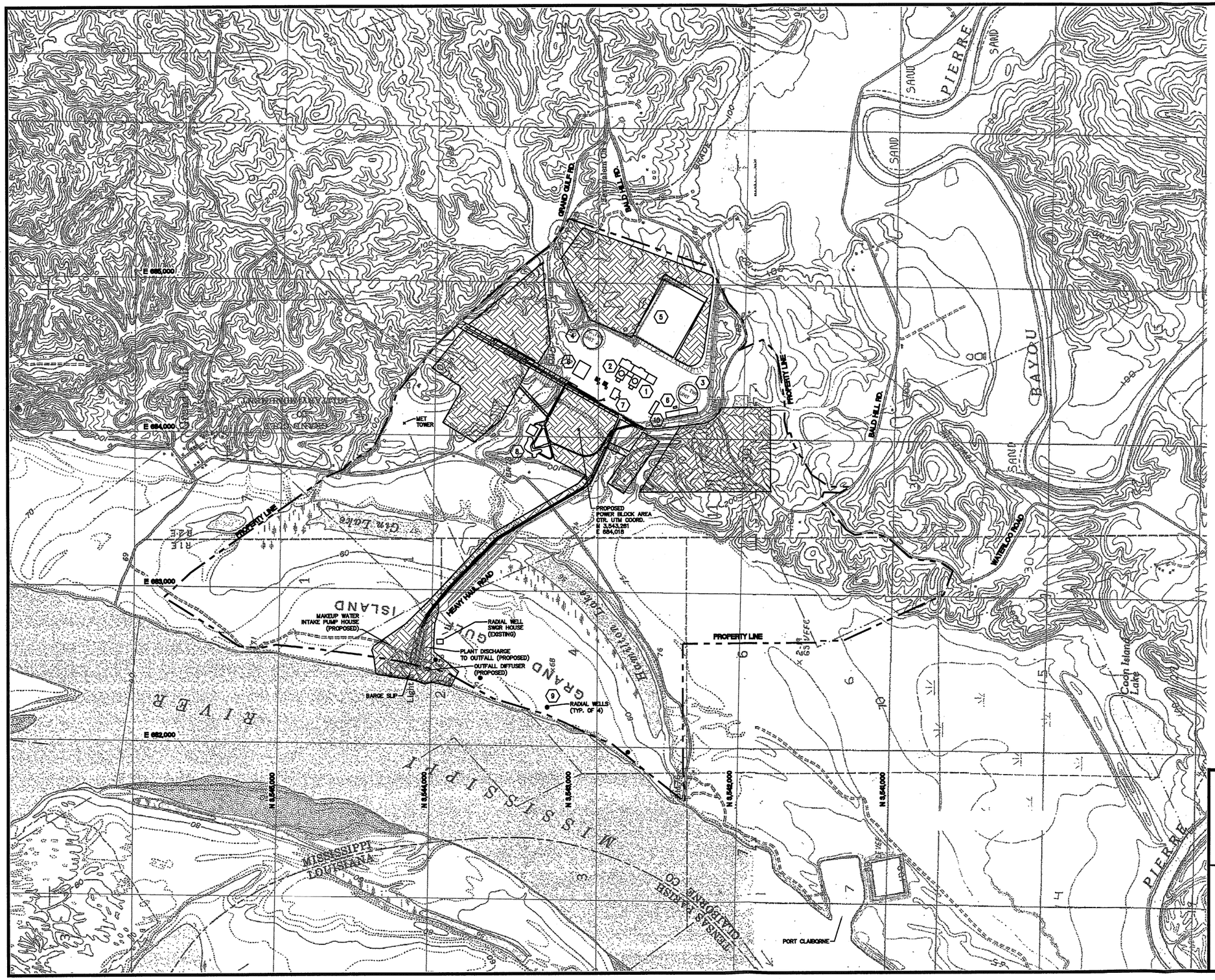
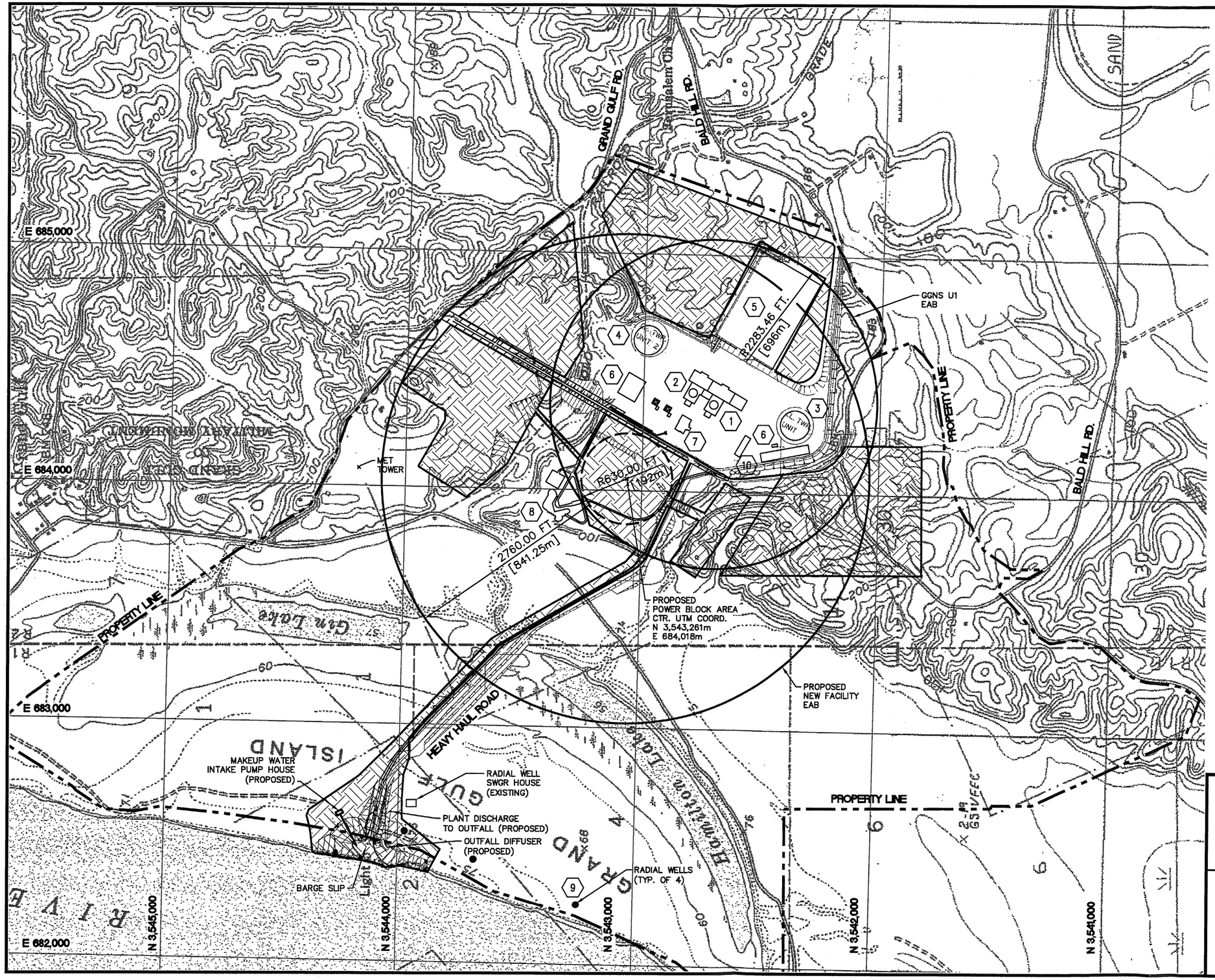


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EARLY SITE PERMIT APPLICATION
SITE SAFETY ANALYSIS REPORT

GGNS SITE LAYOUT
WITH PROPOSED NEW FACILITY
CONSTUCTION AREAS

FIGURE 2.1-1 REV. 1



GGNS BUILDING LEGEND:

1. UNIT 1
2. UNIT 2 (NOT COMPLETED)
3. UNIT 1 NDCT
4. UNIT 2 NDCT BASIN
5. SWITCHYARD
6. WAREHOUSE
7. ADMINISTRATION BUILDING
8. ESC BUILDING
9. RADIAL WELLS
10. AUXILIARY COOLING TOWER

NOTES:

PROPOSED NEW PLANT CONSTRUCTION AREAS.

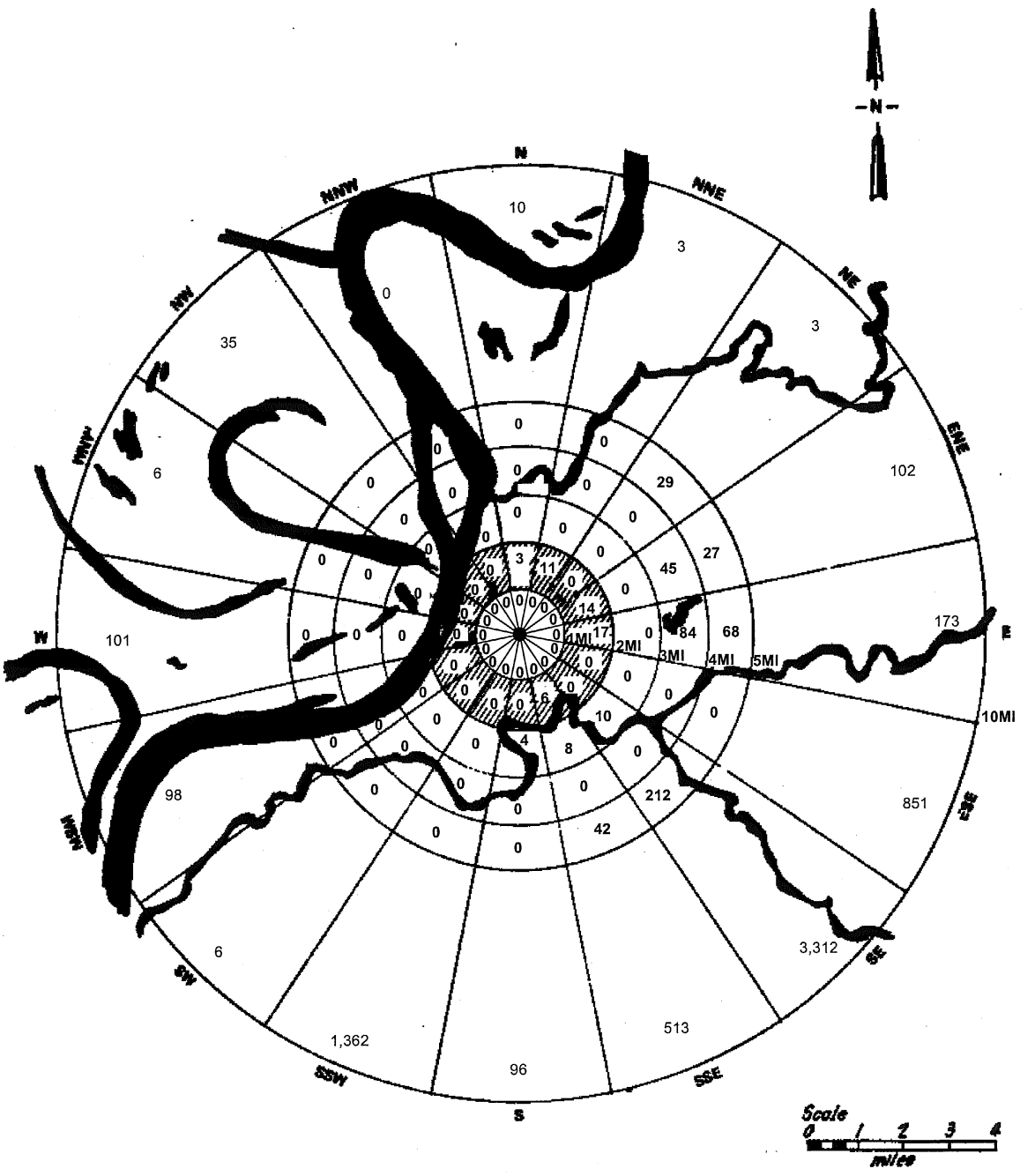
UTM COORD. GRID SHOWN.

SOURCE:
USGS TOPO MAP GRAND GULF, MS – LA (1963–1973) AND WIDOWS CREEK, MS – LA (1986 PROVISIONAL)

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EARLY SITE PERMIT APPLICATION
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SITE LAYOUT

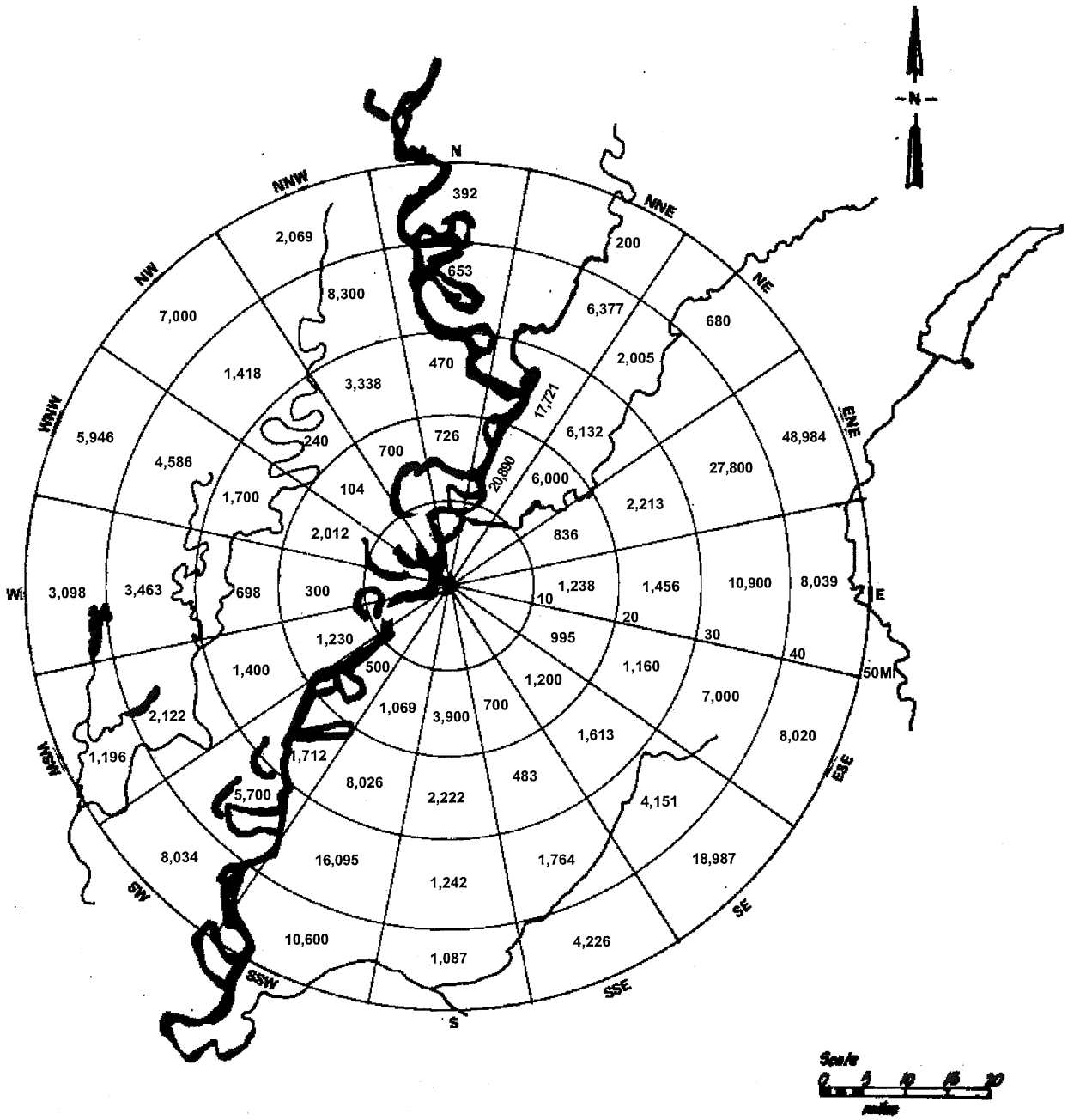
FIGURE 2.1-2 REV. 1



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SITE SAFETY ANALYSIS REPORT

PROJECTED 2002
POPULATION DISTRIBUTION
0 - 10 MILES
(UFSAR FIGURE 2.1-6)

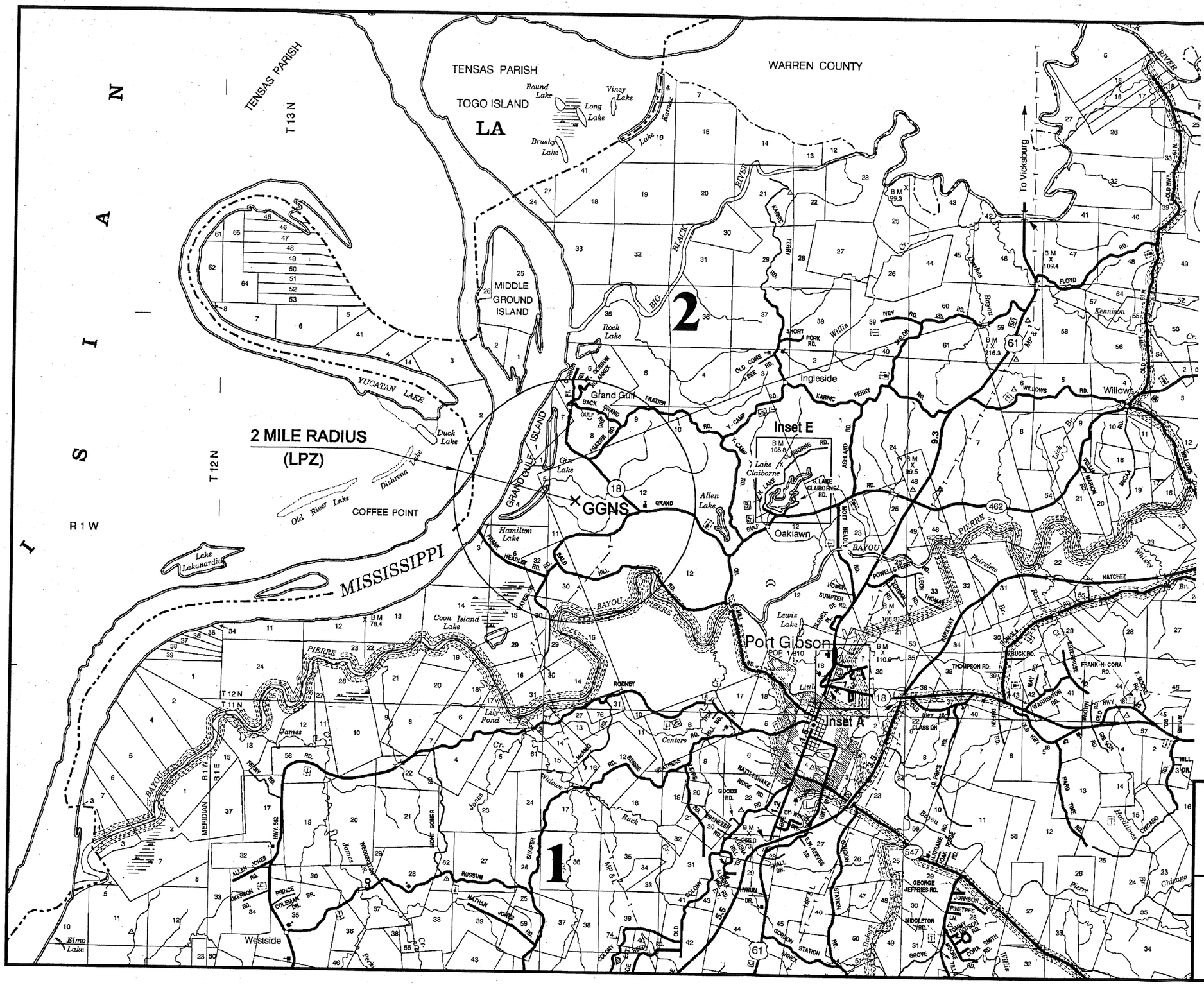
FIGURE 2.1-3 REV. 1



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EARLY SITE PERMIT APPLICATION
SITE SAFETY ANALYSIS REPORT

PROJECTED 2002
POPULATION DISTRIBUTION
10 - 50 MILE RADIUS
(UFSAR FIGURE 2.1-4)

FIGURE 2.1-4 REV. 1



GENERAL HIGHWAY MAP

CLAIBORNE COUNTY

MISSISSIPPI

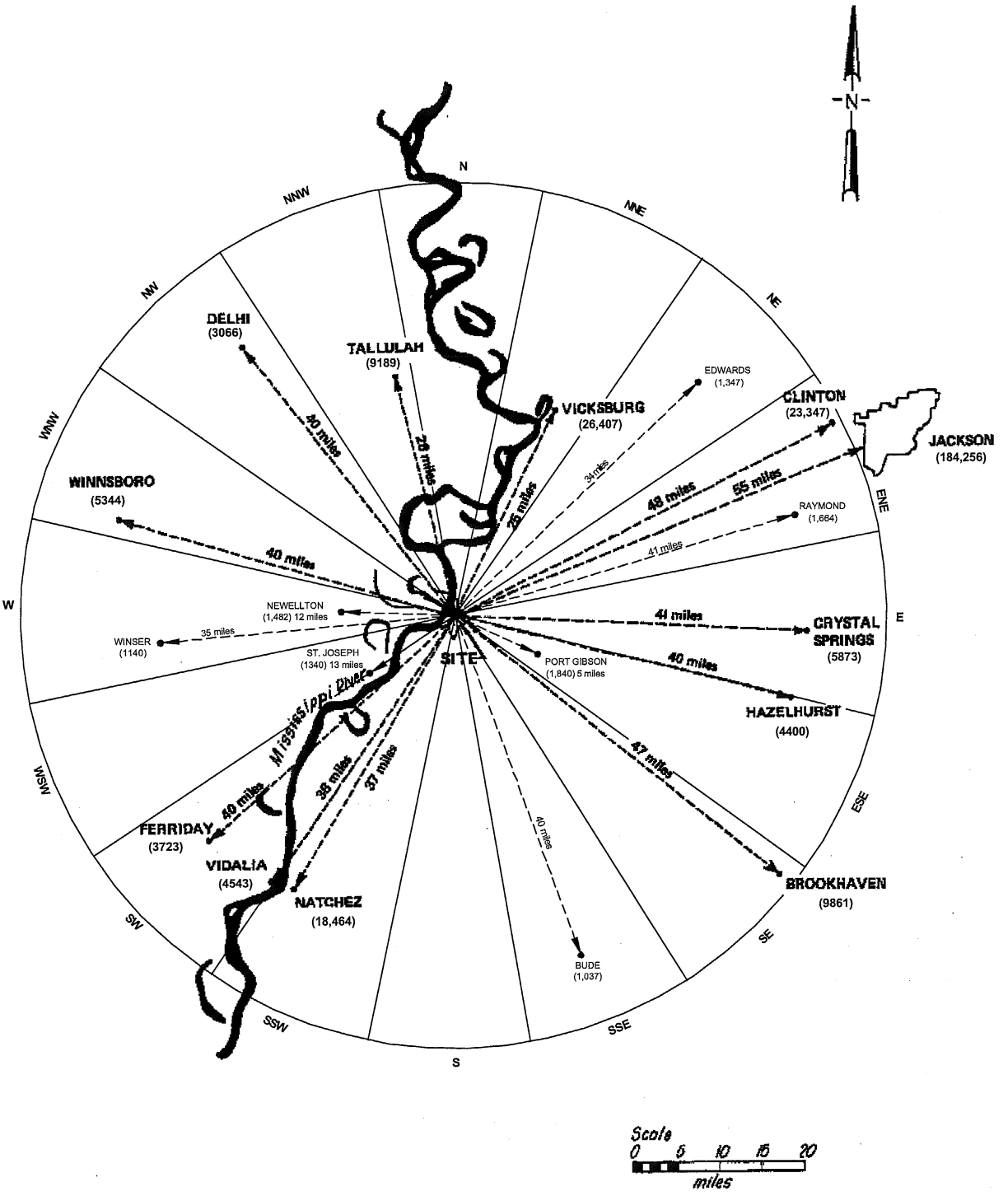
© 2000

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
PLANNING DIVISION
IN COOPERATION WITH THE
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
TRANSVERSE MERCATOR PROJECTION,
STATE PLANE COORDINATE SYSTEM 1983

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SITE SAFETY ANALYSIS REPORT

TRANSPORTATION ROUTES IN THE VICINITY OF THE SITE AND LOW POPULATION ZONE

FIGURE 2.1-5 REV. 1



POP. SOURCE: 2000 BUREAU OF CENSUS

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COMMUNITIES OVER 1000
POPULATION

FIGURE 2.1-6 REV. 1

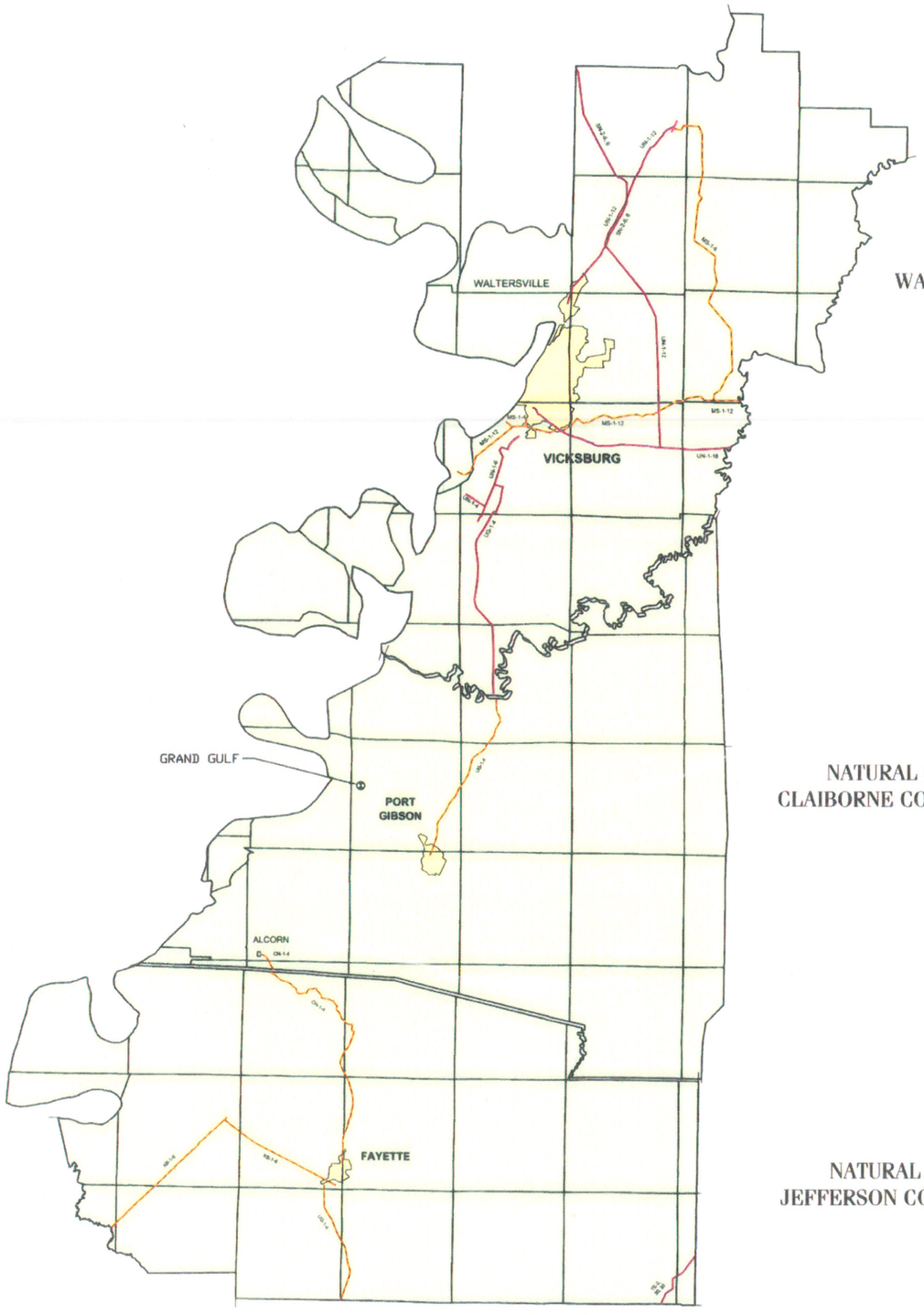


SOURCE: Official highway map - Louisiana (1970)
Official highway map - Mississippi (1971)

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GENERAL AREA MAP
(UFSAR FIGURE 2.1-3)

FIGURE 2.2-1 REV. 1



NATURAL GAS PIPLINES
WARREN COUNTY, MISSISSIPPI

GAS PIPELINES
- TRANSMISSION
- LOCAL-PRIVATE
- LOCAL-MUNICIPAL

LINE CODE	PIPELINE OWNER/OPERATOR
MS	MISSISSIPPI FUEL CO.
SN	SOUTHERN NATURAL GAS PIPELINE
UG	UNION GAS
UN	UNITED GAS PIPELINE CO.

NATURAL GAS PIPLINES
CLAIBORNE COUNTY, MISSISSIPPI

GAS PIPELINES
- TRANSMISSION
- LOCAL-PRIVATE
- LOCAL-MUNICIPAL

LINE CODE	PIPELINE OWNER/OPERATOR
CN	CLAIBORNE NATURAL GAS
UG	UNION GAS

NATURAL GAS PIPLINES
JEFFERSON COUNTY, MISSISSIPPI

GAS PIPELINES
- TRANSMISSION
- LOCAL-PRIVATE
- LOCAL-MUNICIPAL

LINE CODE	PIPELINE OWNER/OPERATOR
CN	CLAIBORNE NATURAL GAS
KB	KERN & BROOKS OIL OPERATIONS
TE	TEXAS EASTERN
UG	UNION GAS

Prepared for the Municipal Gas Authority of Mississippi by

Mississippi Mineral Resources Institute
220 Old Chemistry Building
University, Mississippi 38677
662-915-7320
e-mail: lmt@mmrl.olemiss.edu
www.olemiss.edu/depts/mmri

DISCLAIMER
The Mississippi Mineral Resources Institute and The University of Mississippi are not responsible for the accuracy of the sources used to determine pipeline locations and associated information. These data should not substitute for field verification or standard engineering procedures at specific sites. **Data last updated in 1992.**

EXAMPLE OF LINE CODE USE
Example Code:
ET-2-8, 10 = Entex - 2 lines - 8 & 10 inches

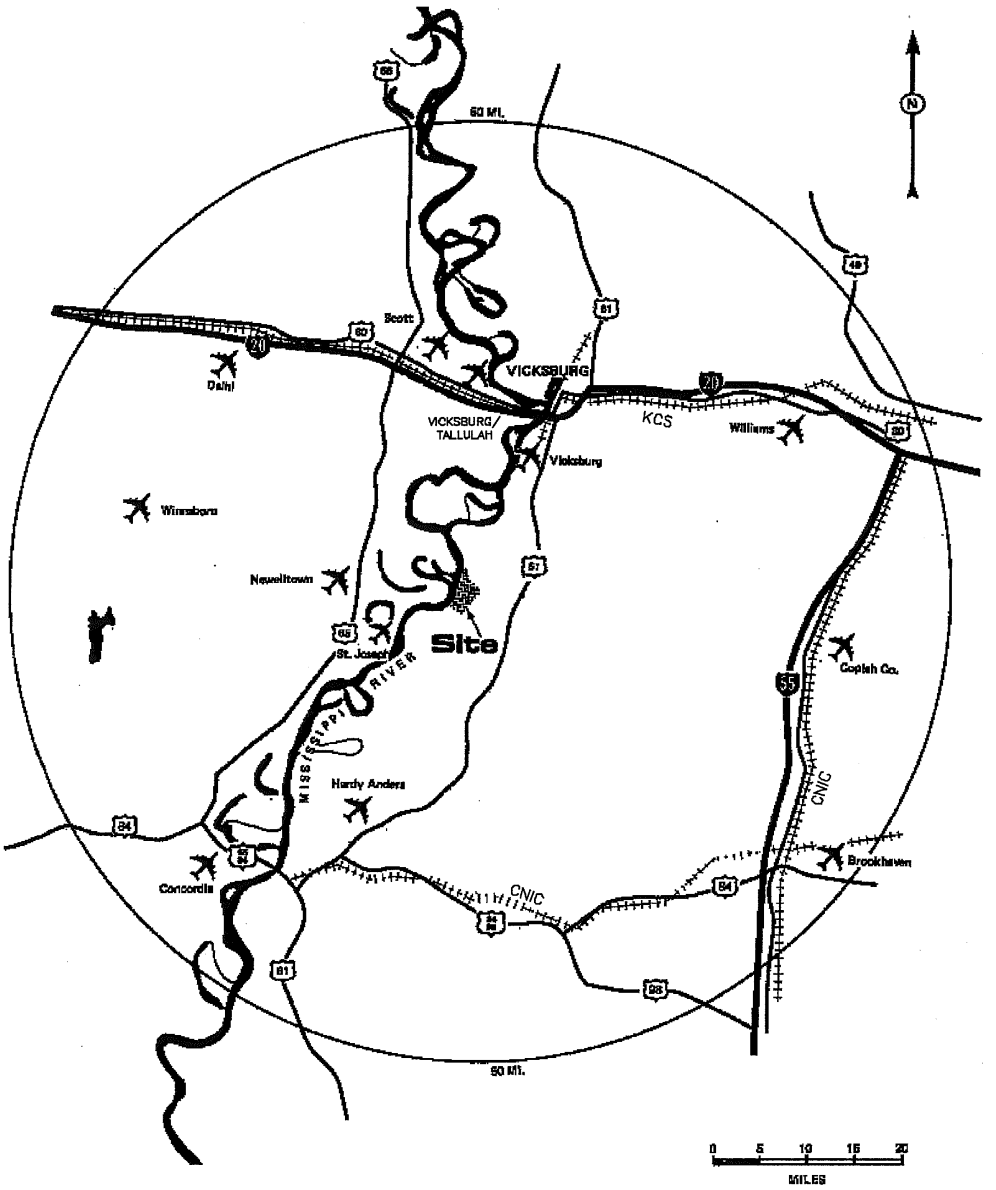
0 5 Miles

SCALE; 1:350,000
Transverse Mercator Projection
Nad27 Datum

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SITE SAFETY ANALYSIS REPORT

3 - COUNTY NATURAL GAS LINE MAP

FIGURE 2.2-2 REV. 1



AIRPORT

RAILROAD

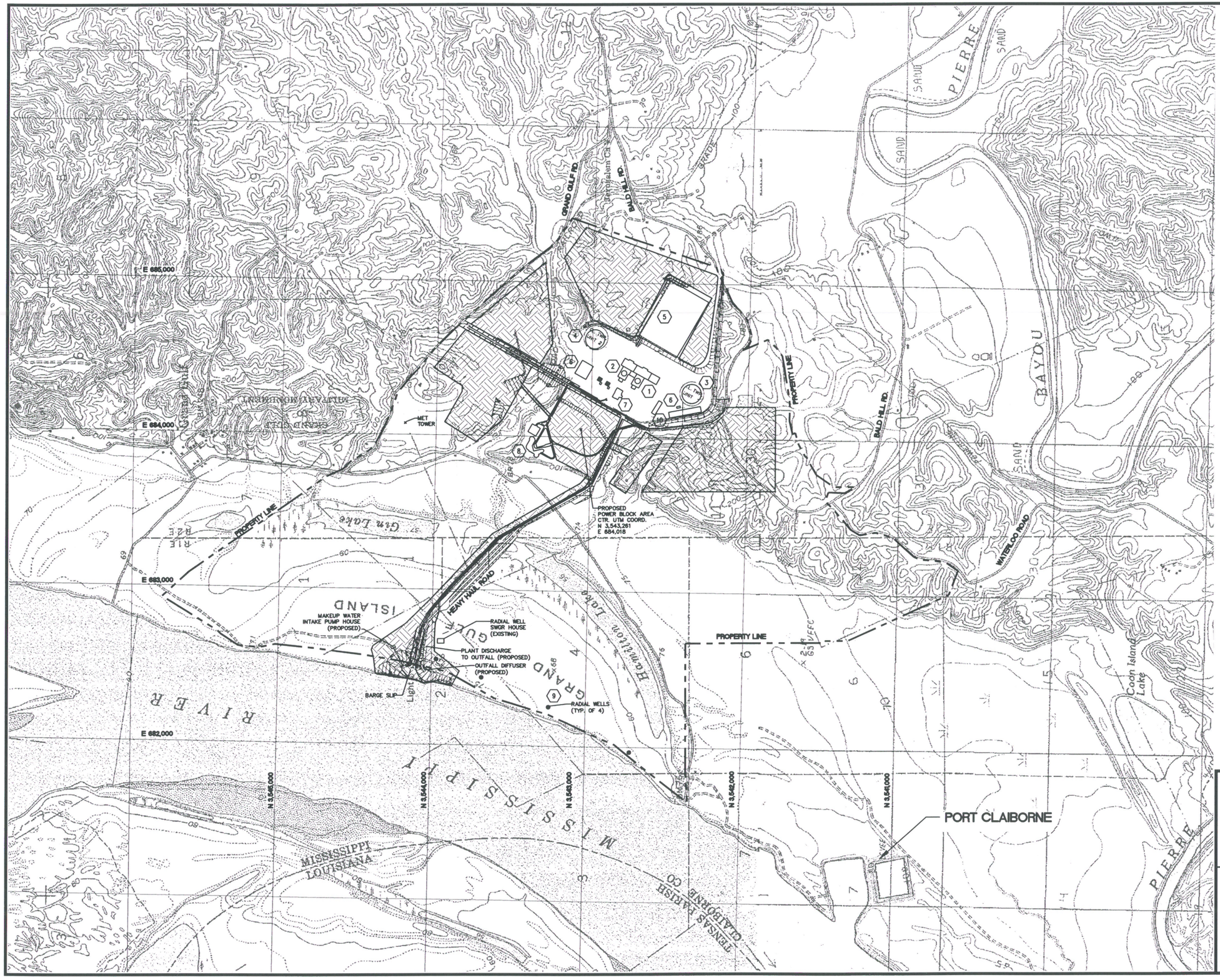
FEDERAL HIGHWAY

INTERSTATE HIGHWAY

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TRANSPORTATION MAP
GENERAL AREA

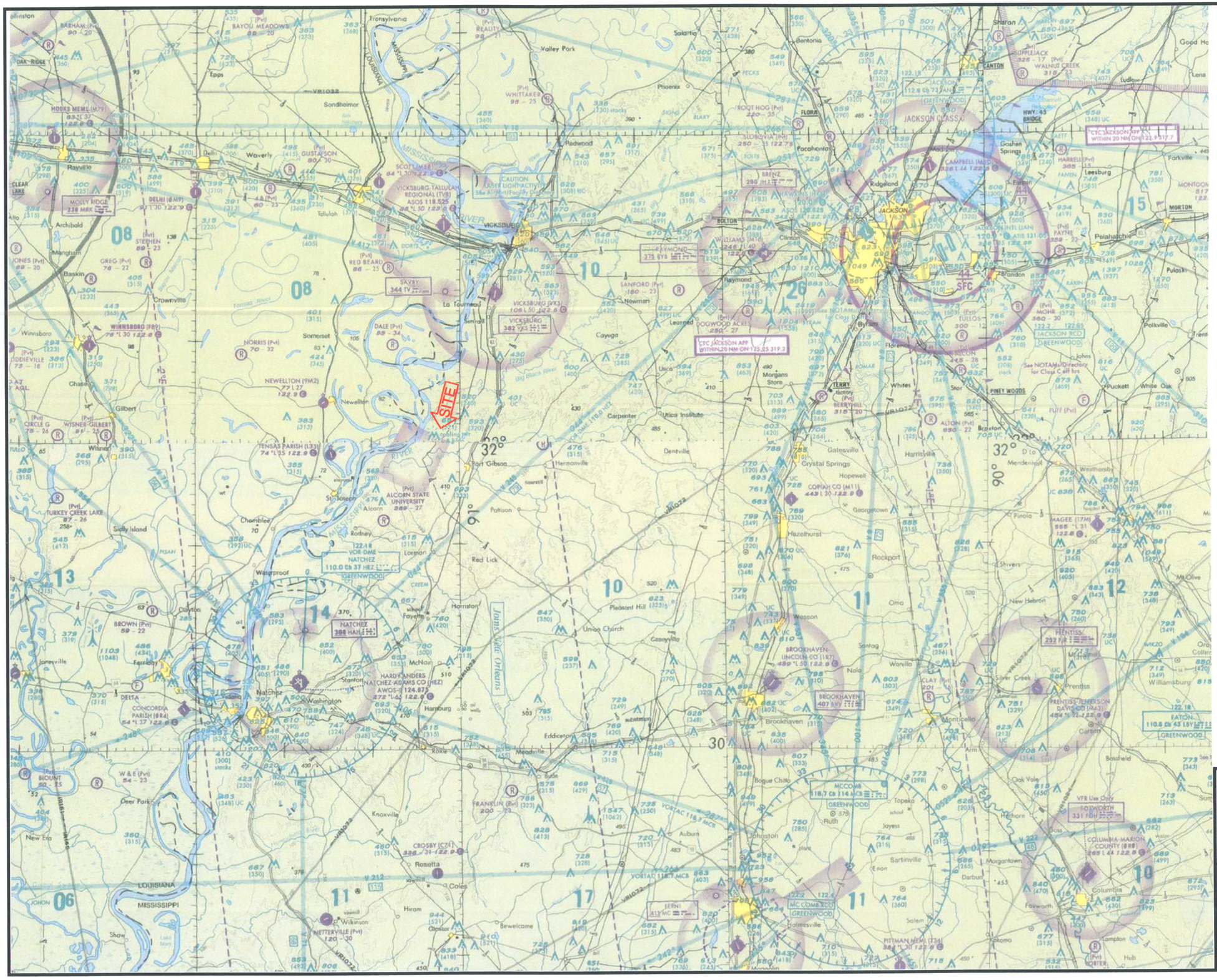
FIGURE 2.2-3 REV. 1

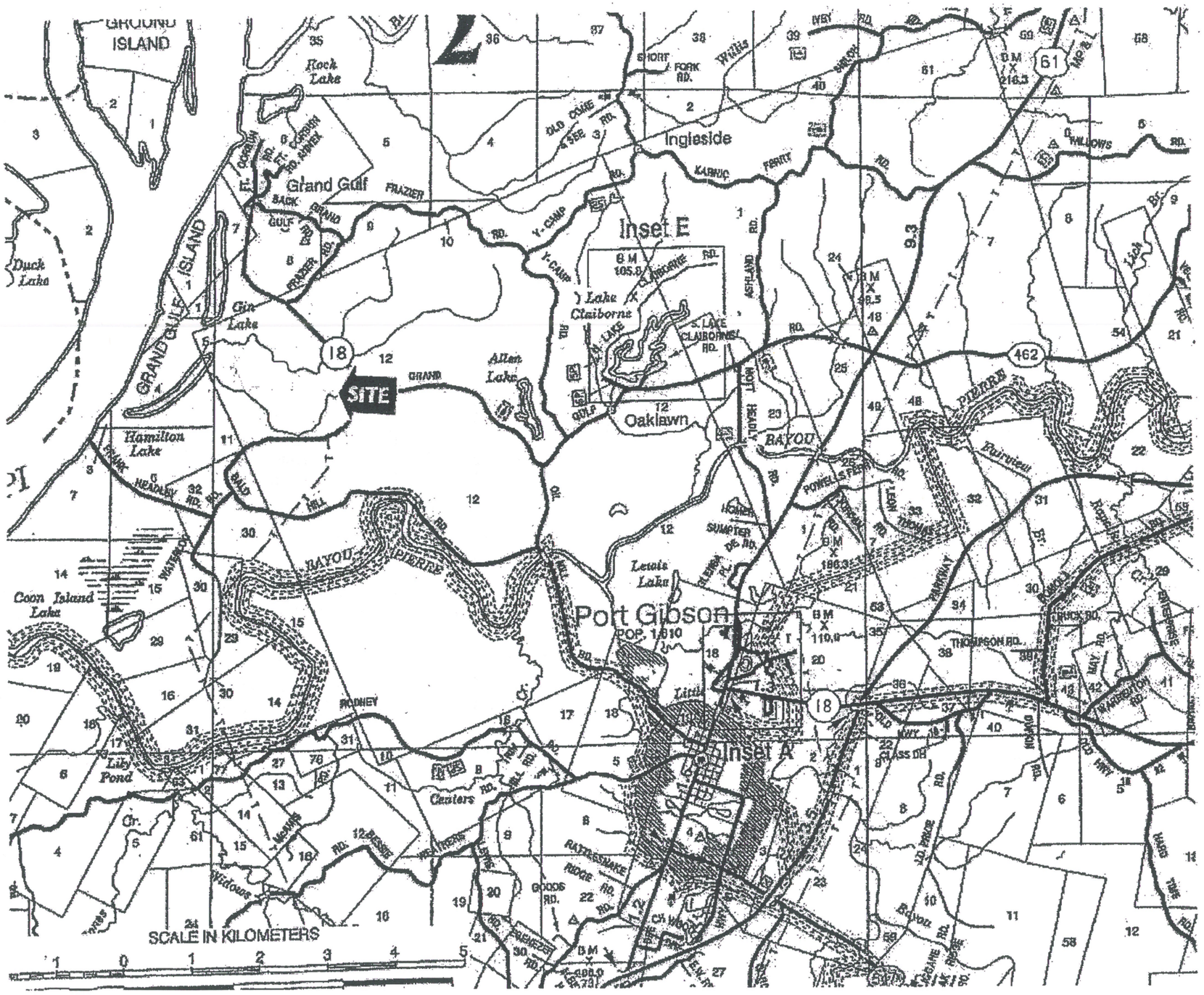


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GRAND GULF NUCLEAR STATION SITE
EARLY SITE PERMIT APPLICATION
SITE SAFETY ANALYSIS REPORT

PORT CLAIBORNE
LOCATION

FIGURE 2.2-4 REV. 1


SITE
VICKSBURG
JACKSON
Vicksburg
Jackson
Natchez
Tallulah
Waverly
Rayville
Delhi
Archibald
Transylvania
Valley Park
Redwood
Phoenix
Bentonia
Sharon
Canton
Flora
Madison
Ridgeland
Pocahontas
Clinton
Raymond
Bolton
Edwards
Crystal Springs
Hazlehurst
Gatesville
Harrisville
Terry
Brandon
Pelahatchie
Florence
Byram
Learned
Cayuga
Newman
Sanford
Newellton
Somerset
Crowville
Winnsboro
Gilbert
Chase
Sondheimer
Epps
Tallulah
La Tourneau
Simrall
Dale
Norris
Scott
Redwood
Fayette
Harriston
Pleasant Hill
Unión Church
Caseyville
Pattison
Red Lick
Port Gibson
Hermanville
Dentville
Utica Institute
Carpenter
Utica
Morgans Store
Whites
Star
Puckett
White Oak
Polkville
Pulaski
Leesburg
Farkville
Morton
Goshen Springs
Eastman
Ludlow
Lena
Good Hope
Sharon
Bentonia
Sallatia
Phoenix
Ridgeland
Madison
Pocahontas
Flora
Canton

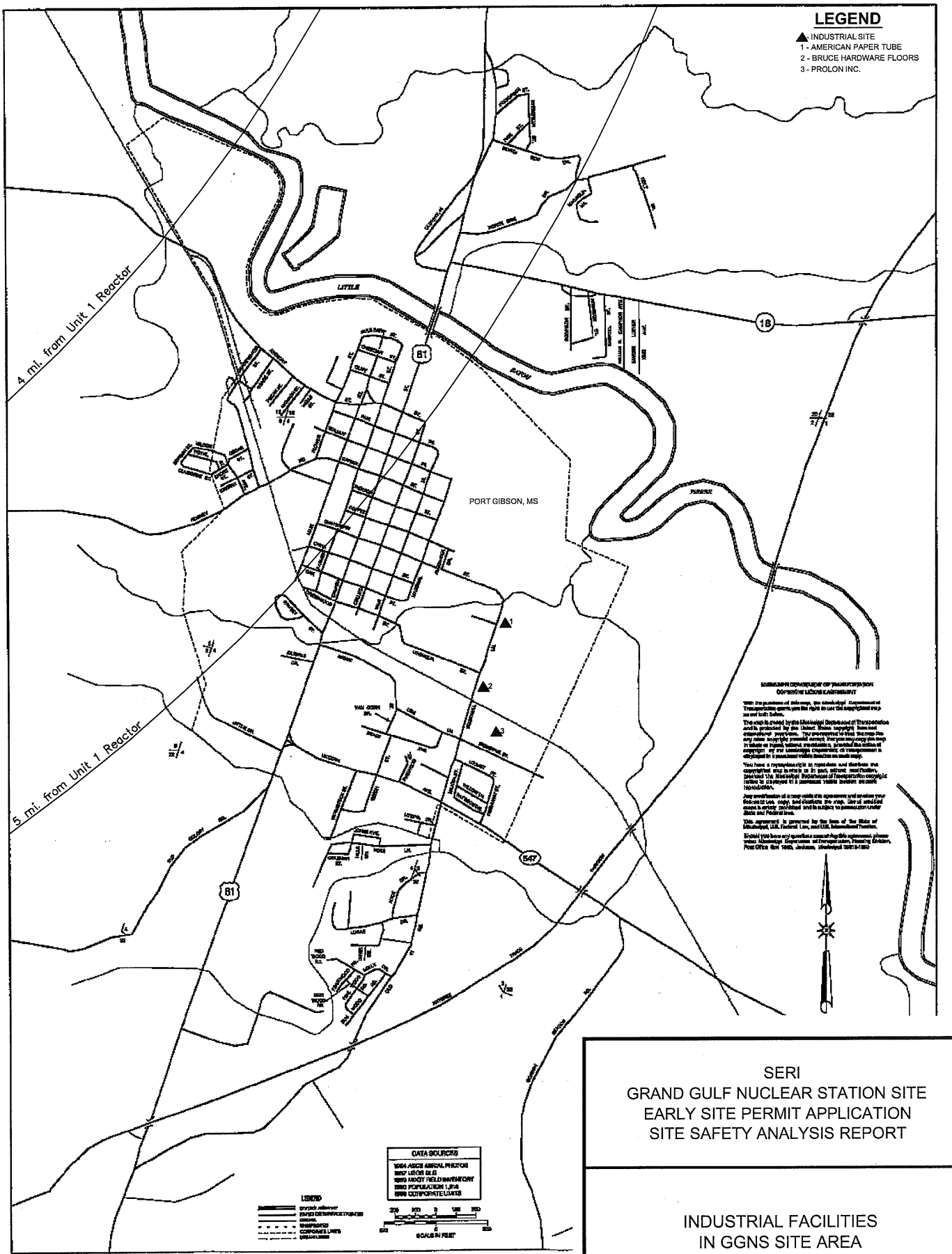


SOURCE: GENERAL HIGHWAY MAP, CLAIBORNE COUNTY, MS., 2000 (MDOT PLANNING DIV.)

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SITE SAFETY ANALYSIS REPORT

TRANSPORTATION MAP
AREA HIGHWAYS - MISSISSIPPI

FIGURE 2.2-6 REV. 1



SOURCE: MDOT PLANNING DIV., PORT GIBSON, MS., CLAIBORNE COUNTY MAP

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INDUSTRIAL FACILITIES
IN GGNS SITE AREA

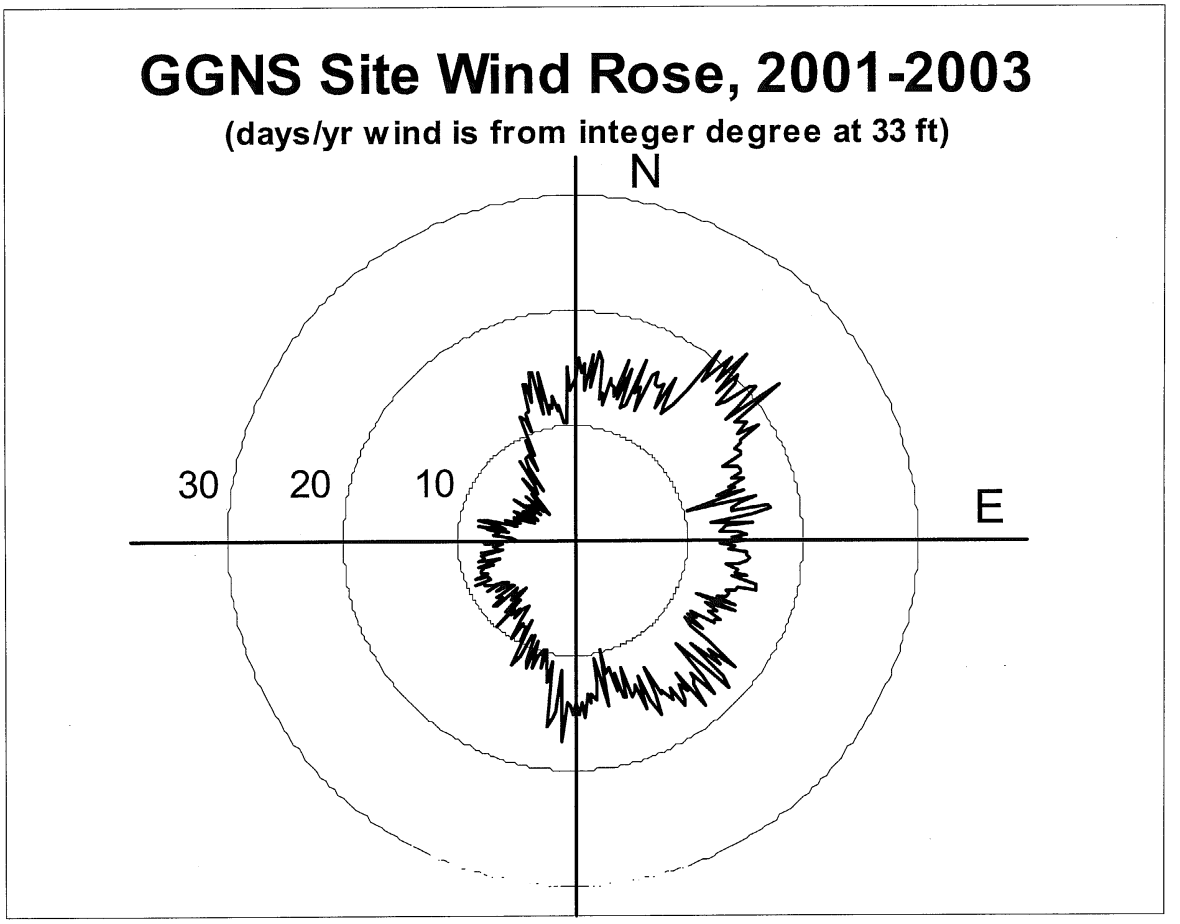
FIGURE 2.2-7 REV. 1

SEE UFSAR
FIGURE 2.2-5

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EARLY SITE PERMIT APPLICATION
SITE SAFETY ANALYSIS REPORT

LOCATION OF CHEMICAL STORAGE
(UFSAR FIGURE 2.2-5)

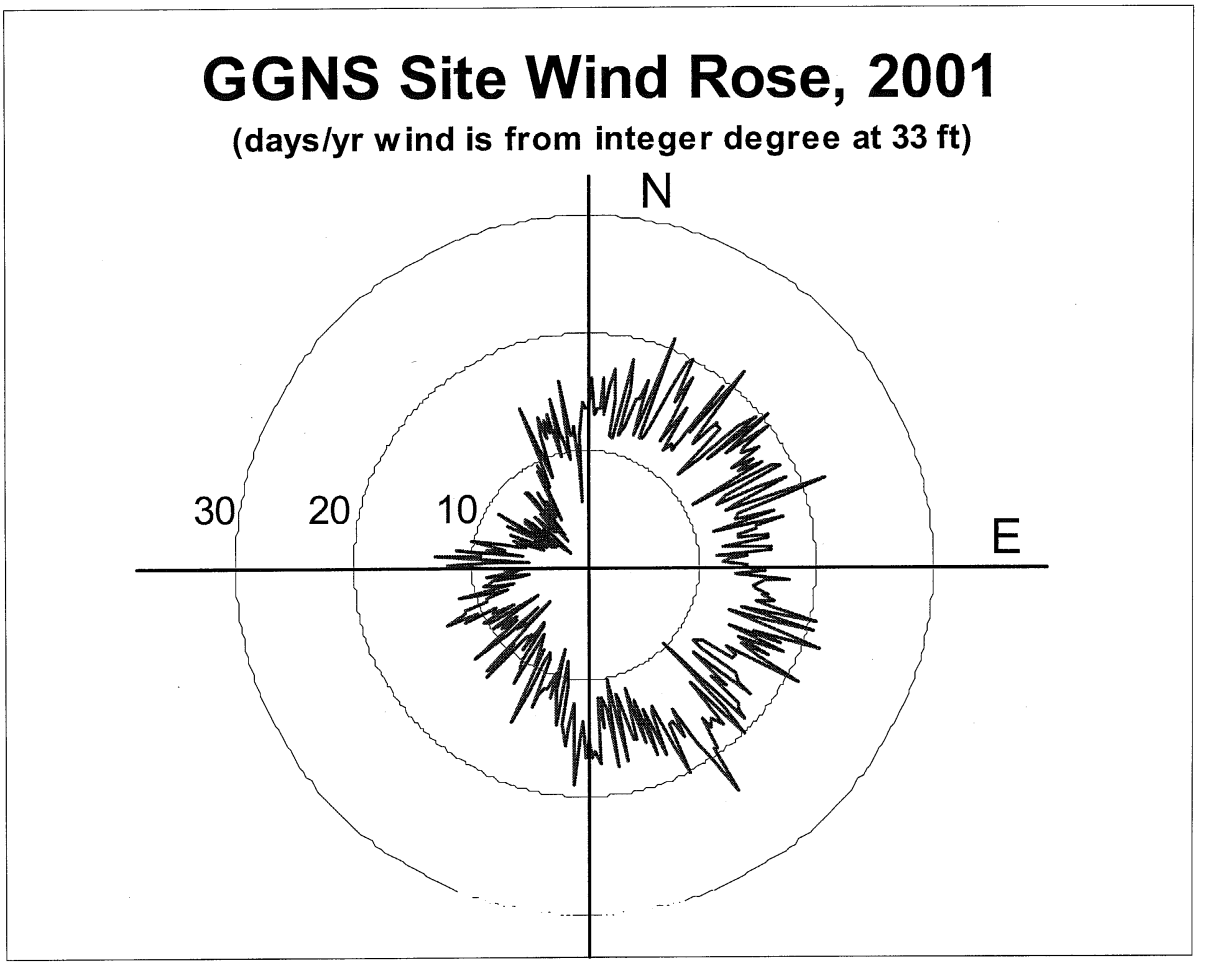
FIGURE 2.2-8 REV. 1



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GRAND GULF NUCLEAR STATION SITE
EARLY SITE PERMIT APPLICATION
SITE SAFETY ANALYSIS REPORT

GGNS SITE WIND ROSE,
2001-2003

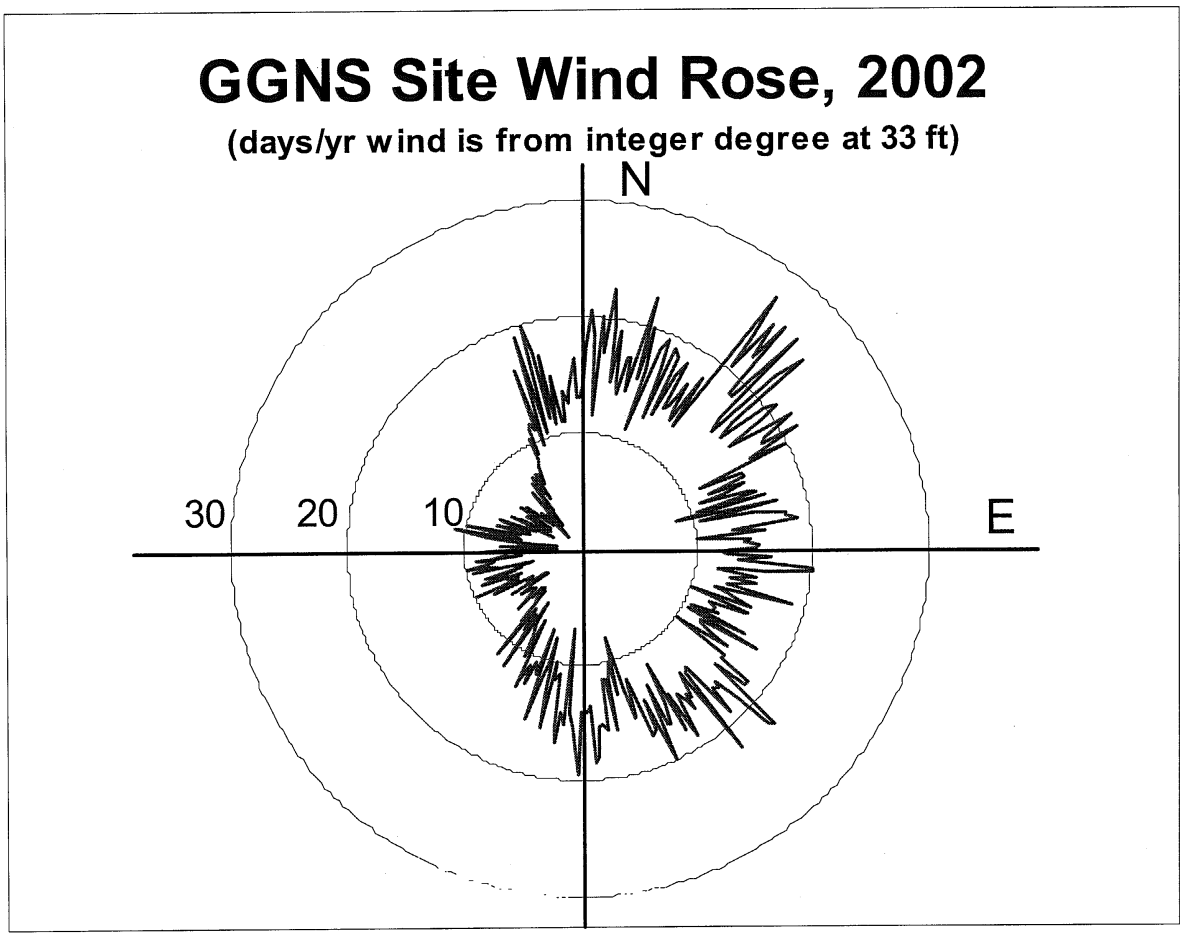
FIGURE 2.3-1 REV. 1



SERI
GRAND GULF NUCLEAR STATION SITE
EARLY SITE PERMIT APPLICATION
SITE SAFETY ANALYSIS REPORT

GGNS SITE WIND ROSE,
2001

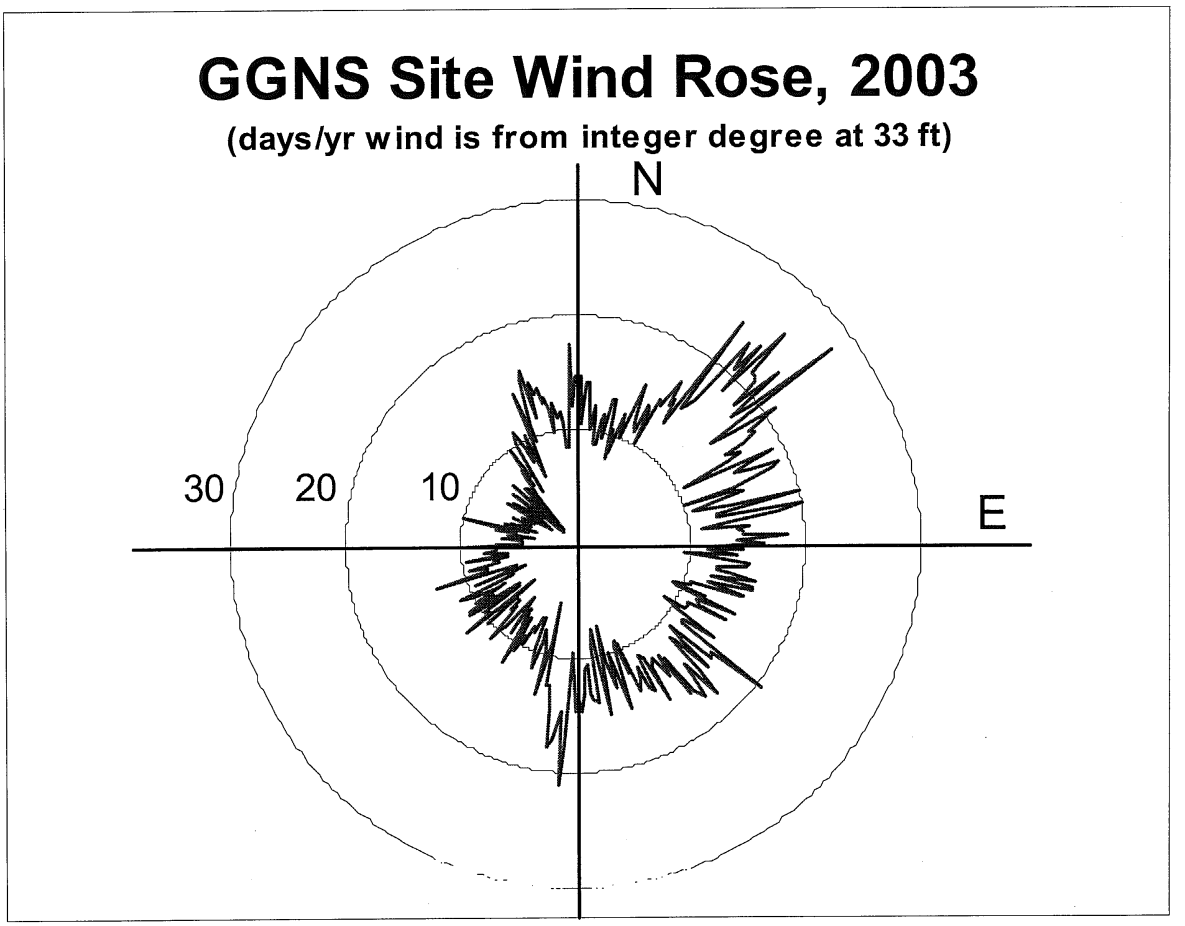
FIGURE 2.3-2 REV. 1



SERI
GRAND GULF NUCLEAR STATION SITE
EARLY SITE PERMIT APPLICATION
SITE SAFETY ANALYSIS REPORT

GGNS SITE WIND ROSE,
2002

FIGURE 2.3-3 REV. 1



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EARLY SITE PERMIT APPLICATION
SITE SAFETY ANALYSIS REPORT

GGNS SITE WIND ROSE,
2003

FIGURE 2.3-4 REV. 1

DELETED

SERI
GRAND GULF NUCLEAR STATION SITE
EARLY SITE PERMIT APPLICATION
SITE SAFETY ANALYSIS REPORT

FIGURE 2.3-5 REV. 1

DELETED

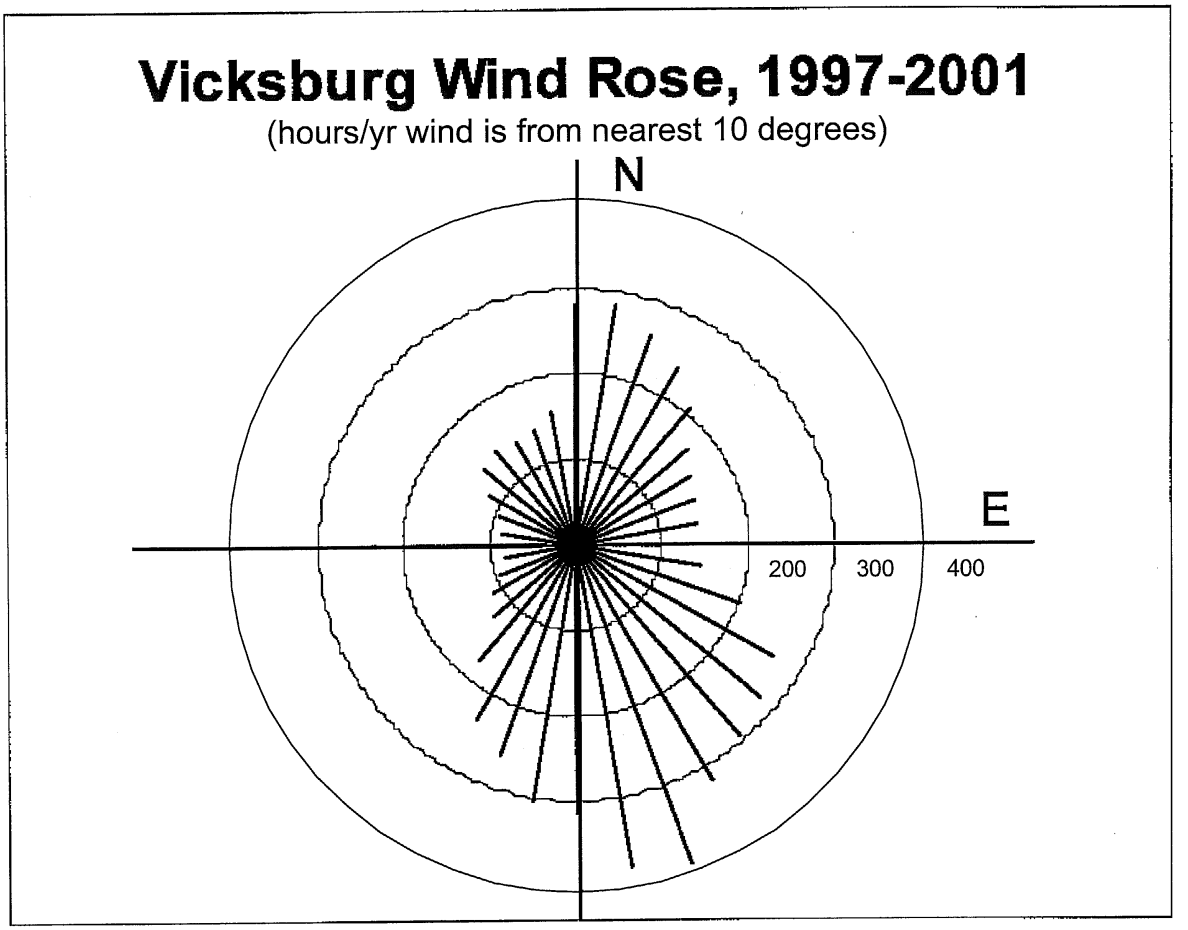
SERI
GRAND GULF NUCLEAR STATION SITE
EARLY SITE PERMIT APPLICATION
SITE SAFETY ANALYSIS REPORT

FIGURE 2.3-6 REV. 1

DELETED

SERI
GRAND GULF NUCLEAR STATION SITE
EARLY SITE PERMIT APPLICATION
SITE SAFETY ANALYSIS REPORT

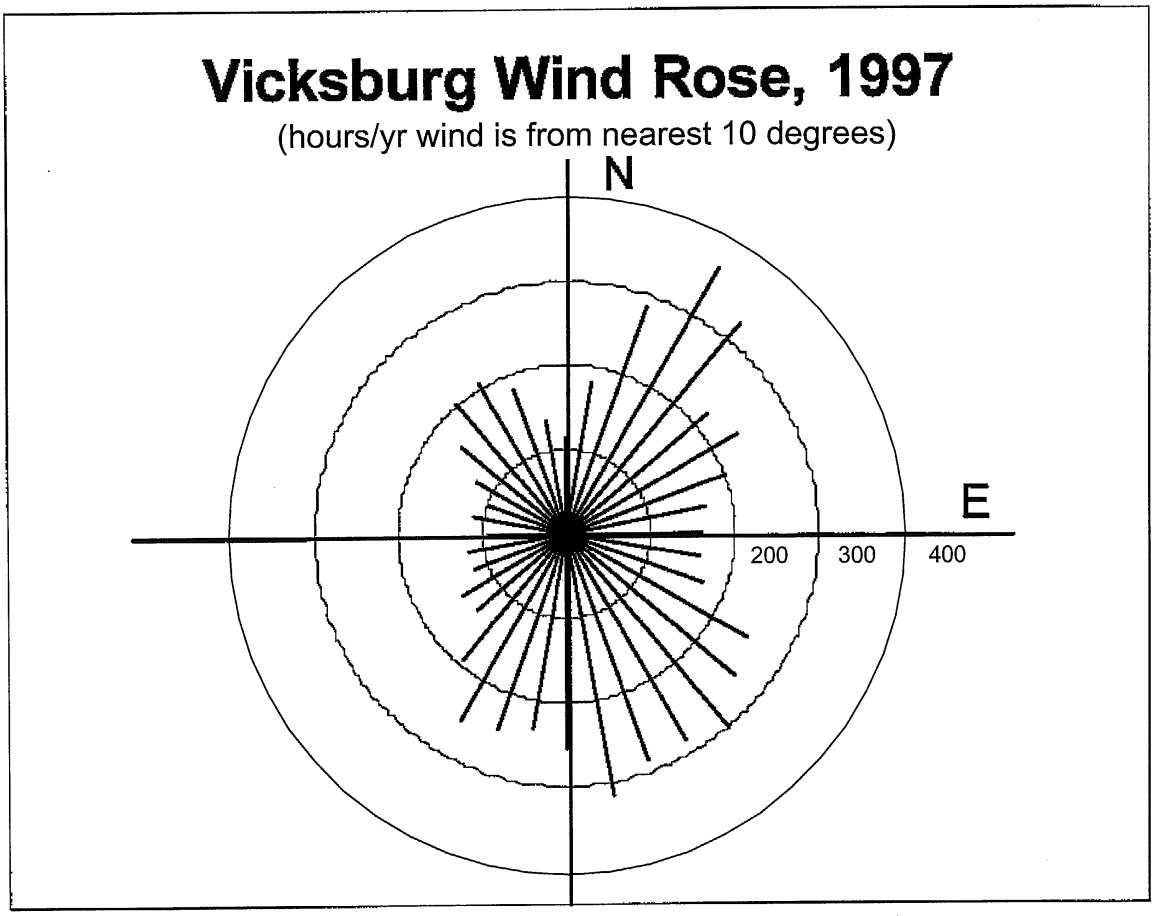
FIGURE 2.3-7 REV. 1



SERI
GRAND GULF NUCLEAR STATION SITE
EARLY SITE PERMIT APPLICATION
SITE SAFETY ANALYSIS REPORT

VICKSBURG WIND ROSE,
1997-2001

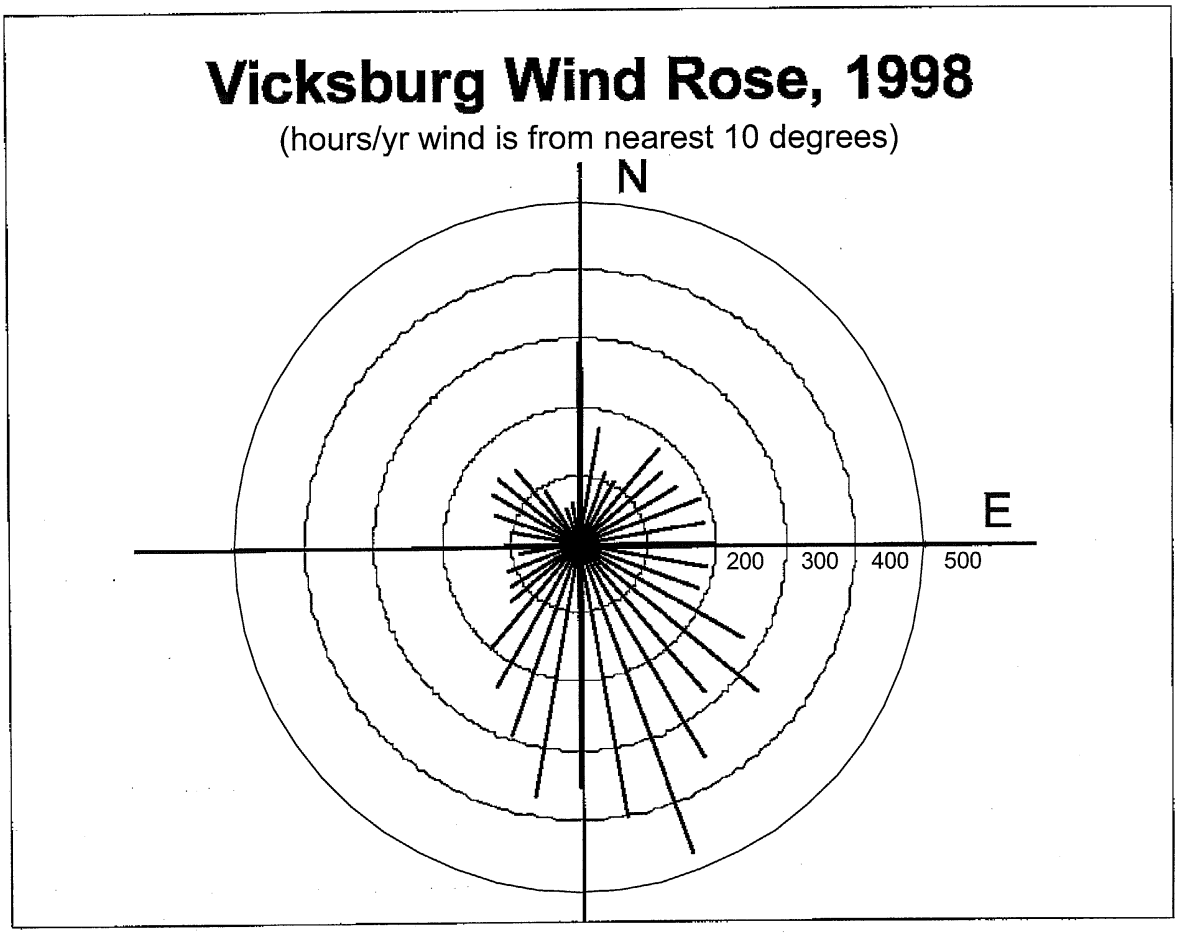
FIGURE 2.3-8 REV. 1



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GRAND GULF NUCLEAR STATION SITE
EARLY SITE PERMIT APPLICATION
SITE SAFETY ANALYSIS REPORT

VICKSBURG WIND ROSE,
1997

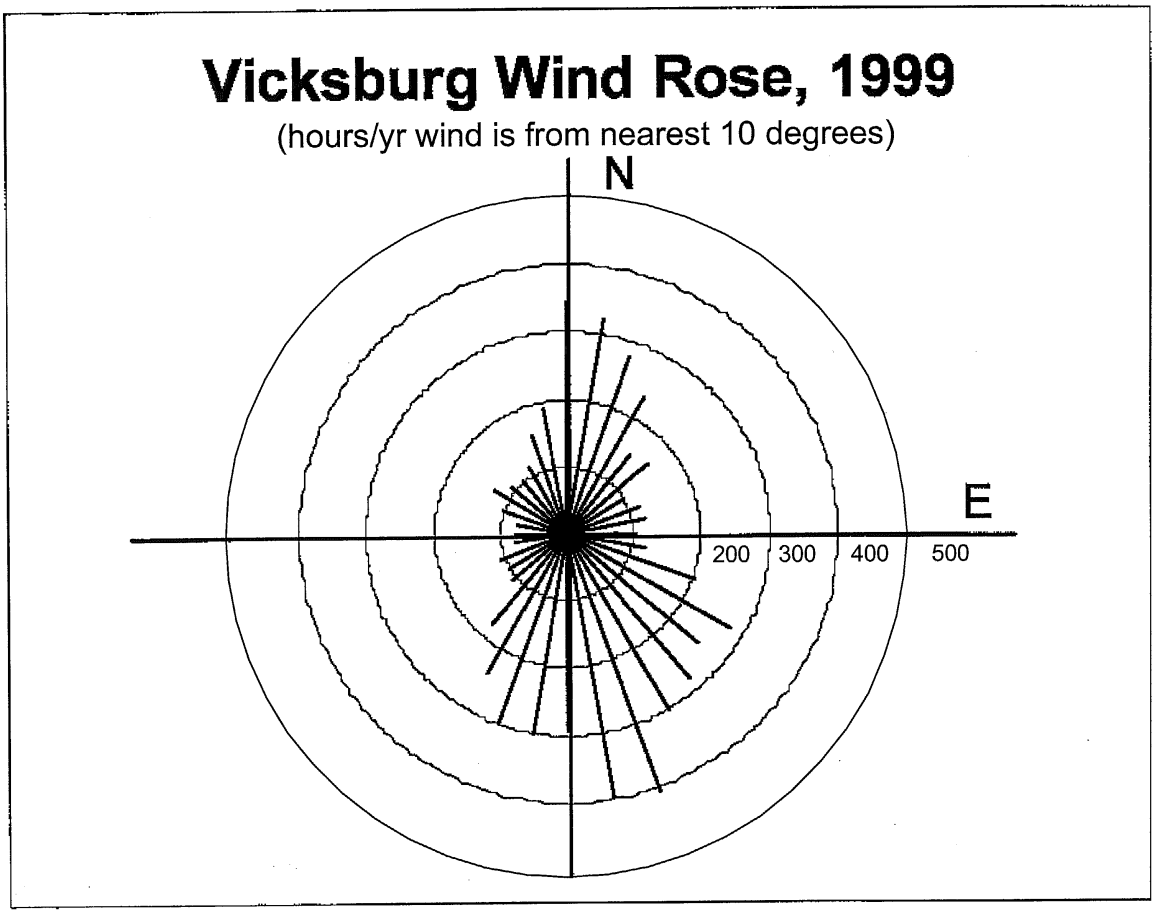
FIGURE 2.3-9 REV. 1



SERI
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EARLY SITE PERMIT APPLICATION
SITE SAFETY ANALYSIS REPORT

VICKSBURG WIND ROSE,
1998

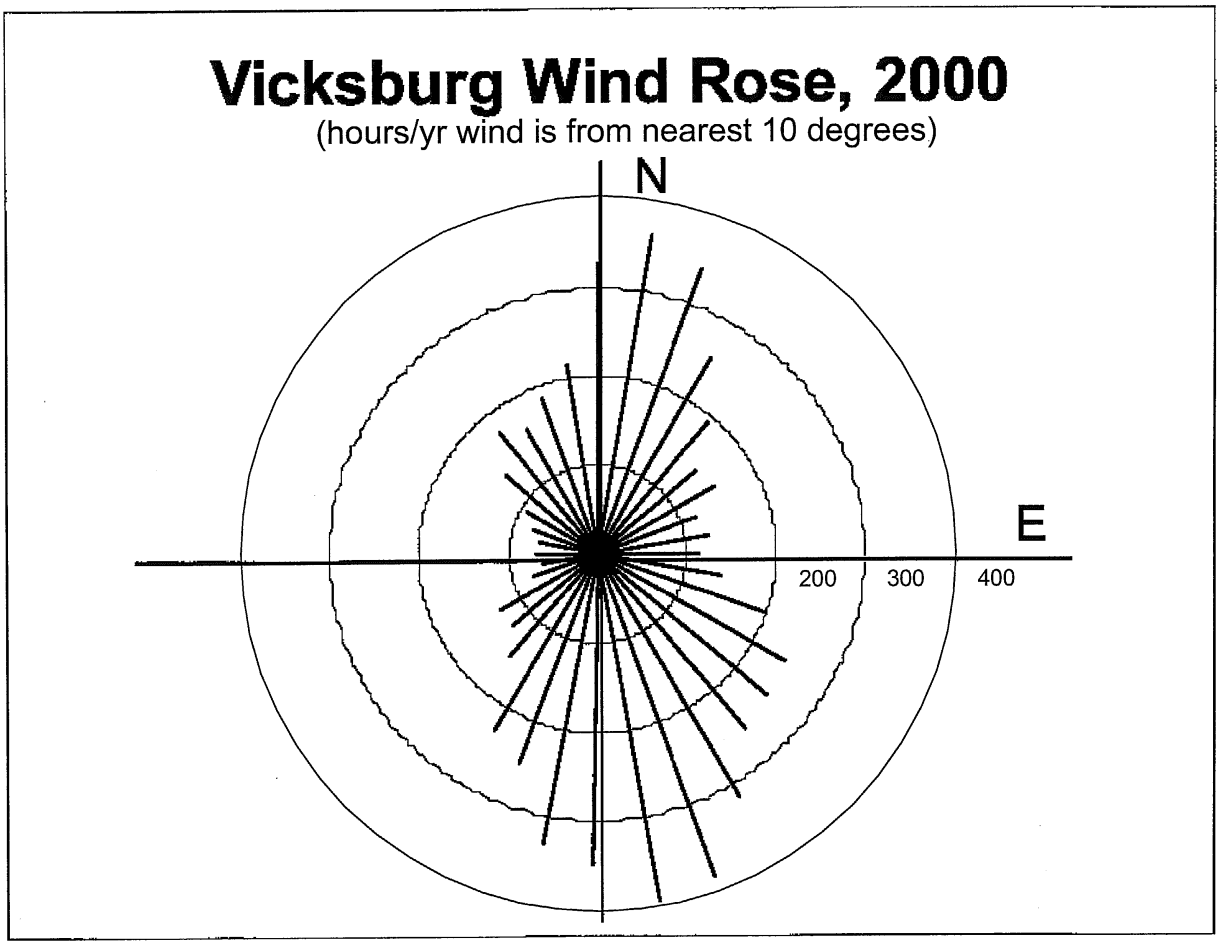
FIGURE 2.3-10 REV. 1



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EARLY SITE PERMIT APPLICATION
SITE SAFETY ANALYSIS REPORT

VICKSBURG WIND ROSE,
1999

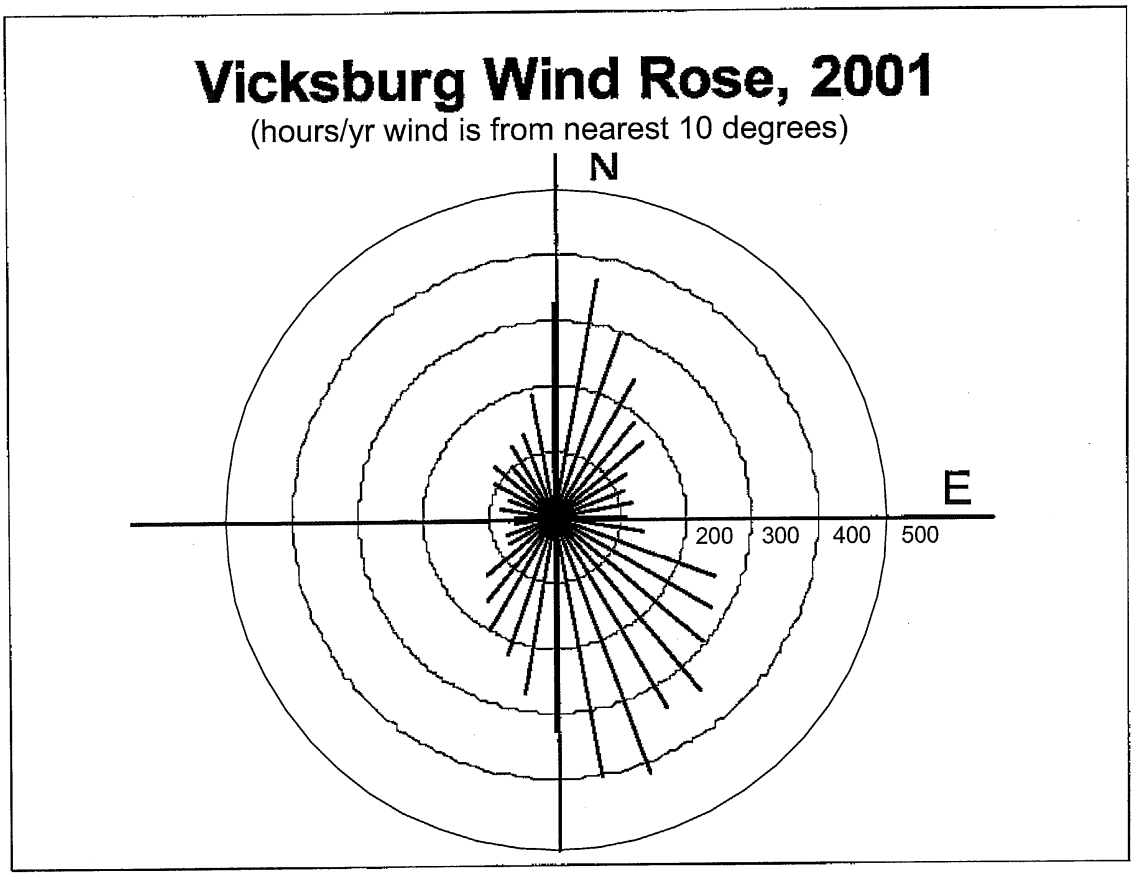
FIGURE 2.3-11 REV. 1



SERI
GRAND GULF NUCLEAR STATION SITE
EARLY SITE PERMIT APPLICATION
SITE SAFETY ANALYSIS REPORT

VICKSBURG WIND ROSE,
2000

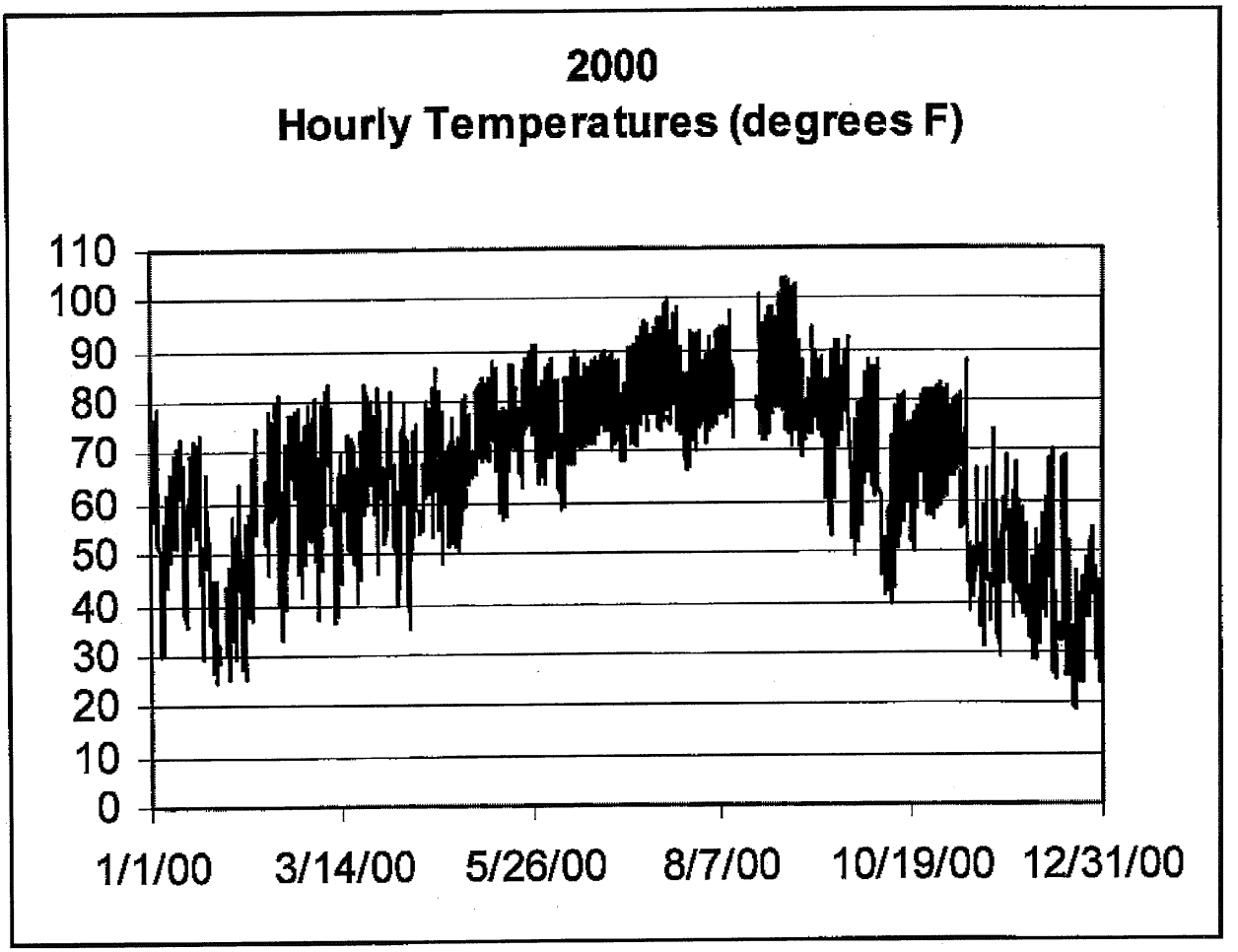
FIGURE 2.3-12 REV. 1



SERI
GRAND GULF NUCLEAR STATION SITE
EARLY SITE PERMIT APPLICATION
SITE SAFETY ANALYSIS REPORT

VICKSBURG WIND ROSE,
2001

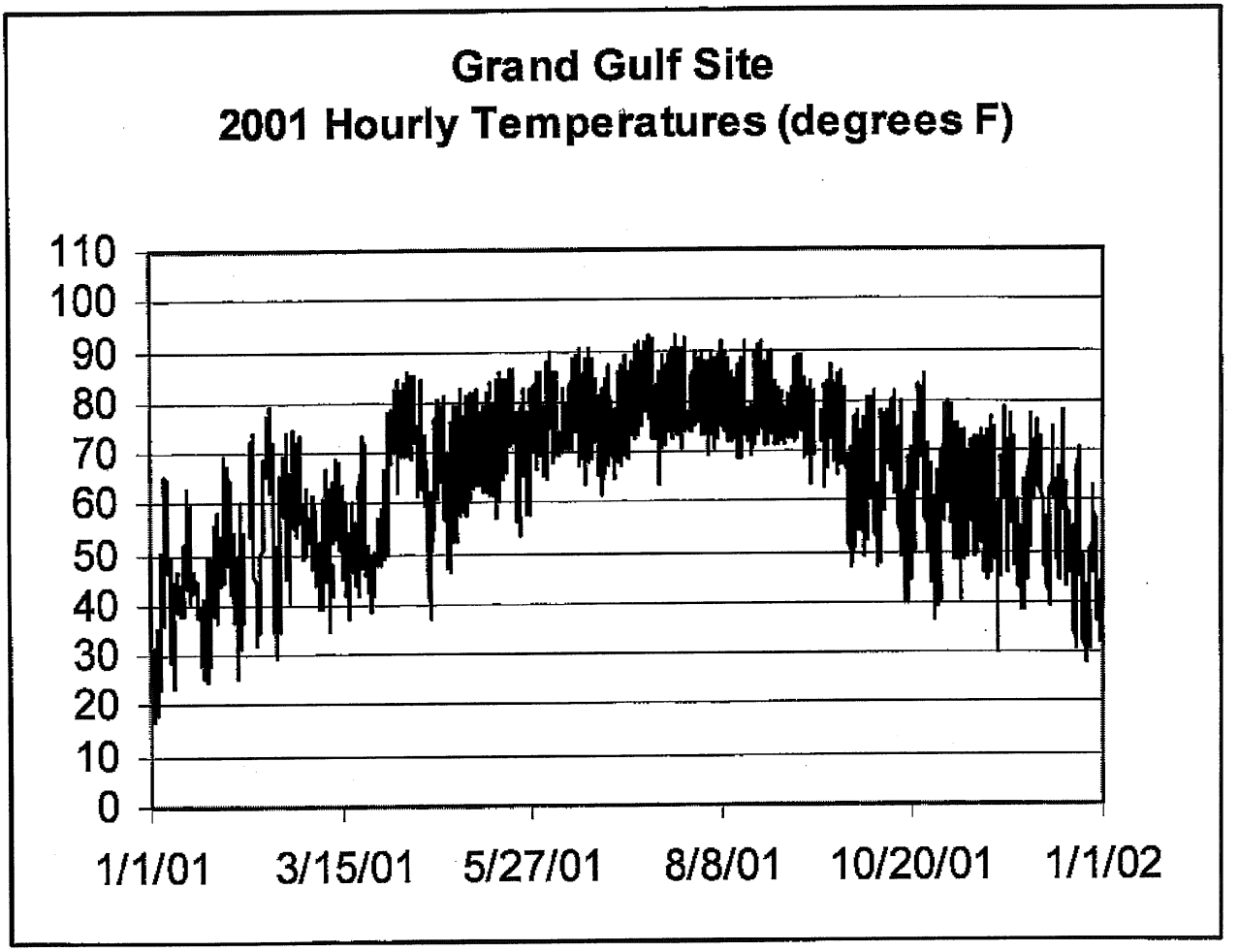
FIGURE 2.3-13 REV. 1



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EARLY SITE PERMIT APPLICATION
SITE SAFETY ANALYSIS REPORT

GGNS SITE 2000
HOURLY TEMPERATURES
(DEGREES F)

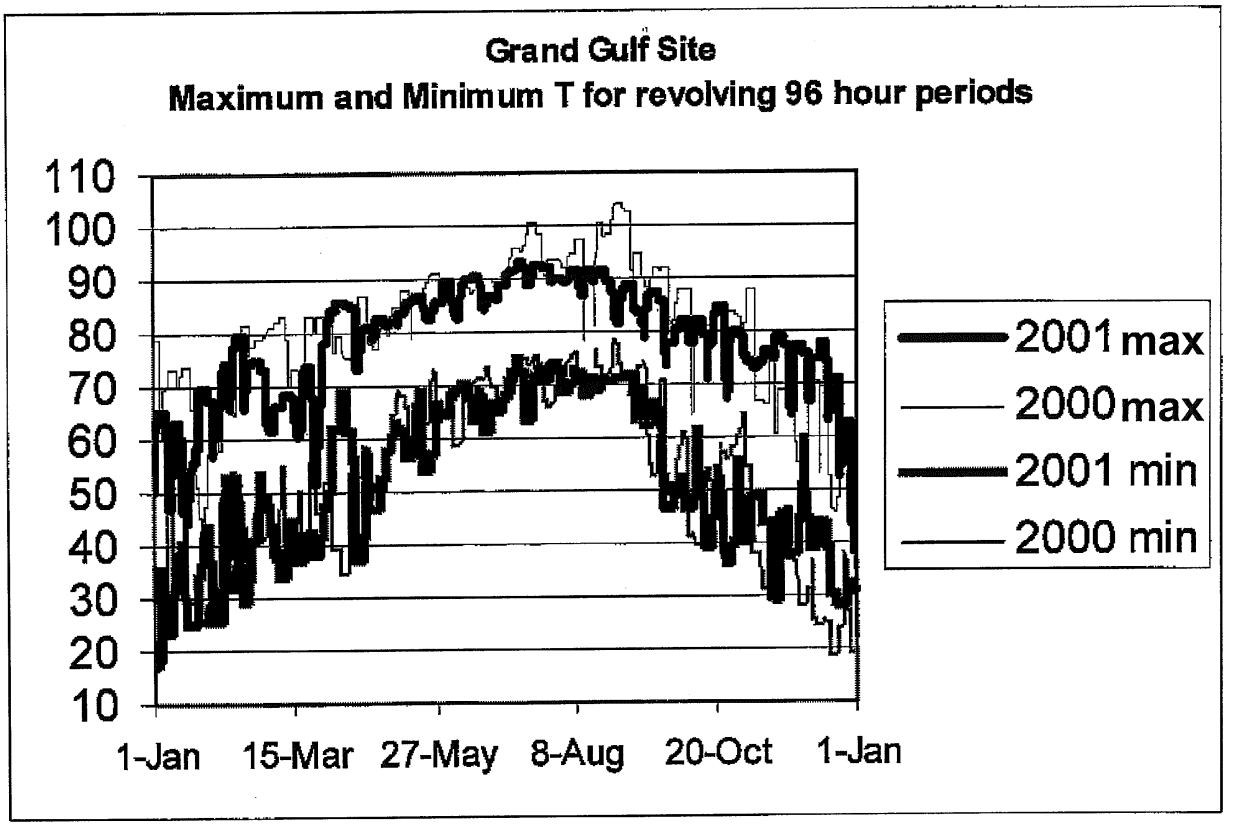
FIGURE 2.3-14 REV. 1



SERI
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EARLY SITE PERMIT APPLICATION
SITE SAFETY ANALYSIS REPORT

GGNS SITE 2001
HOURLY TEMPERATURES
(DEGREES F)

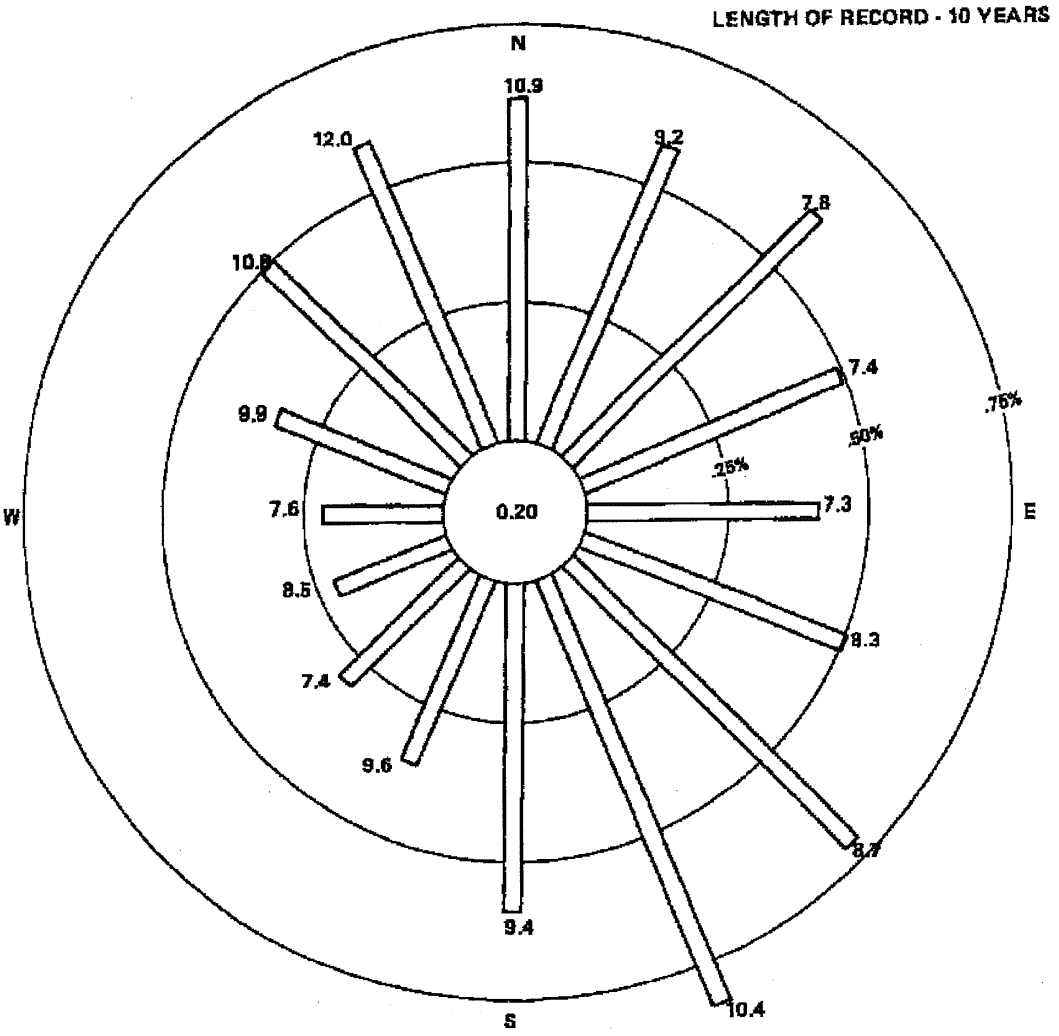
FIGURE 2.3-15 REV. 1



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EARLY SITE PERMIT APPLICATION
SITE SAFETY ANALYSIS REPORT

GGNS SITE
MAXIMUM AND MINIMUM TEMPERATURE
FOR REVOLVING 96 HOUR PERIODS

FIGURE 2.3-16 REV. 1



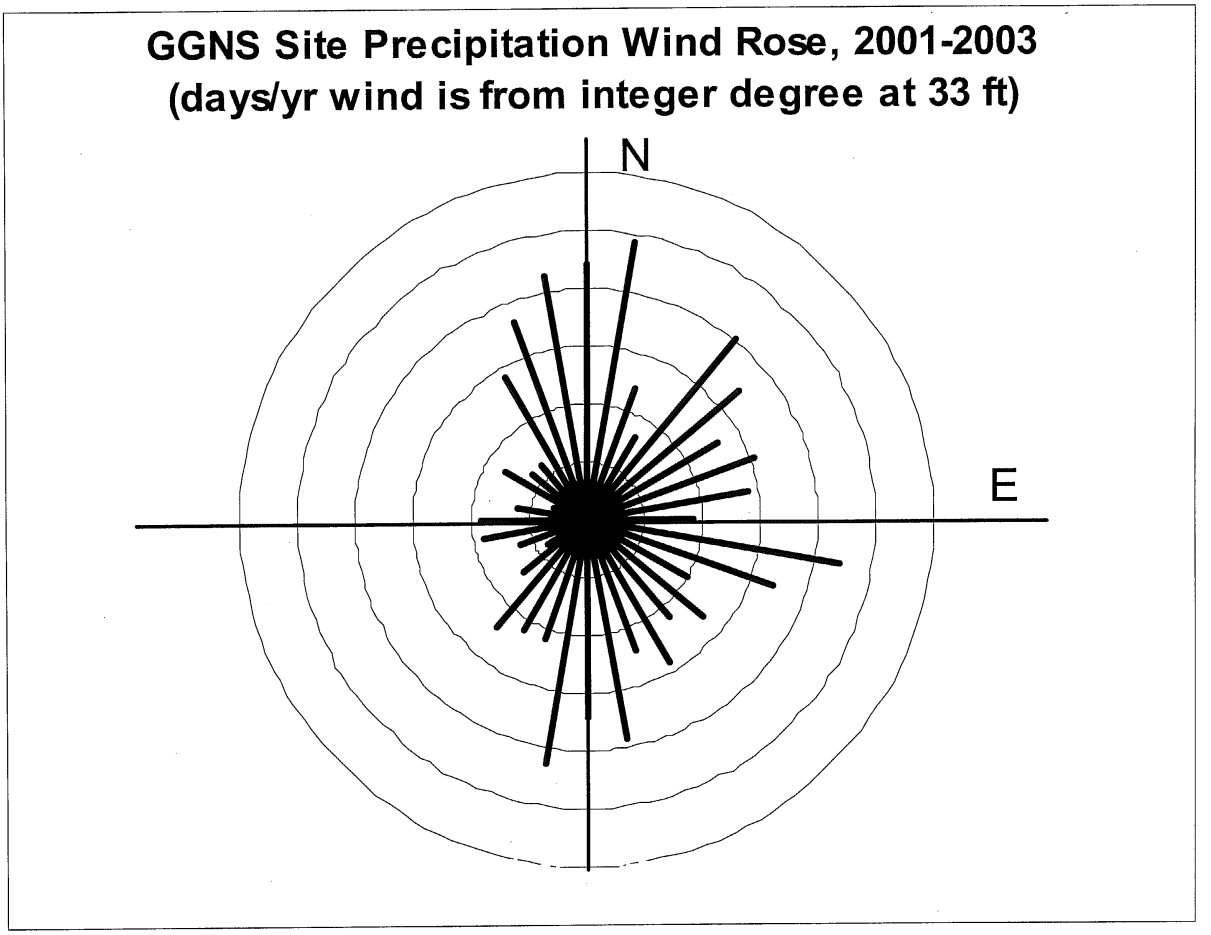
NOTES: THE VALUE IN THE CENTER OF THE INNER CIRCLE GIVES THE PERCENTAGE OF CALM WINDS. DATA WERE PLOTTED IN HUNDREDTHS PRIOR TO ROUNDING FOR TABLE 2.3.65 VALUES AT ENDS OF BARS ARE AVERAGE ANNUAL WIND SPEEDS, BY DIRECTION, DURING PRECIPITATION, IN MILES PER HOUR.

DATA SOURCE: PRECIPITATION AND NON-PRECIPITATION WINDS, JOB NO. 13267, U. S. DEPARTMENT OF COMMERCE, NOAA, NATIONAL CLIMATIC CENTER, FEBRUARY, 1972.

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ANNUAL PRECIPITATION WIND ROSE
(PERCENT OF TOTAL OBSERVATIONS)
JACKSON, MISSISSIPPI
(UFSAR FIGURE 2.3-5)

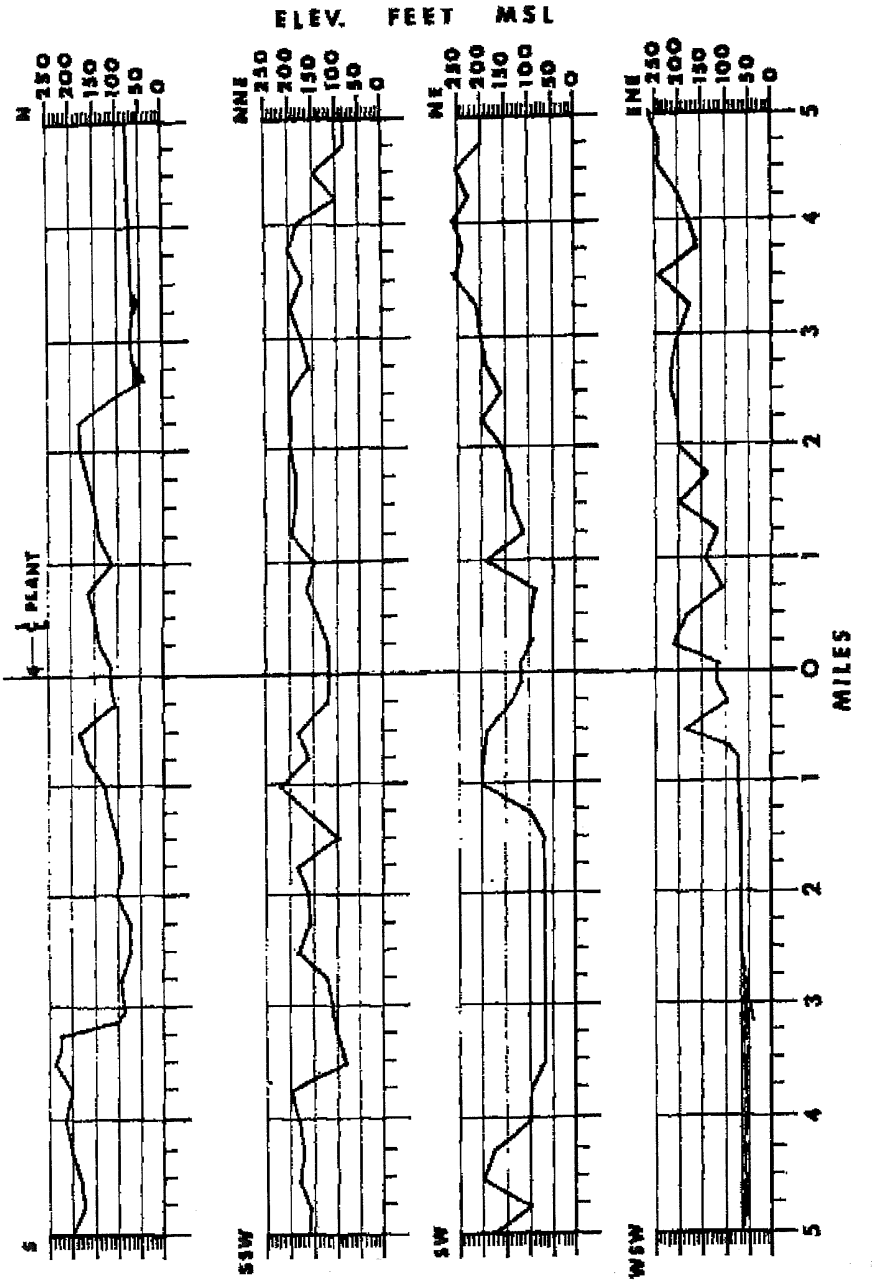
FIGURE 2.3-17 REV. 1



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EARLY SITE PERMIT APPLICATION
SITE SAFETY ANALYSIS REPORT

GGNS SITE PRECIPITATION WIND ROSE, 2000-2003

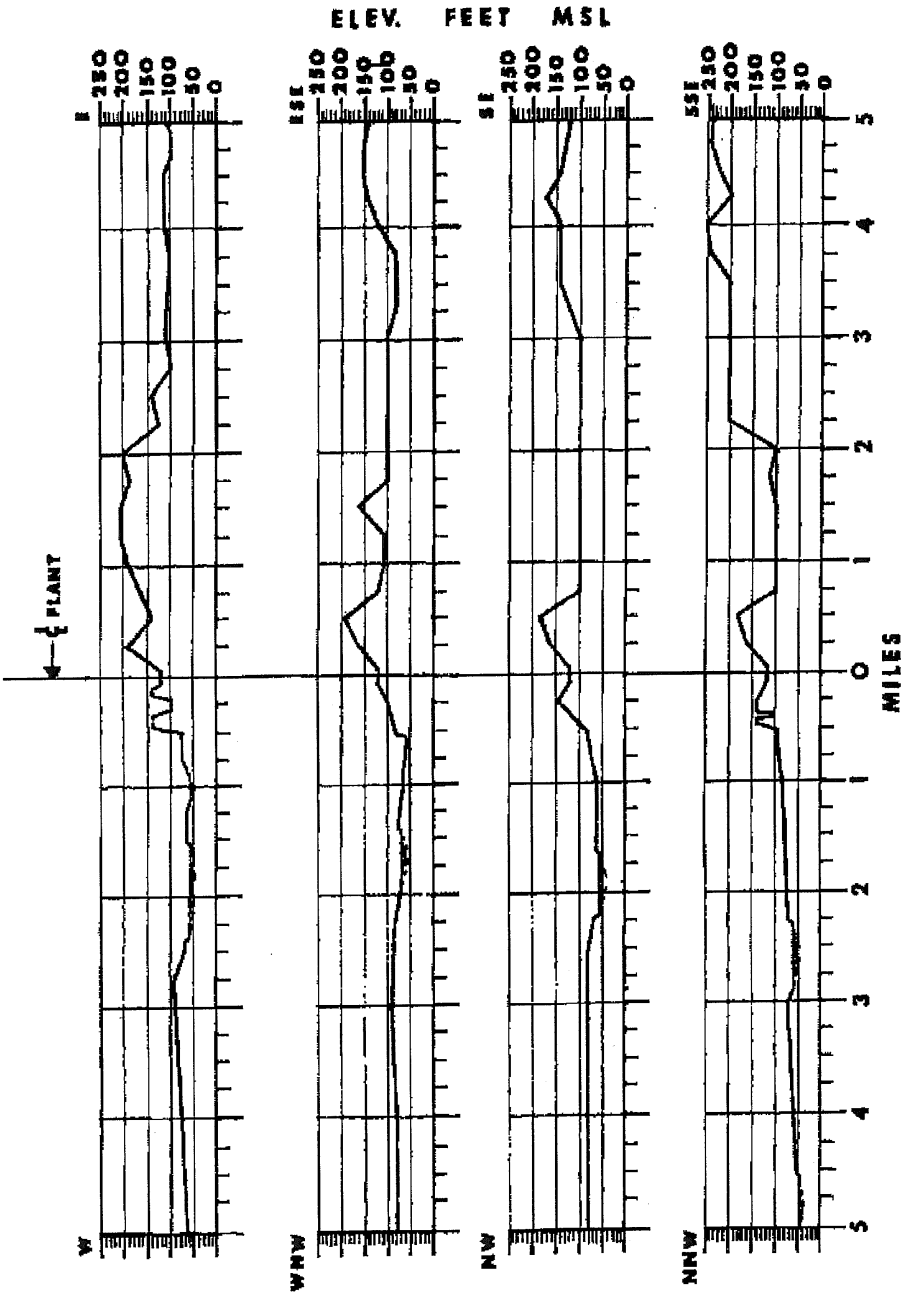
FIGURE 2.3-18 REV. 1



SERI
GRAND GULF NUCLEAR STATION SITE
EARLY SITE PERMIT APPLICATION
SITE SAFETY ANALYSIS REPORT

TOPOGRAPHIC PROFILES
(UFSAR FIGURE 2.3-8)

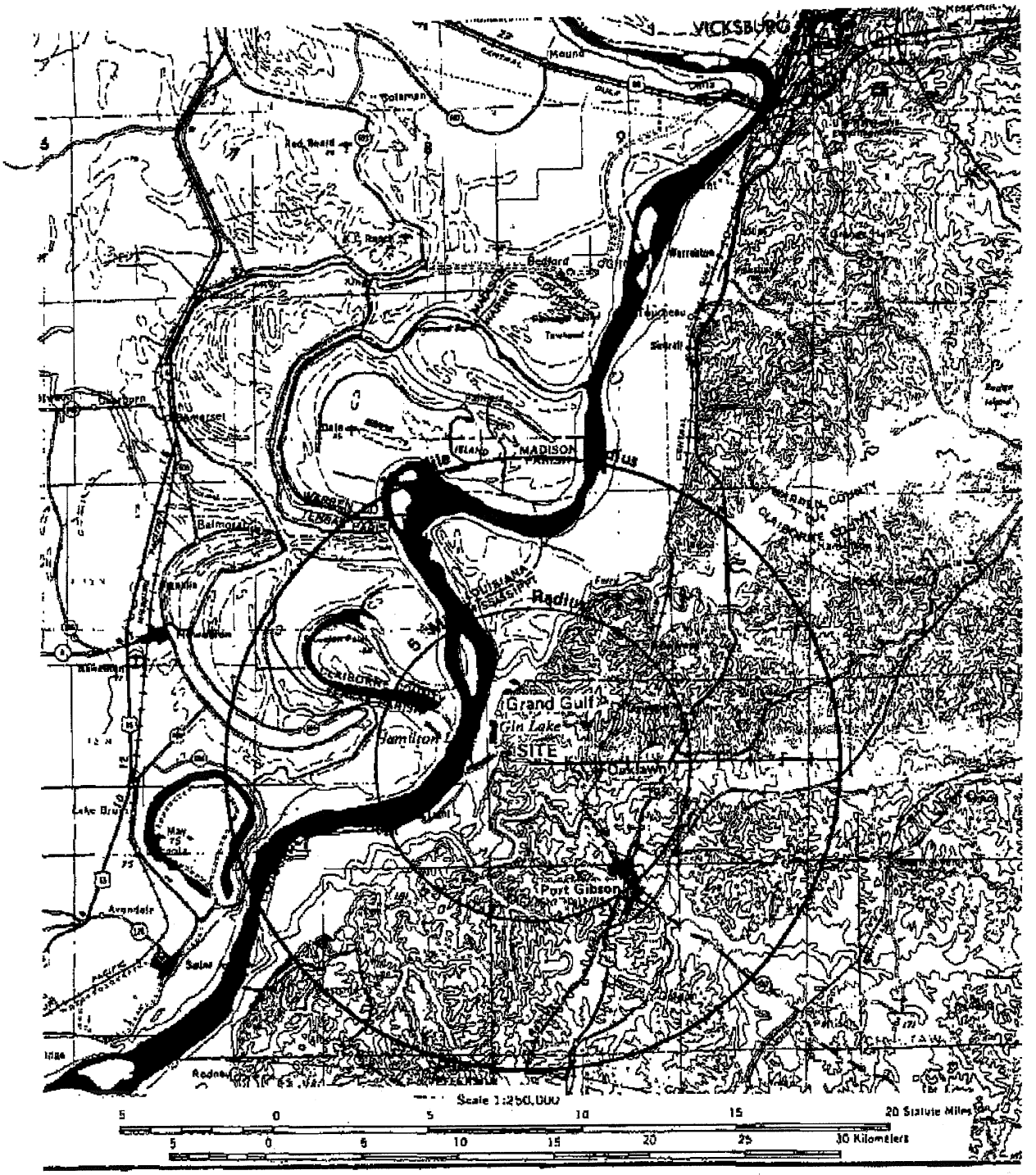
FIGURE 2.3-19 REV. 1



SERI
GRAND GULF NUCLEAR STATION SITE
EARLY SITE PERMIT APPLICATION
SITE SAFETY ANALYSIS REPORT

TOPOGRAPHIC PROFILES
(UFSAR FIGURE 2.3-9)

FIGURE 2.3-20 REV. 1



SERI
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EARLY SITE PERMIT APPLICATION
SITE SAFETY ANALYSIS REPORT

TOPOGRAPHIC PLAN OF AREA
WITHIN 5 AND 10 MILES OF PLANT
(UFSAR FIGURE 2.3-10)

FIGURE 2.3-21 REV. 1