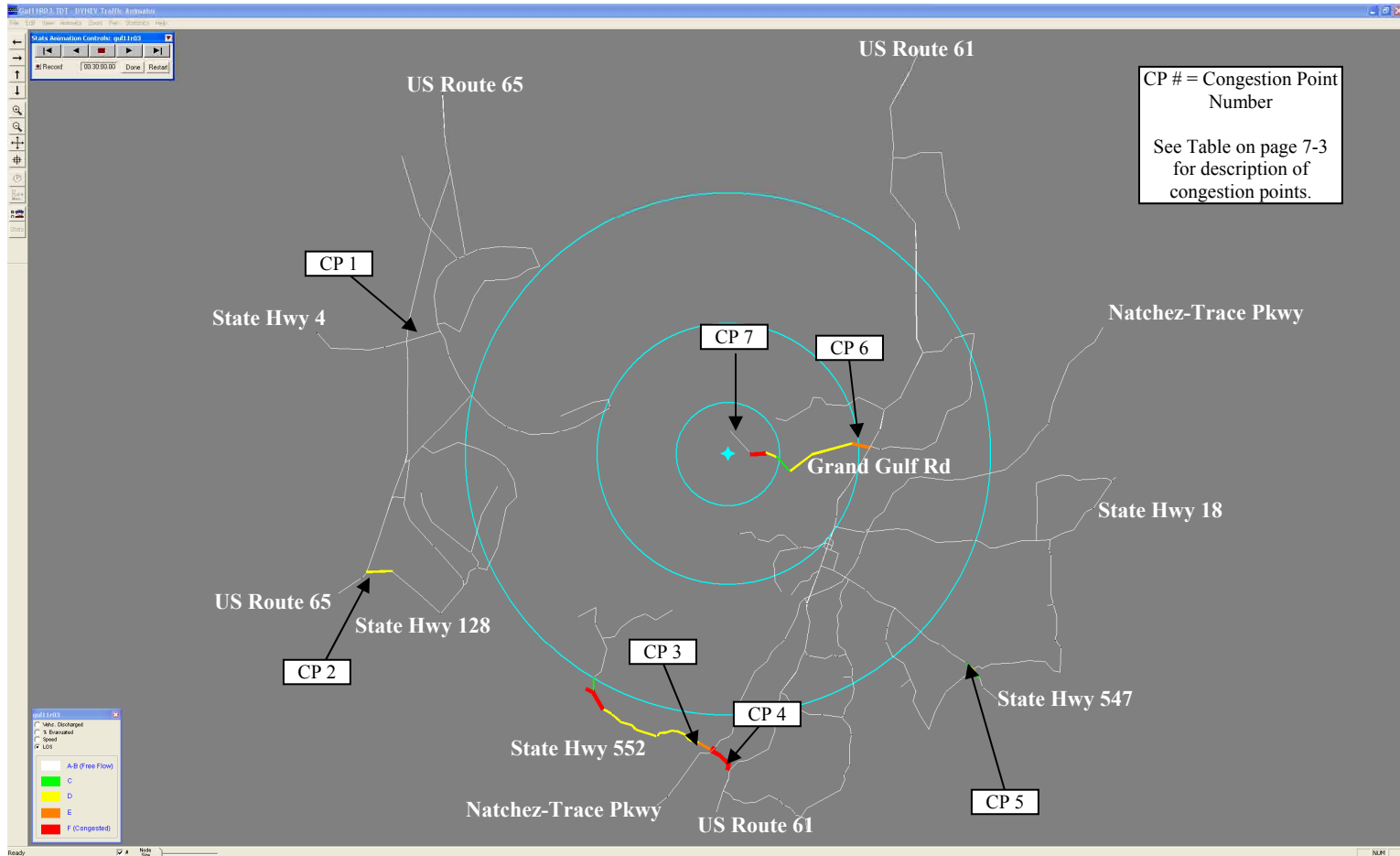


**Figure 7-1. Assumed
Regional Evacuation**

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Evacuation Time Estimate



**Figure 7-3. Areas of Traffic Congestion
30 Minutes after the Advisory to Evacuate (Region R3, Scenario 11)**

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Evacuation Time Estimate

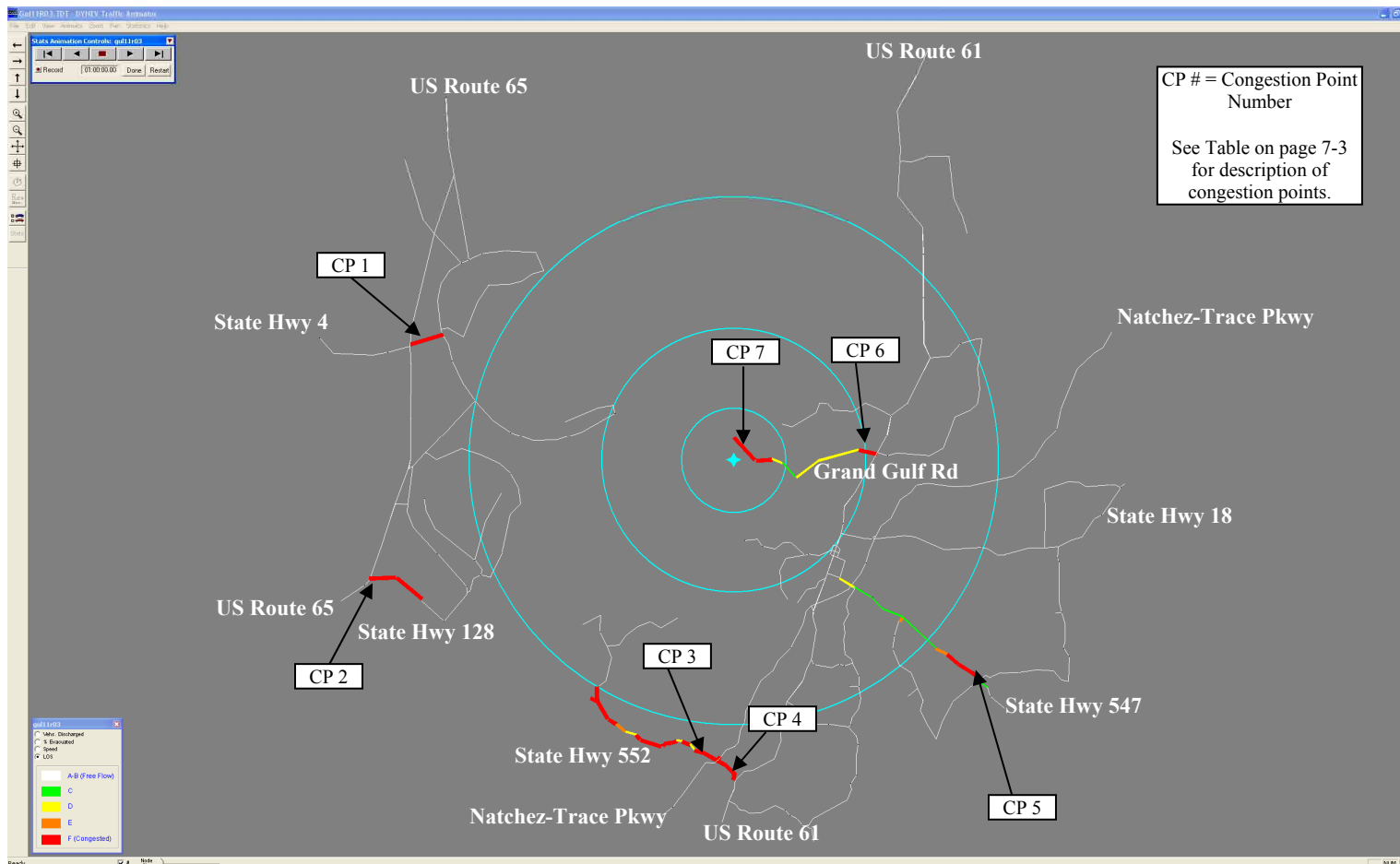


Figure 7-4. Areas of Traffic Congestion
1 Hour after the Advisory to Evacuate (Region R3, Scenario 11)

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Evacuation Time Estimate

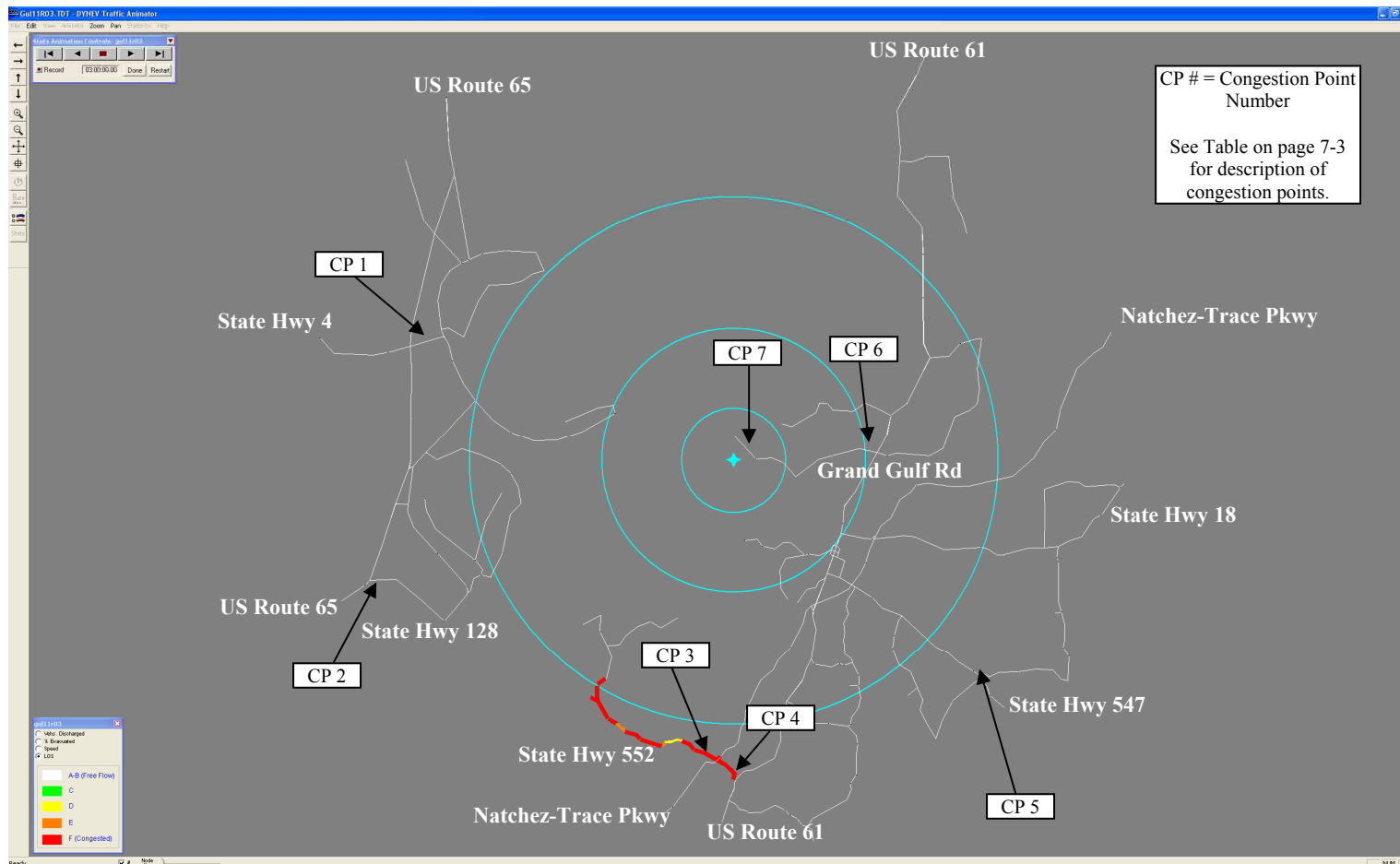
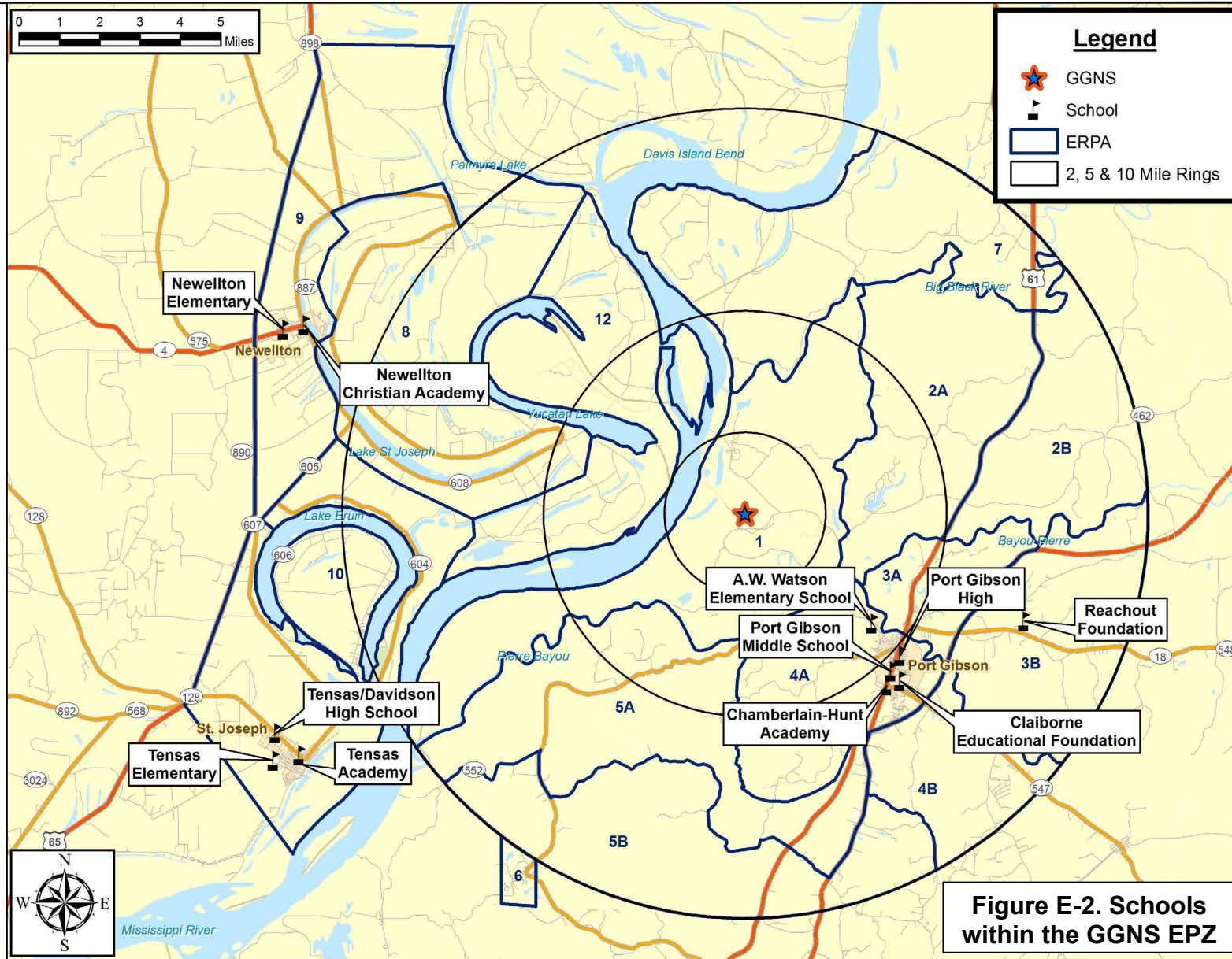


Figure 7-5. Areas of Traffic Congestion
3 Hours after the Advisory to Evacuate (Region R3, Scenario 11)

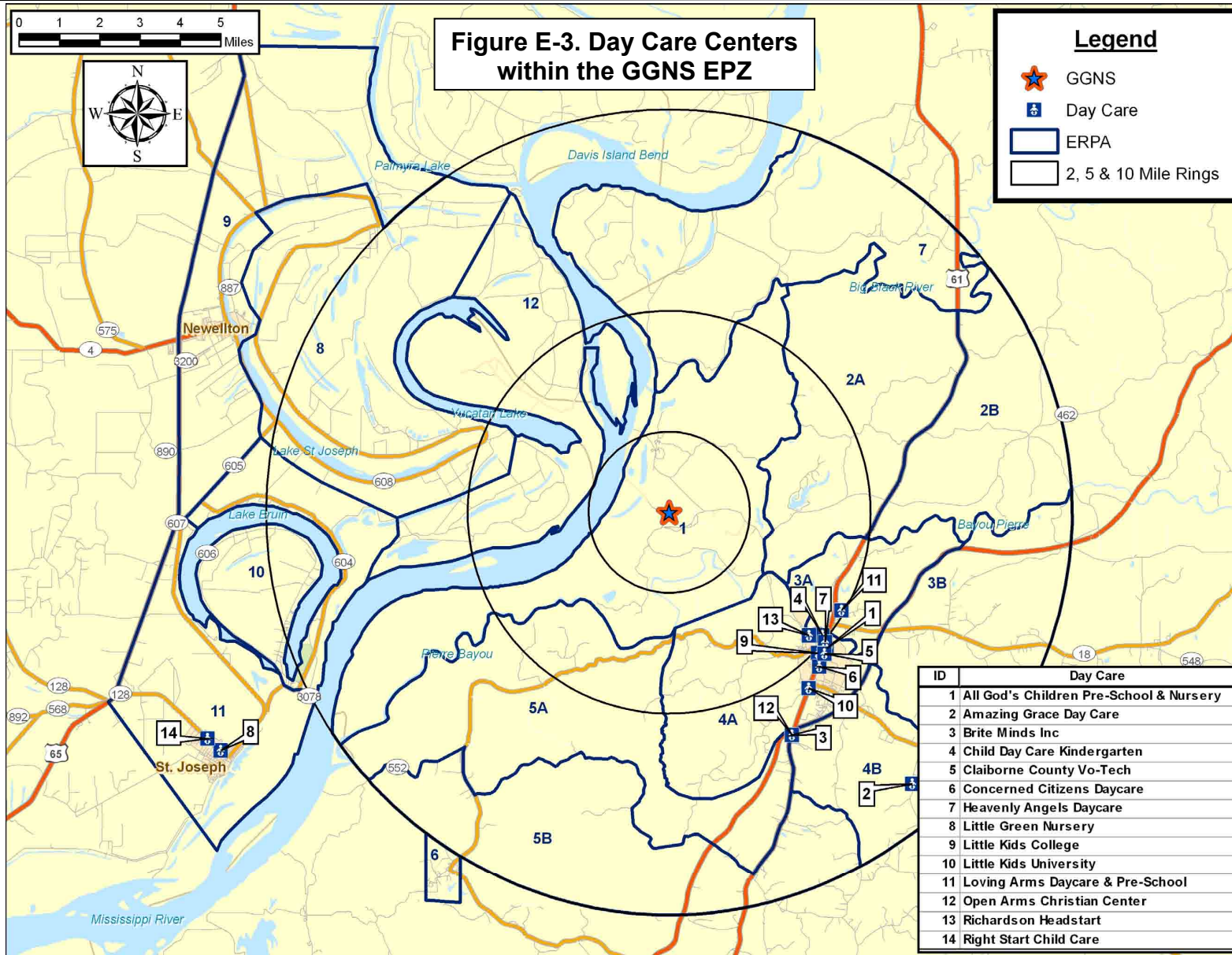
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Evacuation Time Estimate



Supplement 1 Grand Gulf Nuclear Station Evacuation Time Estimate



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Evacuation Time Estimate

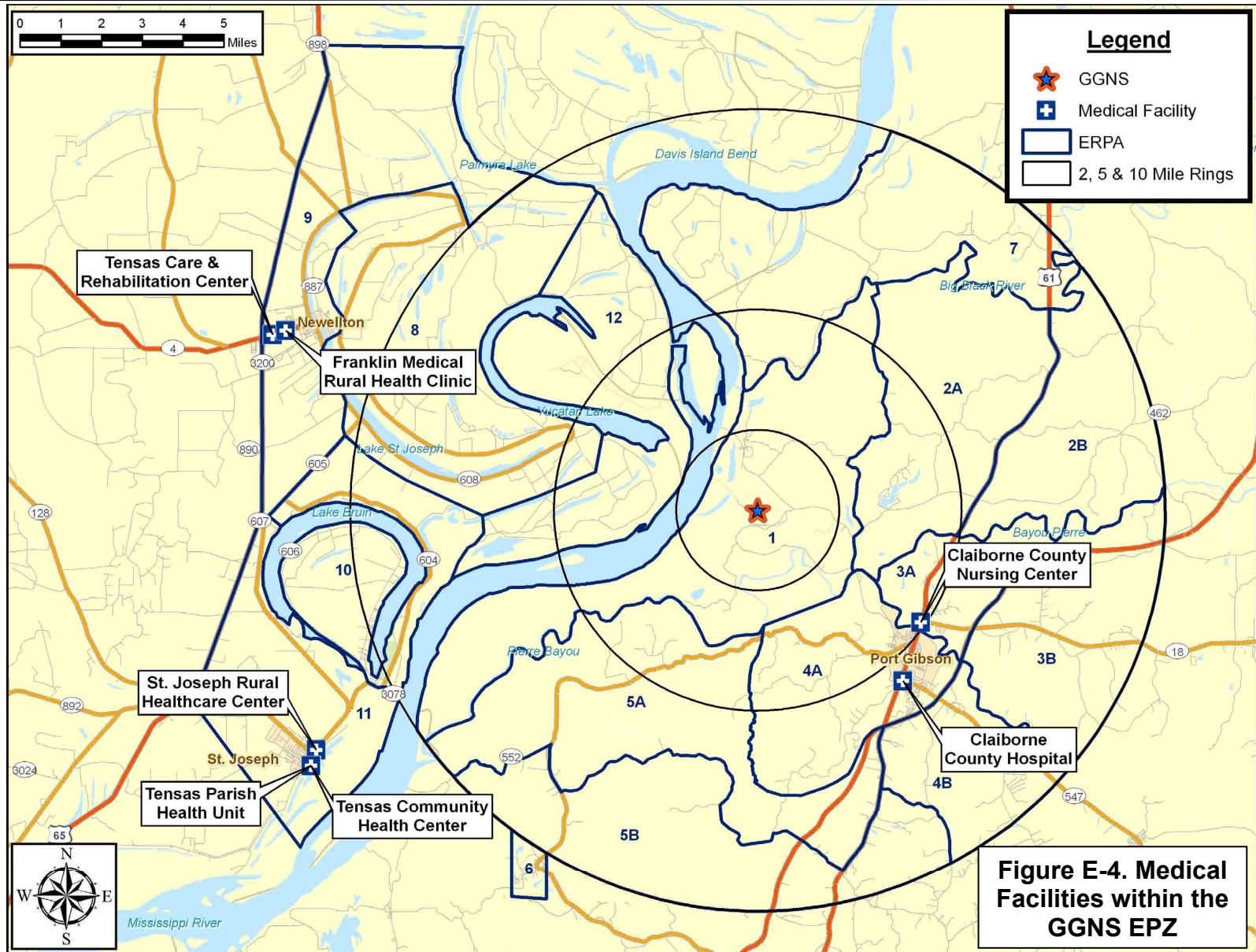
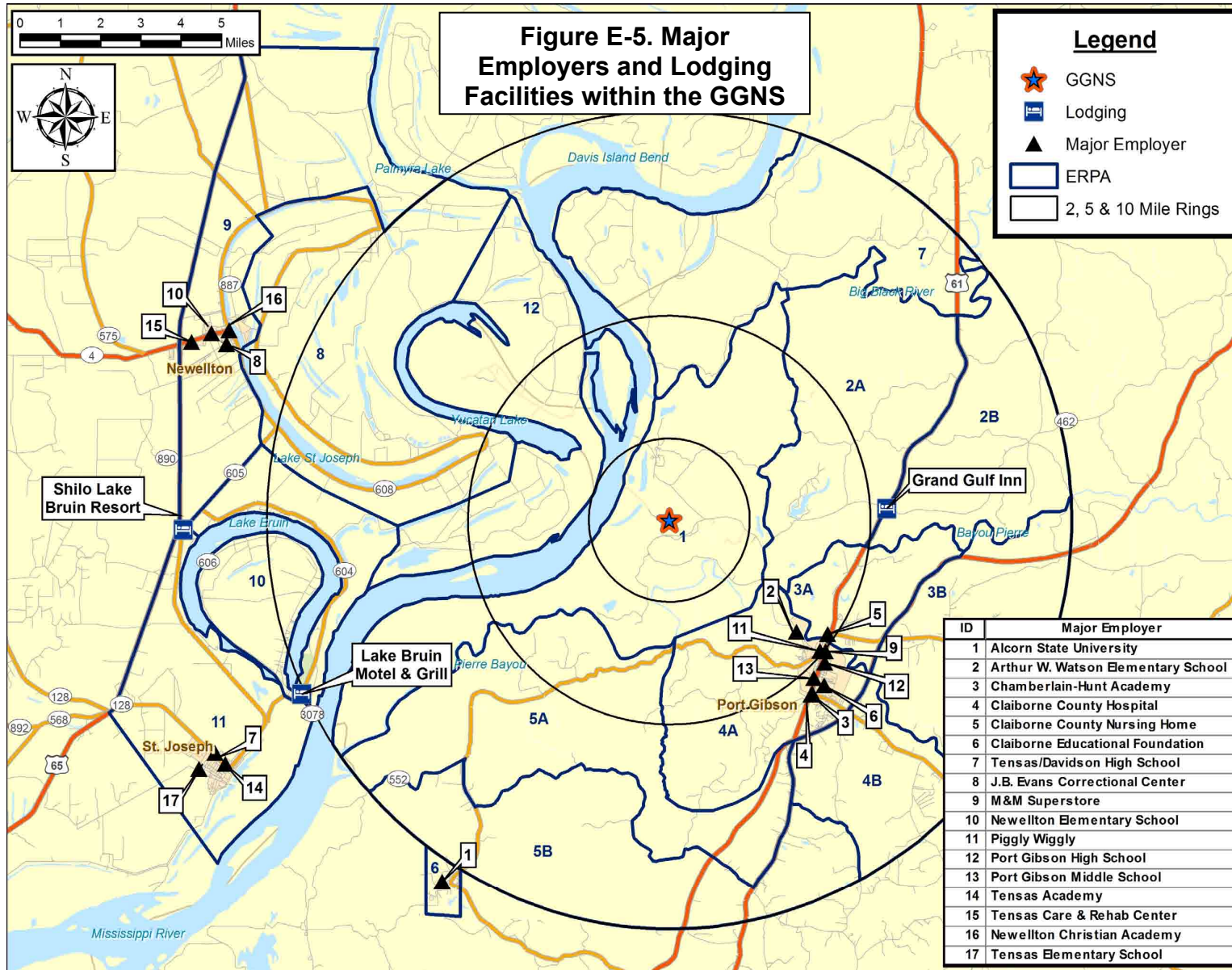


Figure E-4. Medical Facilities within the GGNS EPZ

Supplement 1

Grand Gulf Nuclear Station Evacuation Time Estimate



Supplement 1 Grand Gulf Nuclear Station Evacuation Time Estimate

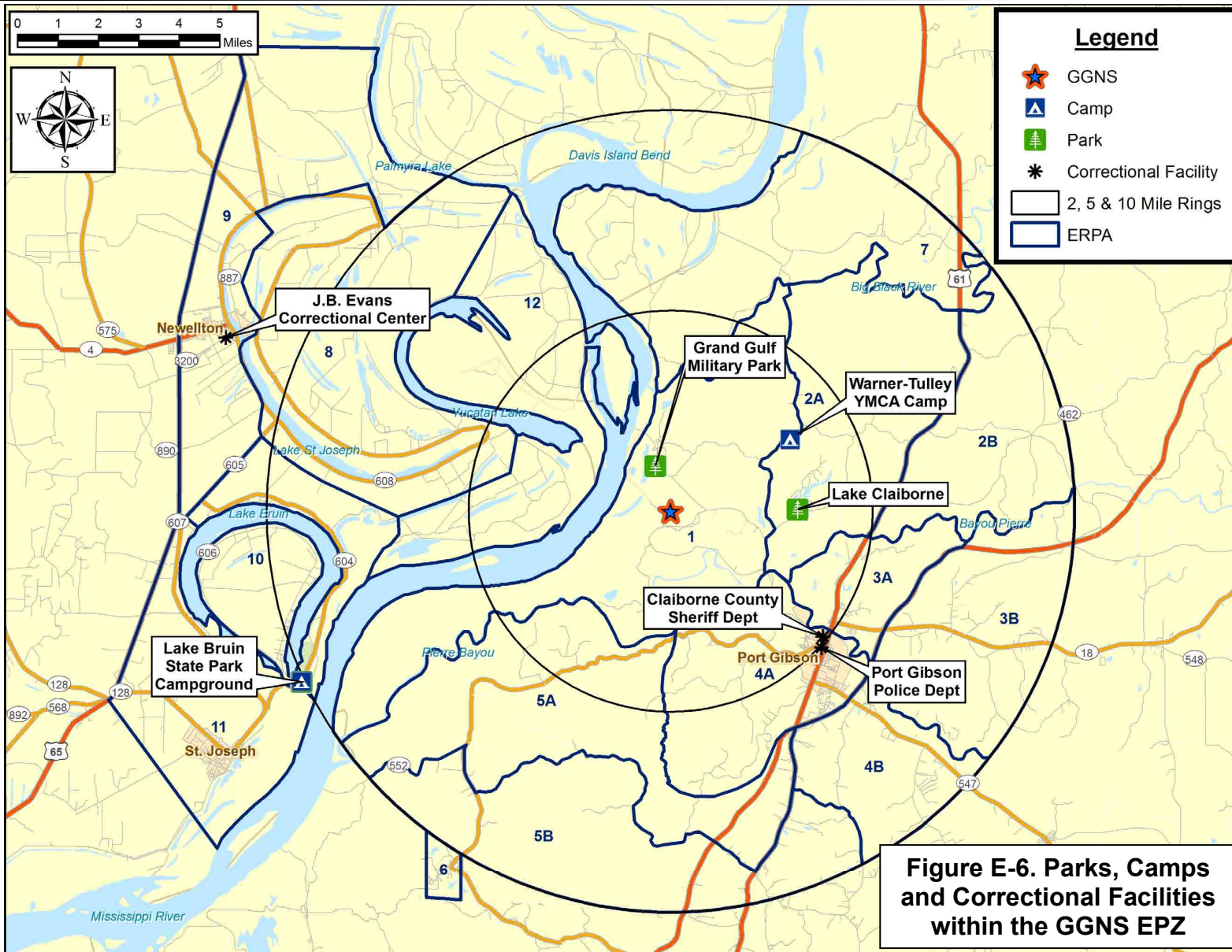


Figure E-6. Parks, Camps and Correctional Facilities within the GGNS EPZ