Before the

United States Nuclear Regulatory Commission

Docket Nos. STN 50-498, STN 50-499

Houston Lighting & Power Company, et. al.

South Texas Project Units 1 & 2

Amendment 5

Houston Lighting & Power Company, an applicant in the above captioned proceeding, for itself and for the City of San Antonio, Central Power & Light Company and the City of Austin, hereby files Amendment 5 to the Environmental Report - Operating License Stage.

Amendment 5 provides updated information consistent with the Application.

Respectfully submitted,

HOUSTON LIGHTING & POWER COMPANY

J. H. Goldberg
Vice President
Nuclear Engineering & Construction

Instructions for incorporating Amendment 5:

In general, amendment pages will replace existing pages that have the same page numbers. In some instances, a different number of pages will be added than are deleted. Affected pages are:

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CHAPTER 2

THE SITE

2.1 SITE LOCATION AND LAYOUT

The South Texas Project (STP) is located in southwest Matagorda County, approximately 12 miles south-southwest of Bay City and 10 miles north of Matagorda Bay. The location of Unit 1 will be 96°02'53" west longitude, 28°47'42" north latitude (3,188,669 m north--788,157 m east; Zone 14R); Unit 2 will be located at 96°03'00" west longitude, 28°47'42" north latitude (3,188,699 m north--787,974 m east; Zone 14R). The site consists nominally of 12,300 acres, of which 7,000 acres make up the cooling reservoir, 65 acres are modified or occupied by the plant and plant facilities, and approximately 1,700 remain as a natural lowland habitat.

Figure 2.1-1 shows the general area within 50 miles of the site. Figure 2.1-2 shows the one- through five- and ten-mile perimeters of the site. An aerial photograph of the STP site and environs before construction is shown on Figure 2.1-3. Superimposed on this photograph is the site boundary (utility owned). Figure 2.1-4 is a diagram of the site layout and surrounding area. The exclusion area and railroad spur are also shown. 5

The exclusion area is an oval shaped area, having a minimum boundary distance from the center of each containment building of 1430 meters. The center of the exclusion area "oval" is a point 93 meters directly west of the center of the Unit 2 reactor containment building. This point is also the center of the Low Population Zone, which is a circle with a radius of three miles. The closest approach of FM 521 to the exclusion area boundary is approximately 76 meters. Table 2.1-1 presents exclusion area boundary distances for Unit 1 and Unit 2 in each of the 16 cardinal compass directions. The participants in the STP own the land comprising the site, shown on Figure 2.1-4, except for the right-of-way of FM 521 and the right-of-way for a county road extending south from FM 521 and adjacent to the western boundary of the site.

The abutting and adjacent properties as well as developments near the site are shown on Figure 2.1-6.

The local relief of the area is characterized by fairly flat land, approximately 23 feet above mean sea level. Through the site boundary flows the west branch of the Colorado River as well as several sloughs, one of which feeds Kelly Lake, a 34.4-acre water body in the northeast corner of the site. The site and its immediate environs fall within the Coastal Prairie which extends as a broad band parallel to the Texas Gulf Coast. Of the approximately 50,240 acres within a 5-mile radius of the site, bottomland comprises 19 percent; the remaining 81 percent is upland. The bottomland includes 52 percent cleared land and 48 percent wooded area, most of which, with the exception of two small islands, is classified as agricultural. The upland consists of 91 percent cleared agricultural land, 8 percent woodlands, and 1 percent industrial.

Major road access to the site will be from farm-to-market road (FM) 521. The site development plan, shown on Figure 2.1-7, reflects the major features of plant development. The main element of the plan is the nuclear power plant and its support facilities. The plant was sited to enable functional and safe operation of a nuclear power plant compatible with the natural environment of the surrounding site and community.

Currently no developed public recreation facilities exist along the Colorado River between Bay City and Matagorda. Neither are there any state or federal wildlife reserves along the river, but, since duck and geese are prevalent near the Gulf, some hunting is done along the lower reaches of the river.

Recreational potential in the immediate vicinity of the project site is in the form of a group of vacation homes directly across (to the east of) the Colorado River from the site. The area between the cooling reservoir and the Colorado River contains a wide variety of plant material dominated by mature live oak trees. Wildlife is abundant within the area of riparian influence. With the natural vegetation, water habitat, and lack of development within the area of riparian influence, that area is a natural lowland habitat and will be allowed to remain such. On the project land, specific recreational and public use developments, other than the natural habitat, include picnic areas, a visitors' center, and a public boat launch facility on the Colorado River at the end of the heavy haul road. 2

Since there are no existing public access points in this area of the Colorado River and since a road and docking areas are to be constructed in conjunction with the construction of the facility, the dock facility will be designed to accommodate and serve as a permanent public boat landing and launching facility.

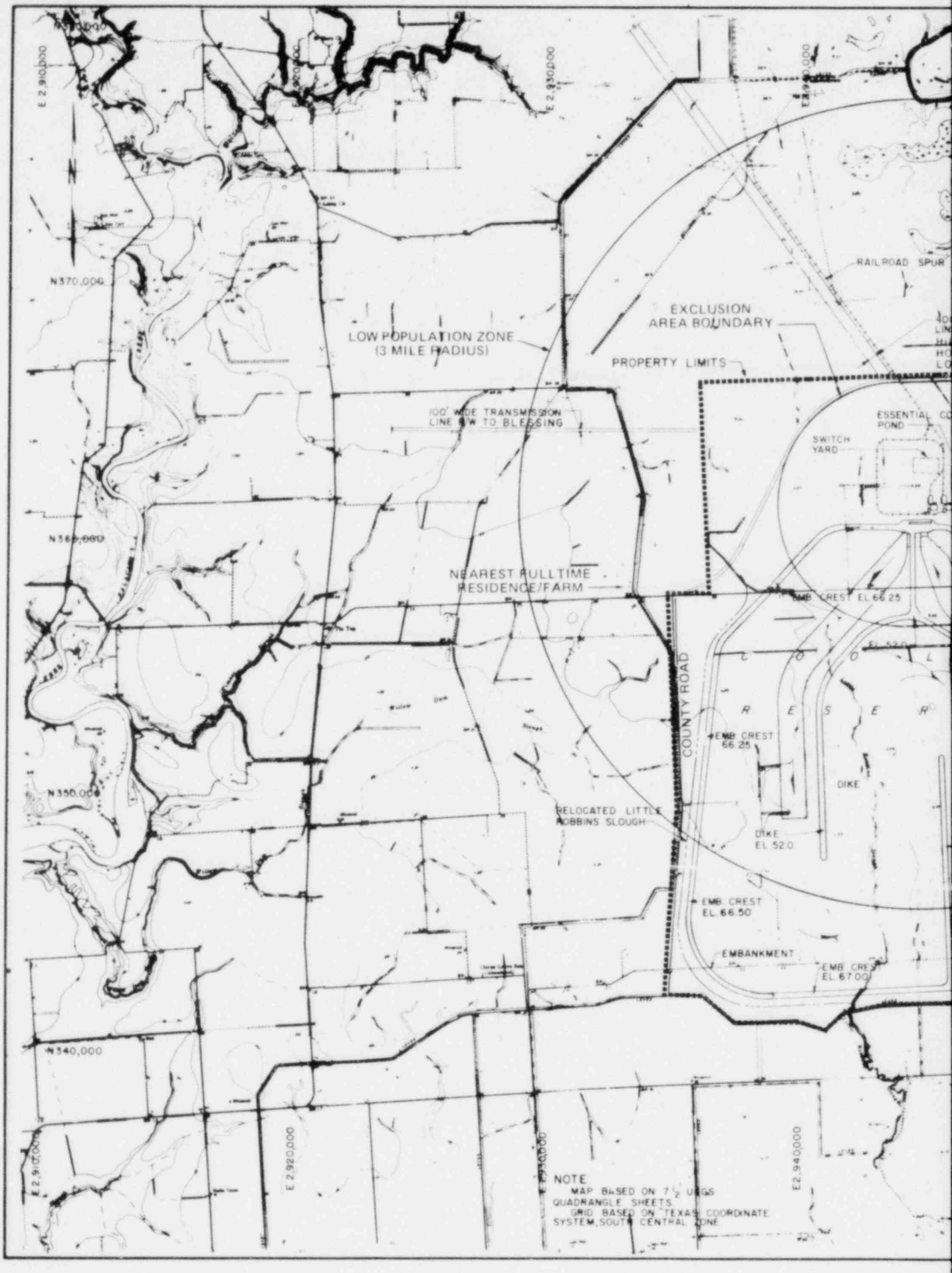
Parking and restrooms will be provided, as well as picnic tables and an interpretive exhibit at the visitors' center to describe the plant's development and operation. The plant and the visitors' center are close enough together so that plant facilities are discernable from the visitors' center. The visitors' center is located on FM 521 near the plant access road (Figure 2.1-5). No swimming or boating will be allowed on Kelly Lake, mainly because of its size; however, Kelly Lake will afford a very fine foreground for a view from the picnic area into the natural habitat.

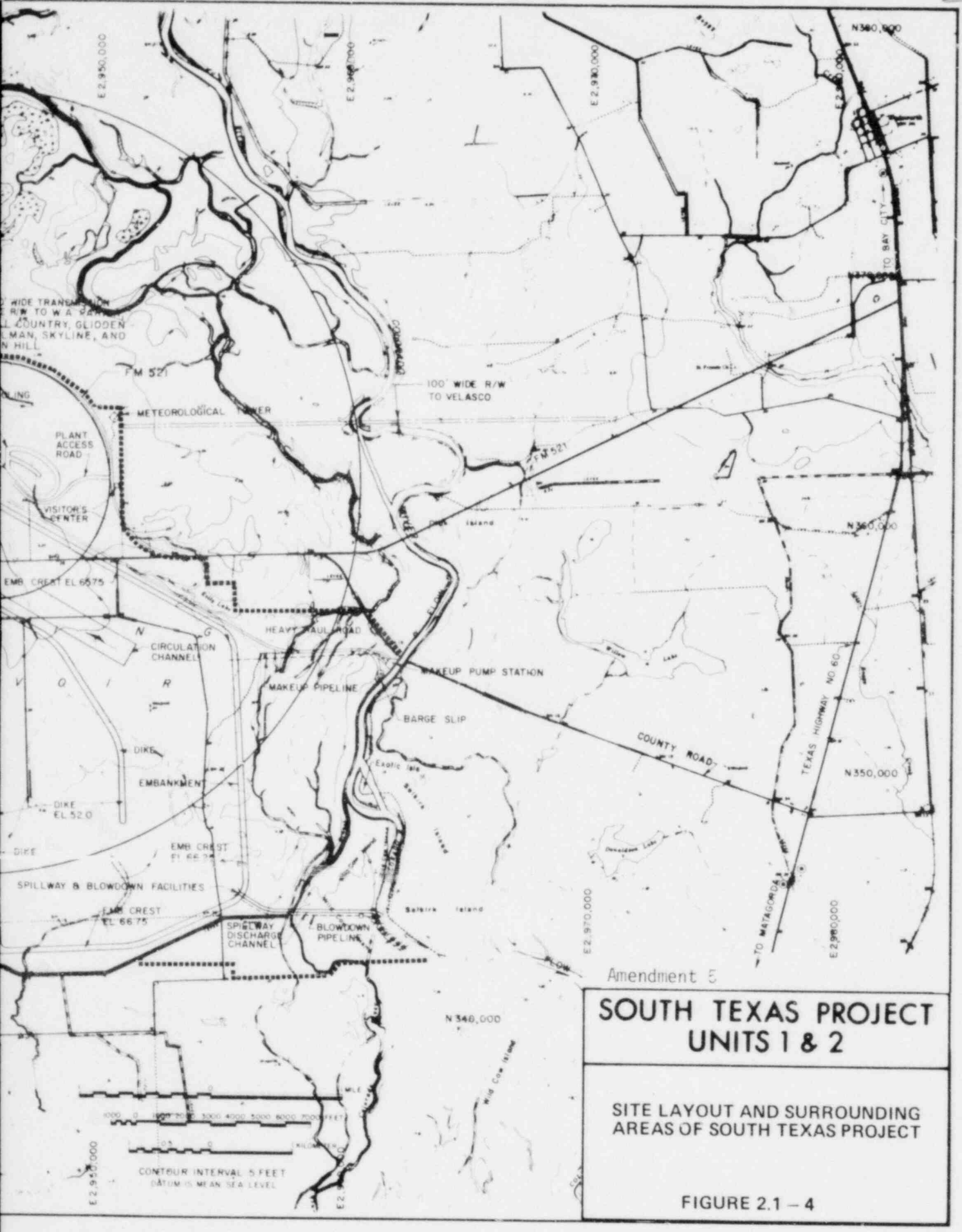
Table 2.1-1

EXCLUSION AREA BOUNDARY DISTANCES

(meters)

	Unit 1	Unit 2	
N	1430	1430	
NNE	1430	1492	Q311.1
NE	1430	1553	
ENE	1430	1596	
E	1430	1615	
ESE	1430	1596	
SE	1430	1553	
SSE	1430	1492	
S	1430	1430	
SSW	1543	1539	
SW	1768	1671	
WSW	1932	1772	
W	1985	1800	
WNW	1932	1772	
NW	1768	1671	
NNW	1543	1539	


E 2,910,000
E 2,930,000
E 2,950,000
N370,000
N360,000
N350,000
N340,000
LOW POPULATION ZONE
(3 MILE RADIUS)
EXCLUSION
AREA BOUNDARY
PROPERTY LIMITS
RAILROAD SPUR
100' WIDE TRANSMISSION
LINE R/W TO BLESSING
ESSENTIAL CO
POND
SWITCH
YARD
NEAREST FULLTIME
RESIDENCE/FARM
EMB CREST EL 66.25
COUNTY ROAD
C O O L
R E S E R
EMB CREST
66.25
DIKE
RELOCATED LITTLE
ROBBINS SLOUGH
DIKE
EL 52.0
EMB CREST
EL 66.50
EMBANKMENT
EMB CREST
EL 67.00
E 2,910,000
E 2,920,000
E 2,930,000
E 2,940,000
NOTE
MAP BASED ON 7½ USGS
QUADRANGLE SHEETS
GRID BASED ON TEXAS COORDINATE
SYSTEM, SOUTH CENTRAL ZONE



Amendment 5

SOUTH TEXAS PROJECT UNITS 1 & 2

SITE LAYOUT AND SURROUNDING AREAS OF SOUTH TEXAS PROJECT

FIGURE 2.1 – 4

2.2 REGIONAL DEMOGRAPHY, LAND, AND WATER USE

2.2.1 POPULATION AND POPULATION DISTRIBUTION

Towns and cities within 50 miles of the STP site are shown on Figure 2.1-1. They are also listed in Table 2.2-1, along with their 1970 and 1980 (to the extent available in 1980 U.S. census listings) resident populations and their distances and directions from the plant. Figure 2.1-2 shows the locations of the municipalities and other features within a 10-mile radius of the plant. | 5

Within 10 miles of the plant the estimated 1980 population was 4,122 persons; within 5 miles it was 488 persons. The closest incorporated communities are Bay City and Palacios. Both, however, are outside the 10-mile radius. Matagorda, an unincorporated community, is about 8 miles southeast of the plant. | Q311.2

All full-time and part-time residences within 4 miles of the plant site are shown on Figure 2.2-0. The nearest full-time residence is in the west-southwest sector approximately 15,000 feet from the reactors. Resident populations allocated to sectors within 10 miles of the STP, but beyond the site boundary, were developed from areal proportioning of 1980 census tract data. Projections were developed on the same basis. | Q 311.1b

Figure 2.2-1 shows the estimated 1980 population distribution within 50 miles of the STP. These population data reflect information from the most recent (1980) census. Figures 2.2-2 through 2.2-6 show corresponding projected populations for the years 1990, 2000, 2010, 2020 and 2030. The population projections were developed using 1970 and 1980 final Census Data with Rice Center's Rural Growth Allocation Model developed for this work by Rice Center/Dames & Moore in 1980/1981 (Ref. 2.2-7), and updated for the STP project in 1982 (Ref. 2.2-8). The 1970 and 1980 final Census Data were obtained for the eight counties located within 50 miles of the STP: Brazoria, Calhoun, Colorado, Fort Bend, Jackson, Matagorda, Victoria and Wharton. Census tract (or minor census division) data were compiled. Land use data, growth conditions and study area control totals were updated to reflect recent changes. The Growth Allocation model (Ref. 2.2-7) was then "calibrated" on the 1970-1980 base period by adjusting attractiveness factors in each of the census tracts to match each tract's share of growth during the base period. Forecasts were then made for the eight-county region. | Q311.2

The areal proportion of each tract within each sector was measured. For tracts without significant urban population, it was assumed the population was evenly distributed. Urban populations located in more than one sector were allocated in proportion to the 1980 Census population to the tracts containing the urban area. The proportion was considered a constant for projections to 2030.

2.2.1.1 Residential Developments

Two developments, Selkirk Island and Exotic Isle, are within approximately 4 miles southeast of the reactor containment buildings. Selkirk Island is a

1,100-acre island development operated as a community. The project includes 384 homesites. 5

The other development, Exotic Isle, is a much smaller area and is a resort/retirement complex. The island is divided into 25 lots. Together the developments represent 409 home or retirement sites (Ref. 2.2-5). In projecting the population for the developments, which are planned almost entirely for retirement use, the figure of 2.5 persons per housing unit was used as a conservative number and the population was assumed to remain constant throughout the life of the project. The resort/home/retirement nature of the developments makes them primarily recreational facilities. Selkirk Island provides, for its residents, boating, fishing, and hunting capabilities along with a swimming pool. During the warmer months, approximately 35 people per day use the swimming facilities (Ref. 2.2-5). There are three piers, 45, 40, and 30 feet in length, maintained for the use of residents of Selkirk Island. It is expected that approximately eight boats can dock at the facility at any one time. Approximately 25 boats per day during weekends are launched from the boat ramp at Selkirk (Ref. 2.2-5). Seven duck blinds are maintained for hunting activities, and fishing is done from individual properties. Approximately 75 hunters use the facilities during the 3-month season. Selkirk Island provides a 5-acre marina for the use of property owners.

The subdivision development of Citrus Grove, 4 miles southwest of the site, has four dwellings; no more building is planned by the developer. The remaining land is being offered for sale in 400-acre lots. Robbins Ranch, 4.5 miles south of the site, was planned to be developed as small irrigated farms; however, these plans have not materialized. There are no seasonal or permanent dwellings in the area. There are twelve seasonal dwellings on the Exotic Isle development. The remaining seasonal dwellings are on Selkirk Island. Population data for these developments are included in the population wheels on Figures 2.2-1 through 2.2-6.

Since most people purchasing homesites in the developments are doing so as retirement investments, a number of people may reside in these homes seasonally until their retirement. See Figure 2.1-6 for location of the Selkirk Island and Exotic Isle developments with respect to the plant site.

2.2.1.2 Transient Population

There are no schools, hospitals, prisons, wildlife preserves, sanctuaries, or recreational and sports facilities within 5 miles of the plant site. With respect to these land and water uses, the recreational developments and public use areas discussed in Section 2.1 are the only areas of projected use. There are presently 148 residences within 5 miles of the plant site. 5

2.2.1.2.1 Visitors' Center and Picnic Areas of Site. As previously discussed in Section 2.1, picnic areas and a visitors' information center will be constructed on the STP site. (Figure 2.1-6 shows location of each.) Attendance figures at the visitors' center are expected to approximate 30,000 annually.

2.2.1.2.2 Migrant Labor Force. A recent inquiry of the Matagorda County agricultural extension agent revealed that there are no migrant workers within 10 miles of the plant. The mechanized nature of agriculture of the county has minimized hand labor (Ref. 2.2-5).

2.2.1.2.3 Seasonal Homes. According to the 1970 census of housing there were five vacant seasonal and migratory homes in Matagorda County (Ref. 2.2-1). The resort/retirement communities of Selkirk Island and Exotic Isle located 3.5 miles southwest of the plant area provide the only seasonal dwellings within 5 miles of the site. These two developments represent a total of about 23 seasonal dwellings and 96 permanent dwellings (Ref. 2.2-5). | 5

2.2.1.3 Population Center

The nearest "population center," as defined in 10CFR100, is the city of Victoria, Texas, which had a 1980 population of 50,695. Its nearest corporate boundary is 59 miles west of the plant. Projections indicate, however, that the population of Bay City will exceed 25,000 by the year 2010. For this reason Bay City has been designated as the population center. The distance to Bay City, approximately 12 miles, is considerably greater than the distance required by 10CFR100, i.e., 1-1/3 times the low population zone distance. | 5

2.2.1.4 Public Facilities and Institutions

Two surveys, one in July 1973 and a second in October 1977, were conducted to determine existing and planned public facilities and institutions such as schools, hospitals, prisons, and parks within 10 miles of the plant. An assessment of socioeconomic conditions, completed in 1980, updated some of the information provided in the 1973 and 1977 surveys. The results of the surveys and assessment are reflected in the subsections below. | 5

2.2.1.4.1 Schools. There are no schools within 5 miles of the site. Schools within 10 miles of the plant are listed in Table 2.2-2 and indicated on Figure 2.2-7. Only three schools are within 10 miles of the plant: Tidehaven High School (8 miles NNW) and Tidehaven Intermediate School (8.5 miles NNW), both located in El Maton, Texas, and the Matagorda Elementary School in Matagorda, Texas (8 miles SE). These schools have a combined enrollment of 584 students (Ref. 2.2-9). Four schools in Palacios are just over 10 miles from the plant: Palacios High School, Palacios Junior High School, Eastside Elementary School, and Central Elementary School (Ref. 2.2-1). The institution of higher education closest to the plant is Wharton County Junior College, 37 miles to the north. The 1977-78 enrollment is 2,047 students (Ref. 2.2-5). | 5

2.2.1.4.2 Hospitals. There are no hospitals within 10 miles of the plant. The only hospital facilities within the county are Matagorda General Hospital located in Bay City and Wagner General Hospital in Palacios. The Matagorda General Hospital has three surgical rooms and 116 beds (Ref. 2.2-9). Included in the facility is a 28-bed convalescent center. Also located in Bay City is the Bay Villa convalescent home. This facility, with a 106-bed capacity, provides convalescent nursing facilities to area residents. The Matagorda County Health Department is located in the county courthouse and | 5

maintains a staff which includes one registered nurse and one health inspector (Ref. 2.2-1 and 2.2-2).

Wagner General Hospital in Palacios provides general medical and surgical facilities for persons in the southwestern end of the county. The hospital has a 43-bed capacity and a staff of 59 (Ref. 2.2-5 and 2.2-9). | 5

2.2.1.4.3 Prisons. There are no prisons within 10 miles of the plant site (Ref. 2.2-1).

2.2.1.4.4 Parks and Recreational Areas. Parks and other recreational areas within 10 miles of the plant are indicated on Figure 2.2-7. The recreational facilities closest to the site are all privately owned. Oliver's Bait Camp (1) (numbers refer to Figure 2.2-7), 10 miles east-southeast of the plant, has 2 acres of land providing boating and fishing facilities. Old Box Factory (2), 10 miles east-southeast of the plant, also has 2 acres of land and also provides boating facilities. Carlson's Park (3), 10 miles southeast of the plant, has 2 acres of land and has boating and fishing facilities (Ref. 2.2-4). The U. S. Fish and Wildlife Service has plans to purchase or lease the Mad Island Marsh Complex south of the site to preserve it as a prime waterfowl wintering area (Ref. 2.2-6). | Q330.2

2.2.1.5 Zoning

Matagorda County and Bay City do not have land use zoning regulations or a planning commission. The only land use regulations within the county are deed restrictions for subdivisions. The county government for Matagorda County is a county commission made up of four precincts, each having a county commissioner. The STP will be located in Precinct 3. No building permit was required for the STP site.

2.2.2 USE OF ADJACENT LANDS AND WATERS

In accordance with the discussion in the Introduction to Regulatory Guide 4.2, Revision 2, pertaining to the applicant's "Environmental Report--Operating License Stage," this section is not addressed since no updating of the corresponding material in the "Environmental Report--Construction Permit Stage" was necessary.

2.2.3 NEARBY INDUSTRIAL, TRANSPORTATION, AND MILITARY FACILITIES

In accordance with the discussion in the Introduction to Regulatory Guide 4.2, Revision 2, pertaining to the "Applicant's Environmental Report--Operating License Stage," this section is not addressed since no updating of the corresponding material in the "Environmental Report--Construction Permit Stage" was necessary.

REFERENCES

Section 2.2:

2.2-1 NUS Corporation, Demography, Land and Water Use Survey, (Rockville, Maryland, 1973).

2.2-2 Bay City Chamber of Commerce, Matagorda County Fact Book (Bay City, Texas, 1971).

2.2-3 American Hospital Association, The AHA Guide to Health Care Field (1971).

2.2-4 Houston-Galveston Area Council, Parks Recreation and Open Space (1971).

2.2-5 Brown & Root, Inc., 1977 Demography, Land and Water Use Survey, (Houston, Texas).

2.2-6 U.S. Department of Interior, Fish & Wildlife Service, Region 2, Wetland Preservation Program, Category 8, Texas Gulf Coast (March 1977).

2.2.7 Rice Center, 18 County Population and Employment Forecast, (December 1980, revised January 1981).

2.2-8 Rice Center, Correspondence to Dames & Moore regarding updating population forecast, (June 15, 1982). 5

2.2-9 NUS Corporation, Revised Assessment of Socioeconomic Conditions at the South Texas Project, (Rockville, Maryland, 1980).

TABLE 2.2-1

TOWNS AND CITIES WITHIN 50 MILES OF SOUTH TEXAS PROJECT

0-10 Miles	Distance (mi) and Direction	Population 1970	Population 1980
Buckeye	8 N	25	**
Rymers	8 NE	6	**
Wadsworth	8 ENE	152	**
Gulf Hill	8 ESE	0	**
Matagorda	8 SW	1,219	**
Citrus Grove	4 SW	0	**
Collegeport	9 WSW	91	**
Simpsonville	4 W	12	**
El Maton	8 NW	165	**
10-20 Miles			
Markham	12 N	603	1,554
Rossge	15N	*	**
Bay City	12 NNE	11,733	17,887
Van Vleck	19 NNE	1,051	1,157
Caney	18 NE	296	**
Rugeley	19 NE	*	**
Chinquapin	17 E	*	**
Gulf	11 ESE	*	**
Camp Hulen	14 WSW	*	**
Palacios	13 WSW	3,642	4,667

Q311.2

*Population information not available in U.S. Census Bureau 1970 listing of current population.

**Population information not available in U.S. Census Bureau 1980 listing of current population.

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TABLE 2.2-1 (Continued)

TOWNS AND CITIES WITHIN 50 MILES OF SOUTH TEXAS PROJECT

10-20 Miles	Distance (mi) and Direction	Population 1970	Population 1980	
Blessing	12 WNW	571	**	
Francitas	18 WNW	30	**	
Midfield	15 NW	70	**	
Clemville	15 NNW	54	**	Q311.2
Magnet	16 N	70	**	
20-30 Miles				
Chalmers	21 NNE	*	**	
McCroskey	24 NNE	*	**	
Ashwood	25 NNE	*	**	
Pledger	29 NNE	159	**	
Sugar Valley	24 NE	*	**	
Allenhurst	21 NE	*	**	
Hasima	24 NE	*	**	
Abercrombie	24 NE	*	**	
Old Ocean	27 NE	900	**	
Sweeney	26 NE	3,191	3,538	
Cedar Lane	23 ENE	85	**	
Gainesmore	25 ENE	*	**	
Hawkinsville	25 ENE	*	**	
Cedar Lake	27 ENE	148	**	

*Population information not available in U.S. Census Bureau 1970 listing of current population.

**Population information not available in U.S. Census Bureau 1980 listing of current population. | 5

TABLE 2.2-1 (Continued)

TOWNS AND CITIES WITHIN 50 MILES OF SOUTH TEXAS PROJECT

20-30 Miles	Distance (mi) and Direction	Population 1970	Population 1980
Four Corners	29 ENE	*	**
Sargent	25 E	76	**
Olivia	26 WSW	200	**
Port Alto	24 WSW	*	**
Weedhaven	25 W	*	**
La Ward	26 W	247	218
Danevang	21 NNW	61	**
30-40 Miles			
Lane City	30 N	111	**
Mackay	34 N	*	**
Boling	35 N	541	1,348
Iago	36 N	31	
Burr	37 N	*	**
Dinsmore	38 N	*	**
Wharton	37 N	7,881	9,033
New Gulf	35 NNE	963	**
Don-Tol	32 NNE	*	**
Danciger	32 NNE	300	**
Damon	39 NNE	360	**
West Columbia	35 NE	3,335	4,109

Q311.2

*Population information not available in U.S. Census Bureau 1970 listing of current population.

**Population information not available in U.S. Census Bureau 1980 listing of current population.

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TABLE 2.2-1 (Continued)

TOWNS AND CITIES WITHIN 50 MILES OF SOUTH TEXAS PROJECT

30-40 Miles	Distance (mi) and Direction	Population 1970	Population 1980	
East Columbia	36 NE	89	**	
El Barnardo	30 NE	*	**	
Brazoria	35 ENE	1,681	3,025	
Hinkles Ferry	34 ENE	35	**	Q311.2
Perry Landing	37 ENE	*	**	
Jones Creek	39 ENE	1,268	2,634	
Churchill Bridge	33 ENE	*	**	
Port O'Connor	33 SW	*	1,031	
Indianola	33 SW	*	**	
Magnolia Beach	34 WSW	*	**	
Port Lavaca	37 WSW	10,491	10,911	
Point Comfort	33 WSW	1,446	1,125	
Keeran	39 W	*	**	
La Salle	38 W	75	**	
Vanderbilt	35 W	667	**	
Lolita	31 W	300	**	
Red Bluff	32 WNW	*	**	
Manson	37 WNW	*	**	
Edna	39 WNW	5,332	5,650	
Ganado	33 WNW	1,640	1,770	
Louise	32 NW	310	**	

*Population information not available in U.S. Census Bureau 1970 listing of current population.

**Population information not available in U.S. Census Bureau 1980 listing of current population. 5

TABLE 2.2-1 (Continued)

TOWNS AND CITIES WITHIN 50 MILES OF SOUTH TEXAS PROJECT

30-40 Miles	Distance (mi) and Direction	Population 1970	Population 1980
Hillje	32 NW	51	**
El Campo	31 NNW	8,563	10,462
El Campo South	30 NNW	1,880	
Pierce	33 NNW	49	**
Jones	38 NNW	*	**
40-50 Miles			
Spanish Camp	42 N	*	**
Hungerford	43 N	178	**
Kendleton	46 N	161	606
Powell Point	48 N	*	**
Marlowe	42 NNE	*	**
Guy	43 NNE	25	**
Needville	45 NNE	1,024	1,417
Long Point	46 NNE	*	**
Fairchilds	48 NNE	95	**
Otey	47 NE	300	**
Chenango	48 N	*	**
Anchor	46 NE	*	**
Bailey Prairie	42 NE	228	353
Snide	42 NE	75	**

Q311.2

*Population information not available in U.S. Census Bureau 1970 listing of current population.

**Population information not available in U.S. Census Bureau 1980 listing of current population.

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TABLE 2.2-1 (Continued)

TOWNS AND CITIES WITHIN 50 MILES OF SOUTH TEXAS PROJECT

40-50 Miles	Distance (mi) and Direction	Population 1970	Population 1980
Angleton	46 NE	9,770	13,929
Angleton South	47 NE	1,017	
Van Pelt	46 ENE	*	**
Bastrop Beach	47 ENE	*	**
Lake Jackson	42 ENE	13,376	19,102
Clute	44 ENE	6,023	9,577
Lake Barbara	45 ENE	605	**
Stratton Ridge	47 ENE	*	**
Oyster Creek	47 ENE	600	1,473
Velasco Heights	45 ENE	*	**
Velasco	45 ENE	*	**
Freeport	45 ENE	11,997	13,444
Gulf Park	42 ENE	2,000	**
Seadrift	48 WSW	1,092	1,277
North Seadrift	49 WSW	*	
Long Mott	49 WSW	76	**
Green Lake	49 WSW	51	**
Clarks	43 WSW	*	**
Kamey	44 WSW	*	**
Placedo	48 W	500	**
Carr	44 W	*	**

Q311.2

*Population information not available in U.S. Census Bureau 1970 listing of current population.

**Population information not available in U.S. Census Bureau 1980 listing of current population.

5

TABLE 2.2-1 (Continued)

TOWNS AND CITIES WITHIN 50 MILES OF SOUTH TEXAS PROJECT

40-50 Miles	Distance (mi) and Direction	Population 1970	Population 1980	
Inez	46 W	300	**	
El Toro	43 WNW	*	**	
Navidao	39 WNW	*	**	
Morales	50 WNW	25	**	Q311.2
Cordele	44 NW	74	**	
Provident City	49 NW	*	**	
New Taiton	41 NNW	*	**	
Nada	48 NNW	165	**	
Glen Flora	40 NNW	210	**	
Egypt	45 NNW	25	**	
Sand Ridge	46 NNW	*	**	
Elm Grove	48 NNW	*	**	
Bonus	48 NNW	42	**	
Richwood	42 ENE	1,452	2,591	

*Population information not available in U.S. Census Bureau 1970 listing of current population.

**Population information not available in U.S. Census Bureau 1980 listing of current population. 5

TABLE 2.2-2

SCHOOLS WITHIN 10 MILES OF SOUTH TEXAS PROJECT
(Except as Indicated)

School*	No. of Students (1979 - 80)	Distance (mi) and Direction
1. Matagorda Elementary (Matagorda)	110	8 SSE
2. Tidehaven High School (El Maton)	247	8 NNW
3. Tidehaven Intermediate (El Maton)	227	8.5 NNW
4. Central Elementary (Palacios)	500	10 - 11 SW**
5. Eastside Elementary (Palacios)	342	10 - 11 SW**
6. Palacios Junior High School (Palacios)	303	10 - 11 SW**
7. Palacios High School (Palacios)	251	10 - 11 SW**

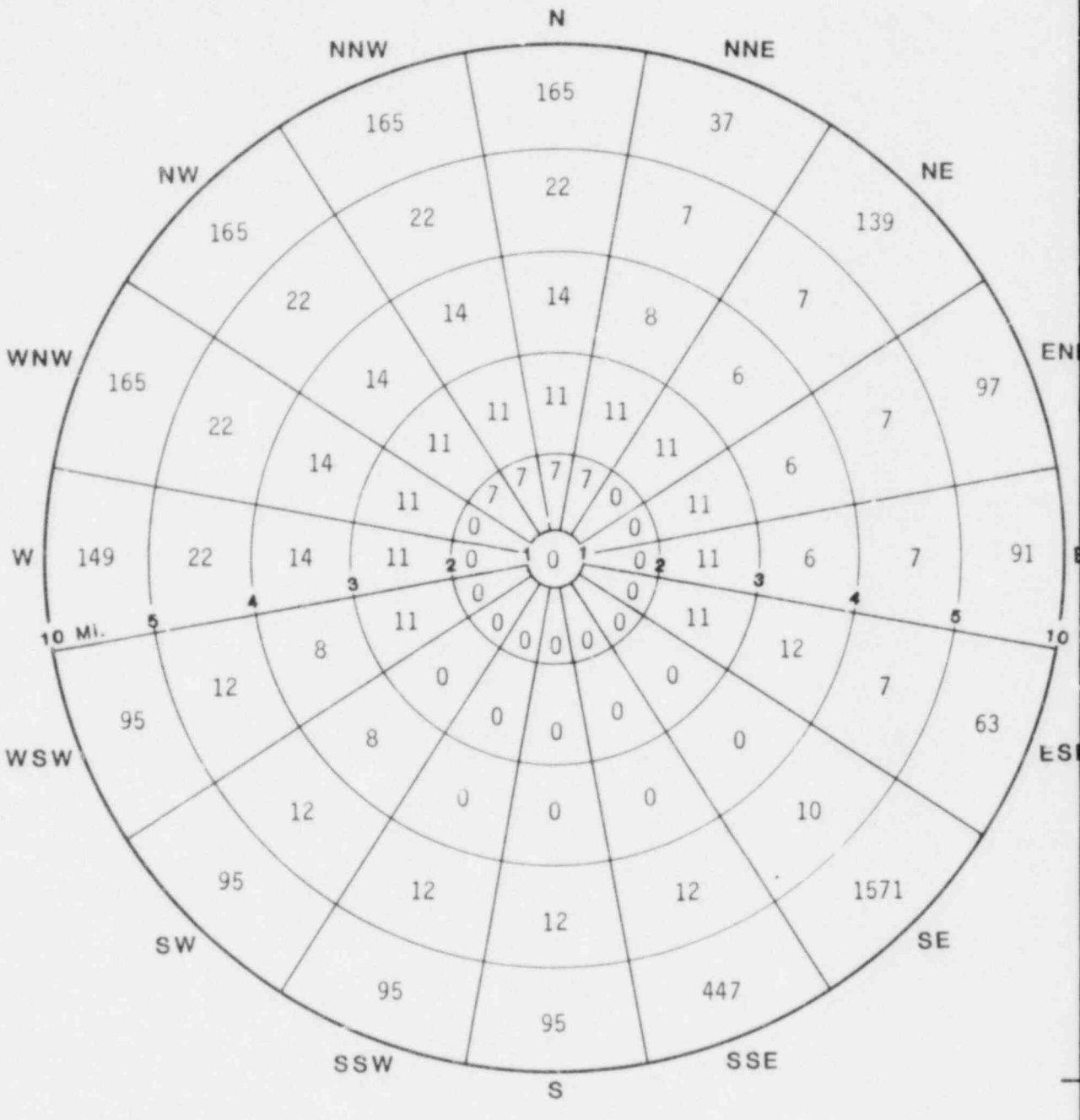
5

* Numbers correspond with Figure 2.2-7.

** These schools are just beyond 10 miles of the plant.

TOTALS

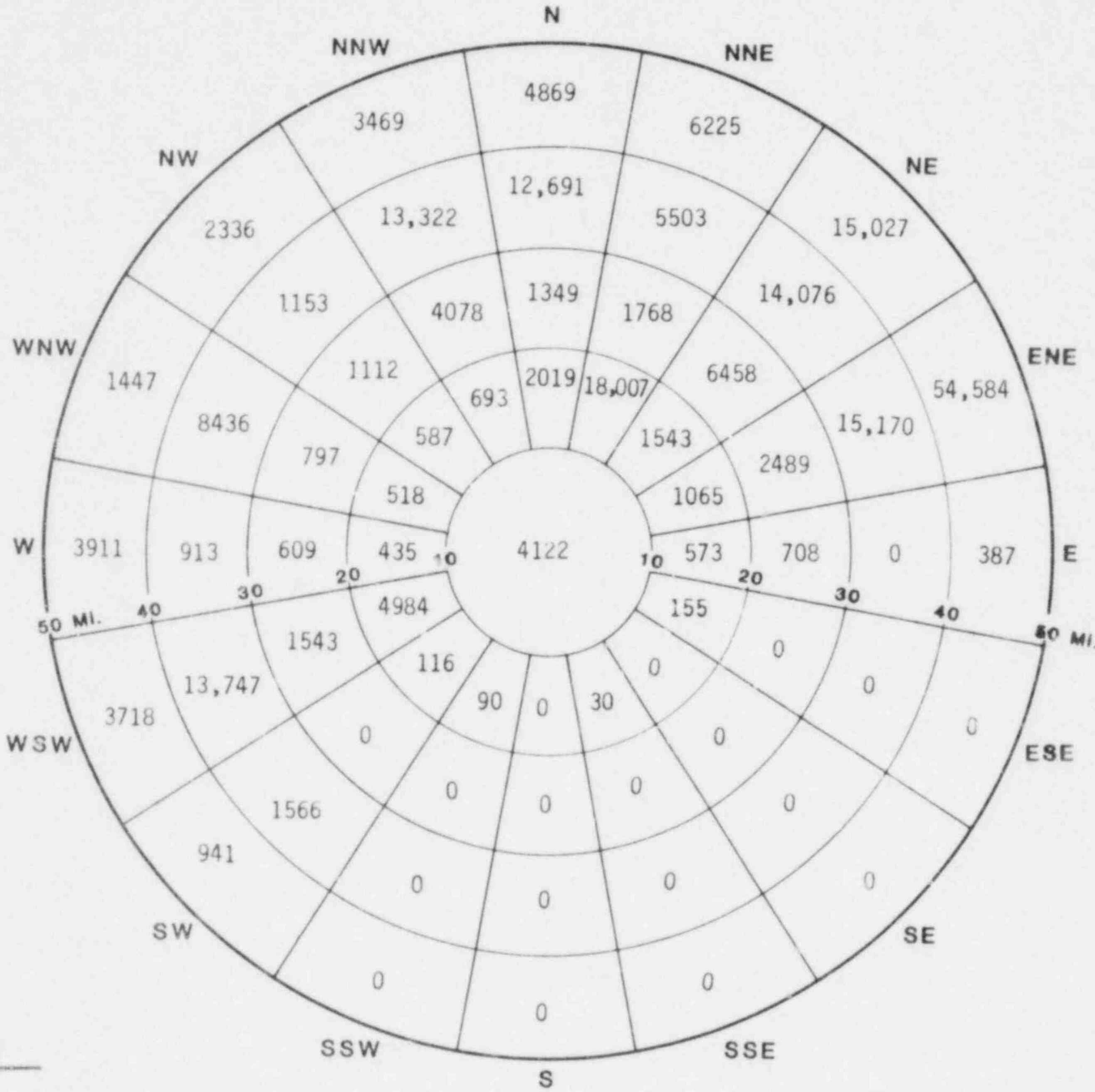
Annulus	0-1 Mi.	1-2 Mi.	2-3 Mi.	3-4 Mi.	4-5 Mi.	0-5 Mi.	0-10 Mi.
Population	0	28	121	124	215	488	4122



NOTE: ASSUMES NO RESIDENT POPULATION ON LAND OWNED BY STP.

TOTALS

Annulus	10-20Mi	20-30Mi	30-40Mi.	40-50Mi.	10-50Mi.	0-50Mi.
Population	30,815	20,911	86,577	96,914	235,217	239,339



1980

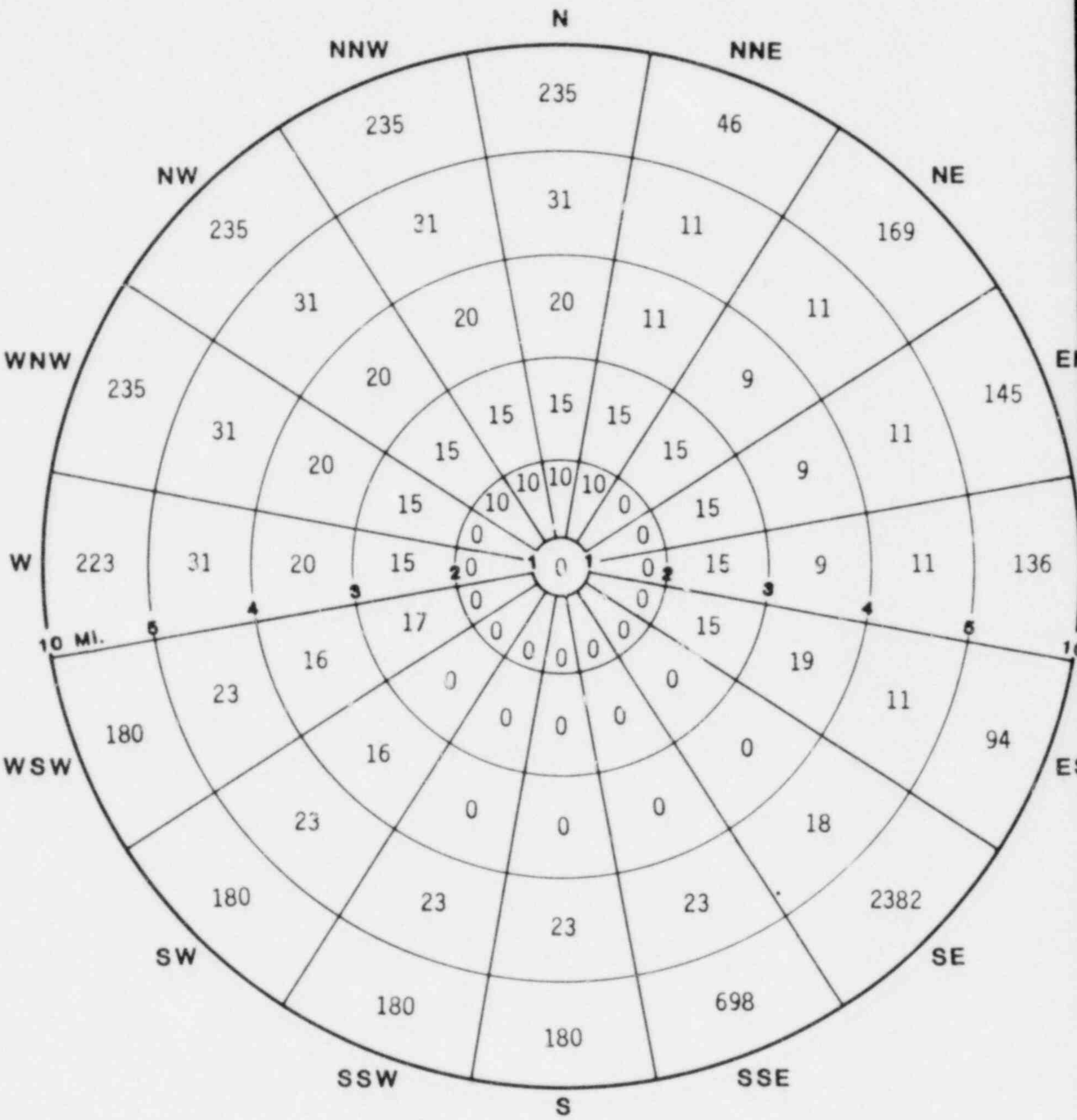
Amendment 5

SOUTH TEXAS PROJECT
UNITS 1 & 2

POPULATION DISTRIBUTION,
0-10 and 10-50 MILES,
SOUTH TEXAS PROJECT, 1980

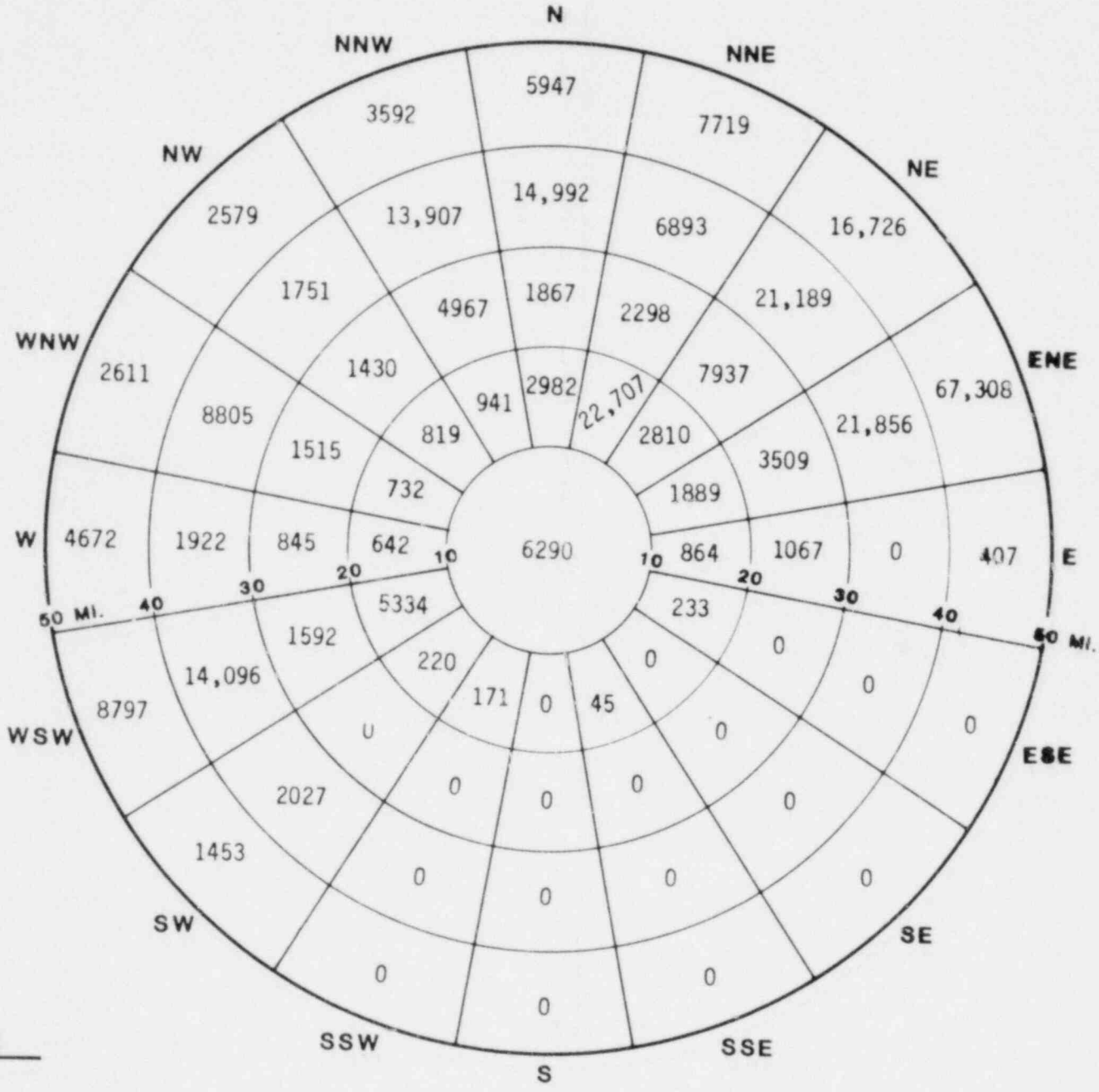
FIGURE 2.2-1

						TOTALS	
Annulus	0-1 Mi.	1-2 Mi.	2-3 Mi.	3-4 Mi.	4-5 Mi.	0-5 Mi.	0-10 Mi.
Population	0	40	165	189	343	737	6290



NOTE: ASSUMES NO RESIDENT POPULATION ON LAND OWNED BY STP.

					TOTALS	
Annulus	10-20Mi	20-30Mi	30-40Mi	40-50Mi.	10-50Mi.	0-50Mi.
Population	40,389	27,027	107,438	121,811	296,665	302,955



1990

Amendment 5

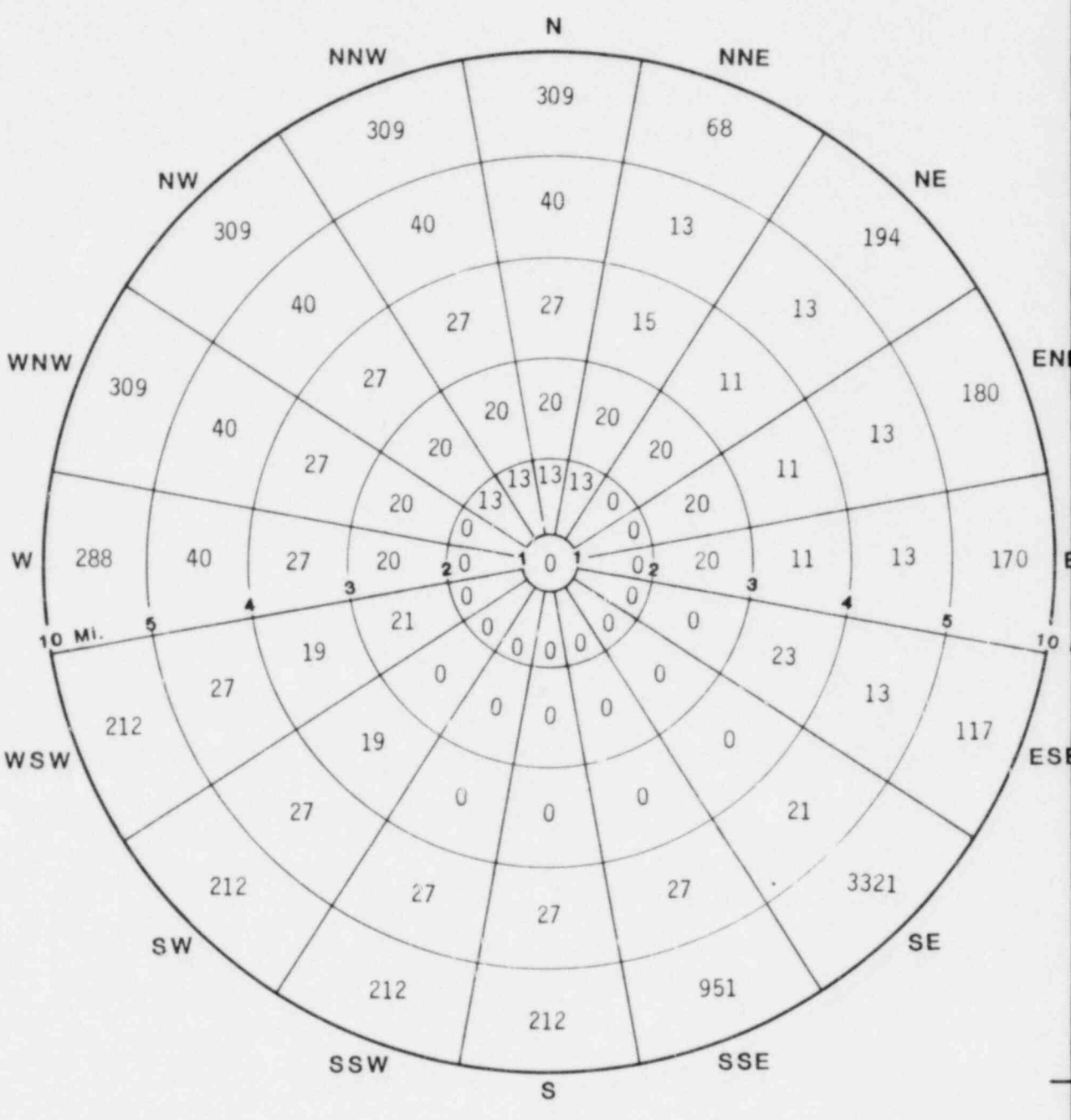
SOUTH TEXAS PROJECT UNITS 1 & 2

POPULATION DISTRIBUTION, 0-10 and 10-50 MILES, SOUTH TEXAS PROJECT, 1990

FIGURE 2.2-2

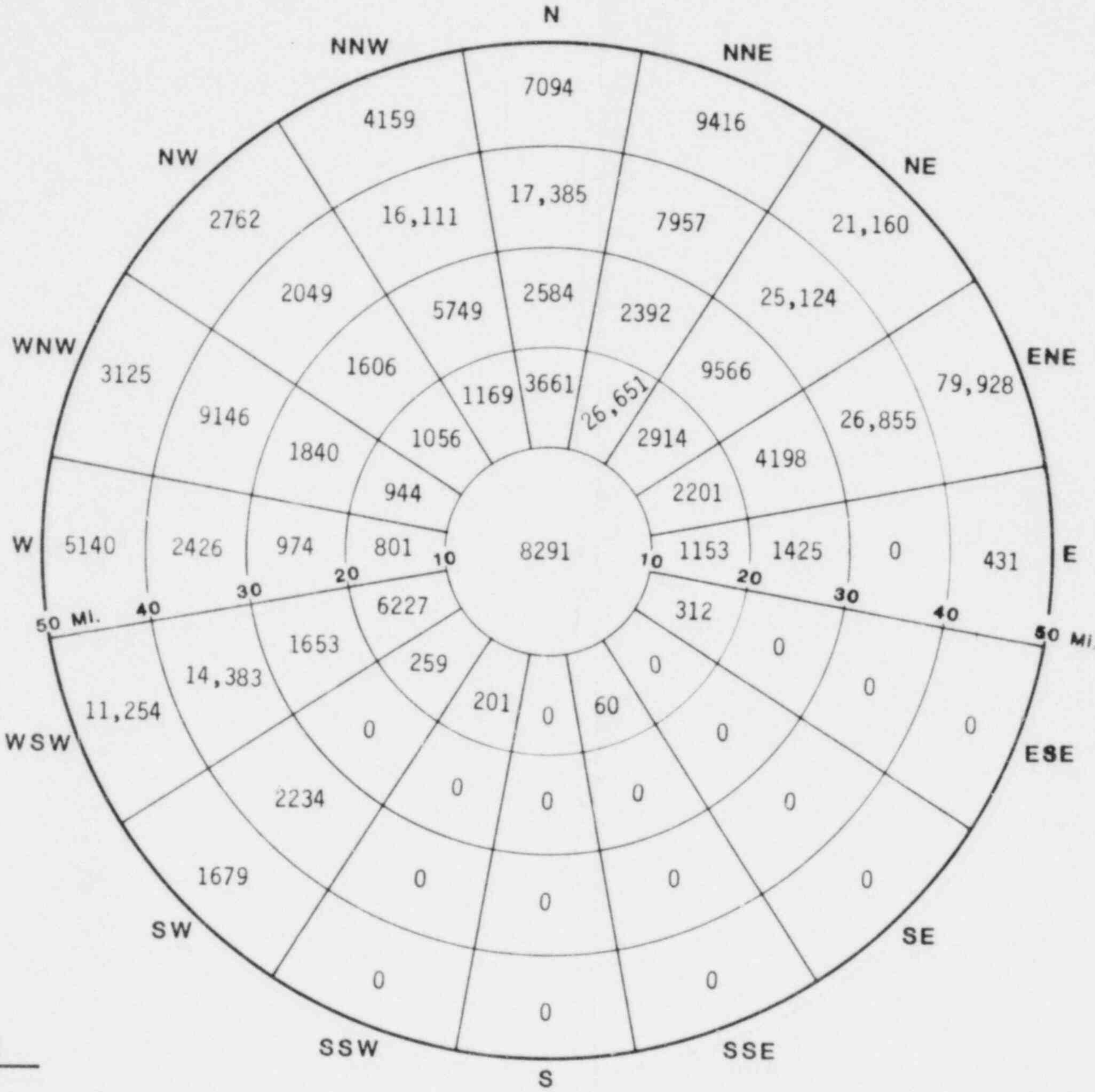
TOTALS

Annulus	0-1 Mi.	1-2 Mi.	2-3 Mi.	3-4 Mi.	4-5 Mi.	0-5 Mi.	0-10 Mi.
Population	0	52	221	244	421	938	8291



NOTE: ASSUMES NO RESIDENT POPULATION ON LAND OWNED BY STP.

					TOTALS	
Annulus	10-20Mi	20-30Mi	30-40Mi	40-50Mi.	10-50Mi.	0-50Mi.
Population	47,609	31,987	123,670	146,148	349,414	357,705



2000

Amendment 5

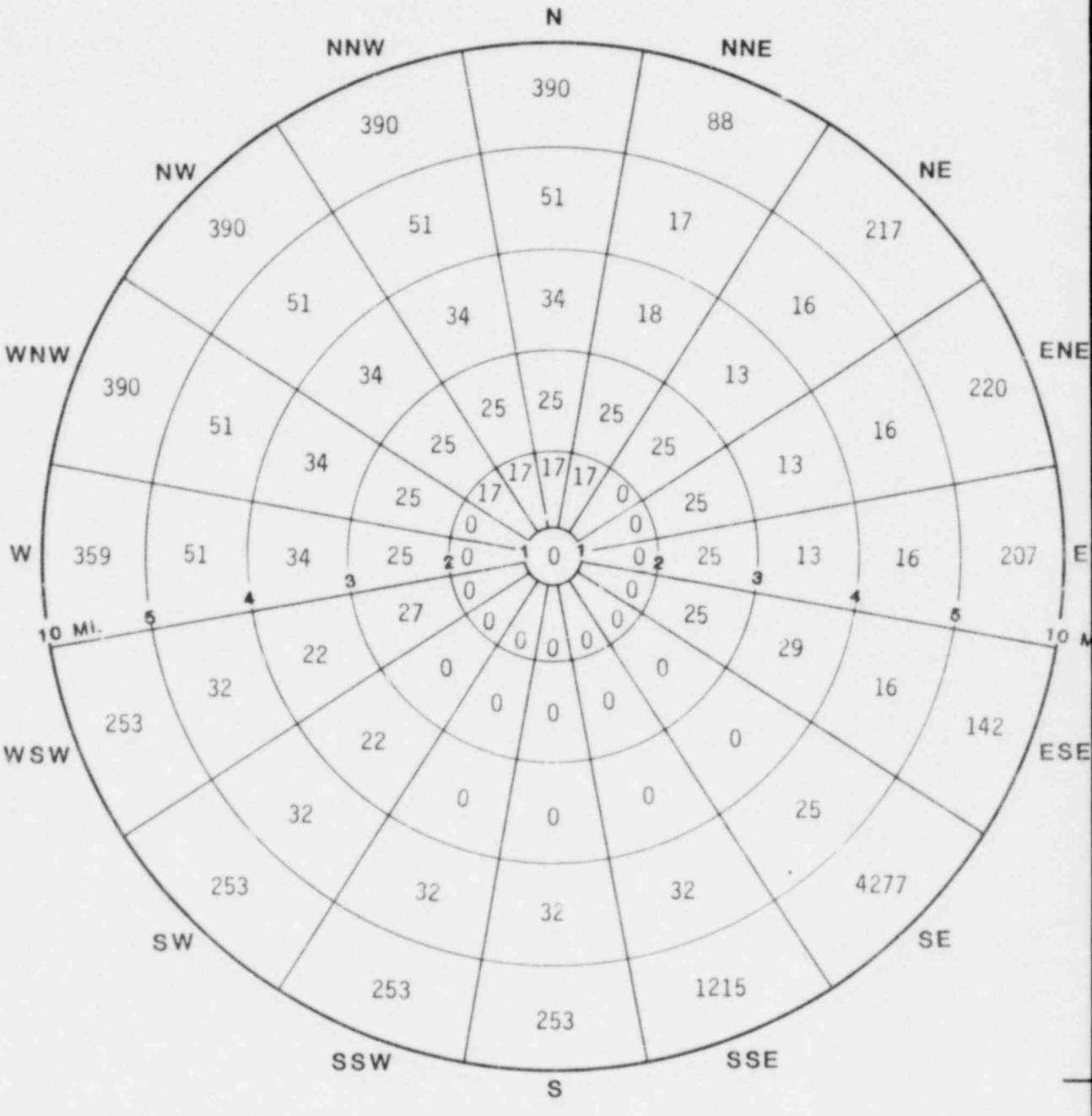
SOUTH TEXAS PROJECT UNITS 1 & 2

POPULATION DISTRIBUTION,
0-10 and 10-50 MILES,
SOUTH TEXAS PROJECT, 2000

FIGURE 2.2-3

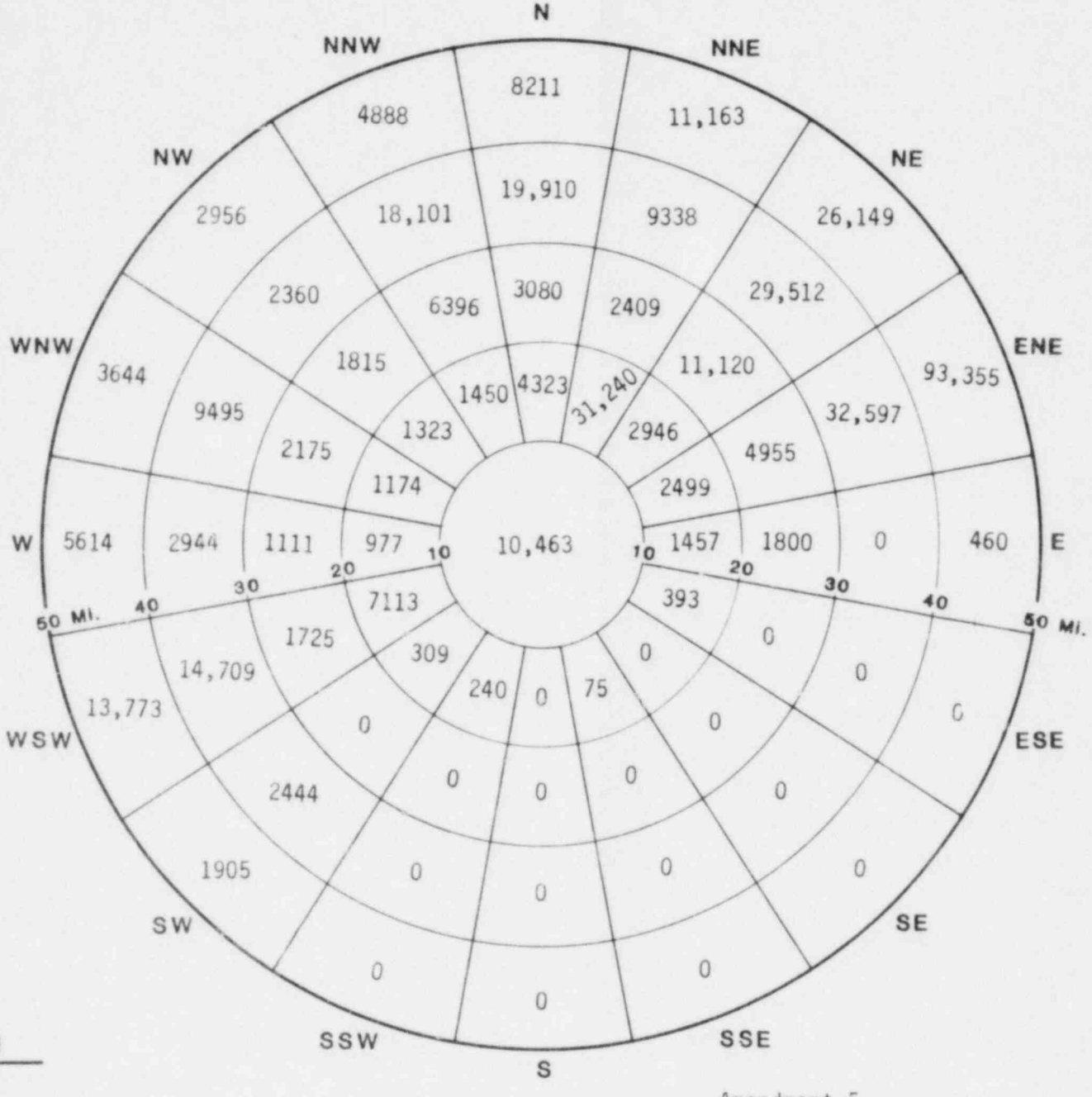
TOTALS

Annulus	0-1 Mi.	1-2 Mi.	2-3 Mi.	3-4 Mi.	4-5 Mi.	0-5 Mi.	0-10 Mi.
Population	0	68	277	300	521	1166	10,463



NOTE: ASSUMES NO RESIDENT POPULATION ON LAND OWNED BY STP.

	TOTALS					
Annulus	10-20Mi	20-30Mi	30-40ML	40-50Mi.	10-50Mi.	0-50Mi.
Population	55,519	36,586	141,410	172,118	405,633	416,096



2010

Amendment 5

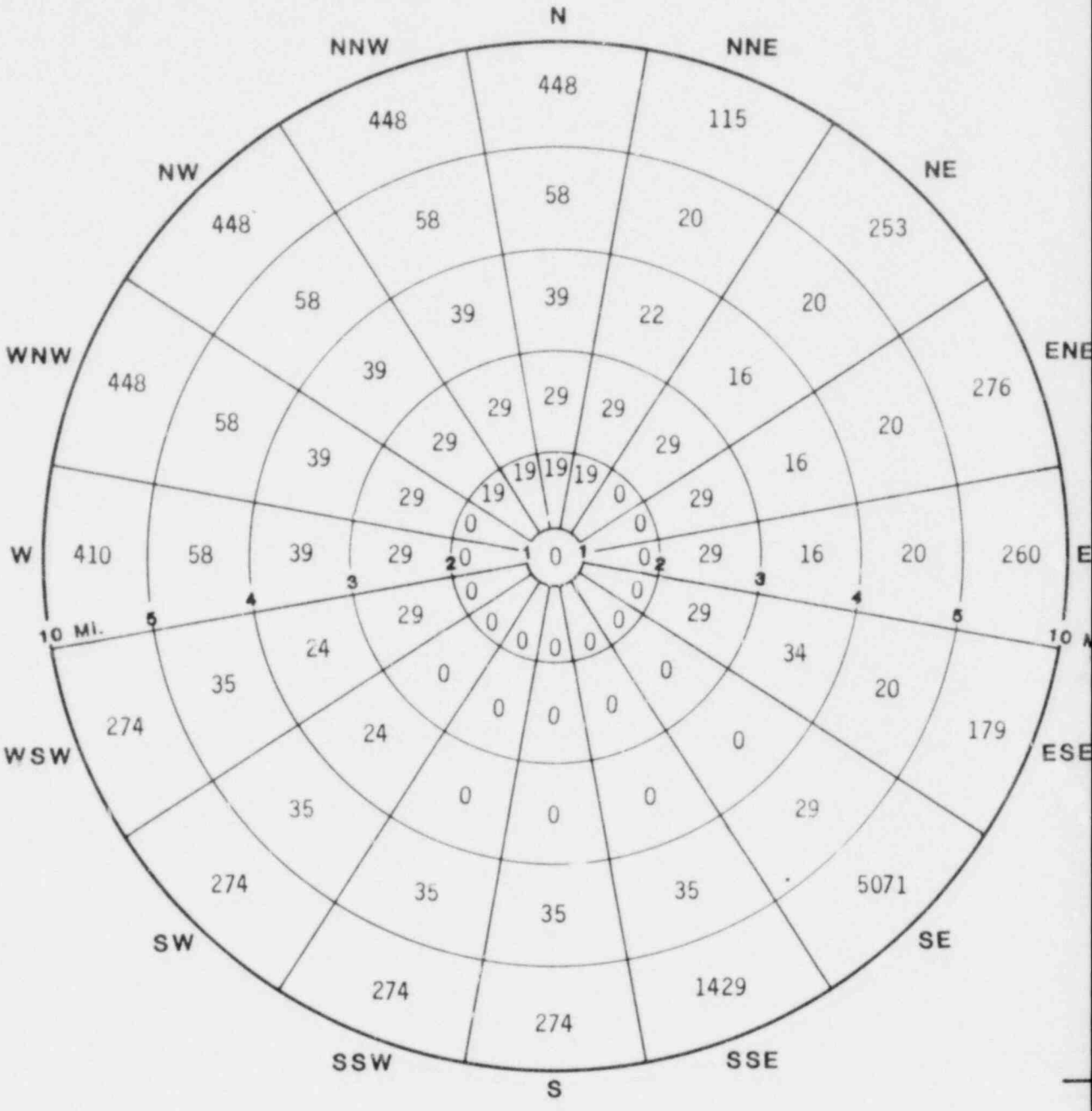
SOUTH TEXAS PROJECT UNITS 1 & 2

POPULATION DISTRIBUTION, 0-10 and 10-50 MILES, SOUTH TEXAS PROJECT, 2010

FIGURE 2.2-4

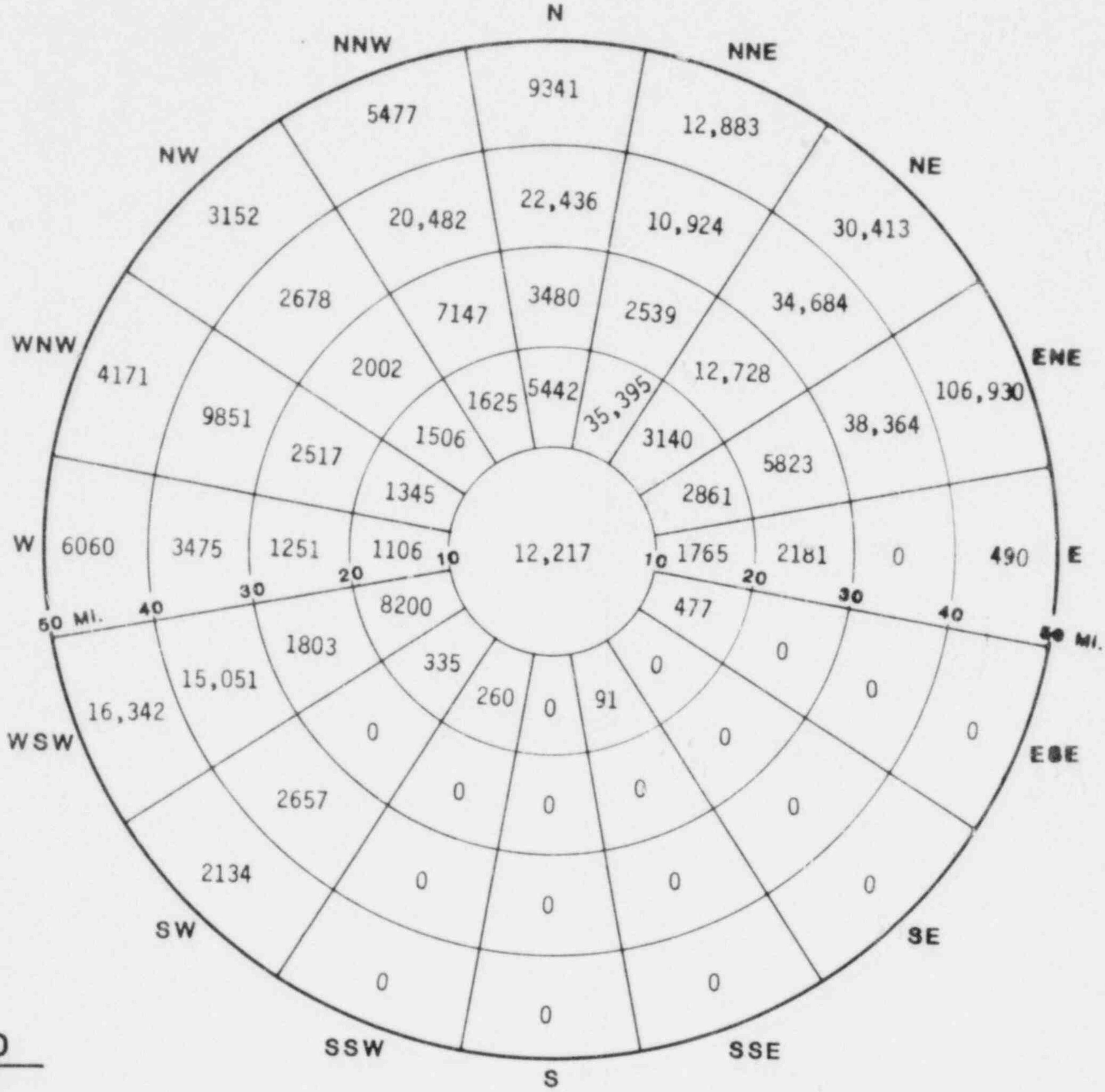
TOTALS

Annulus	0-1 Mi.	1-2 Mi.	2-3 Mi.	3-4 Mi.	4-5 Mi.	0-5 Mi.	0-10 Mi.
Population	0	76	319	347	594	1336	12,217



NOTE: ASSUMES NO RESIDENT POPULATION ON LAND OWNED BY STP.

					TOTALS	
Annulus	10-20Mi	20-30Mi	30-40Mi	40-50Mi.	10-50Mi.	0-50Mi.
Population	63,548	41,471	160,602	187,393	463,014	475,231



2020

Amendment 5

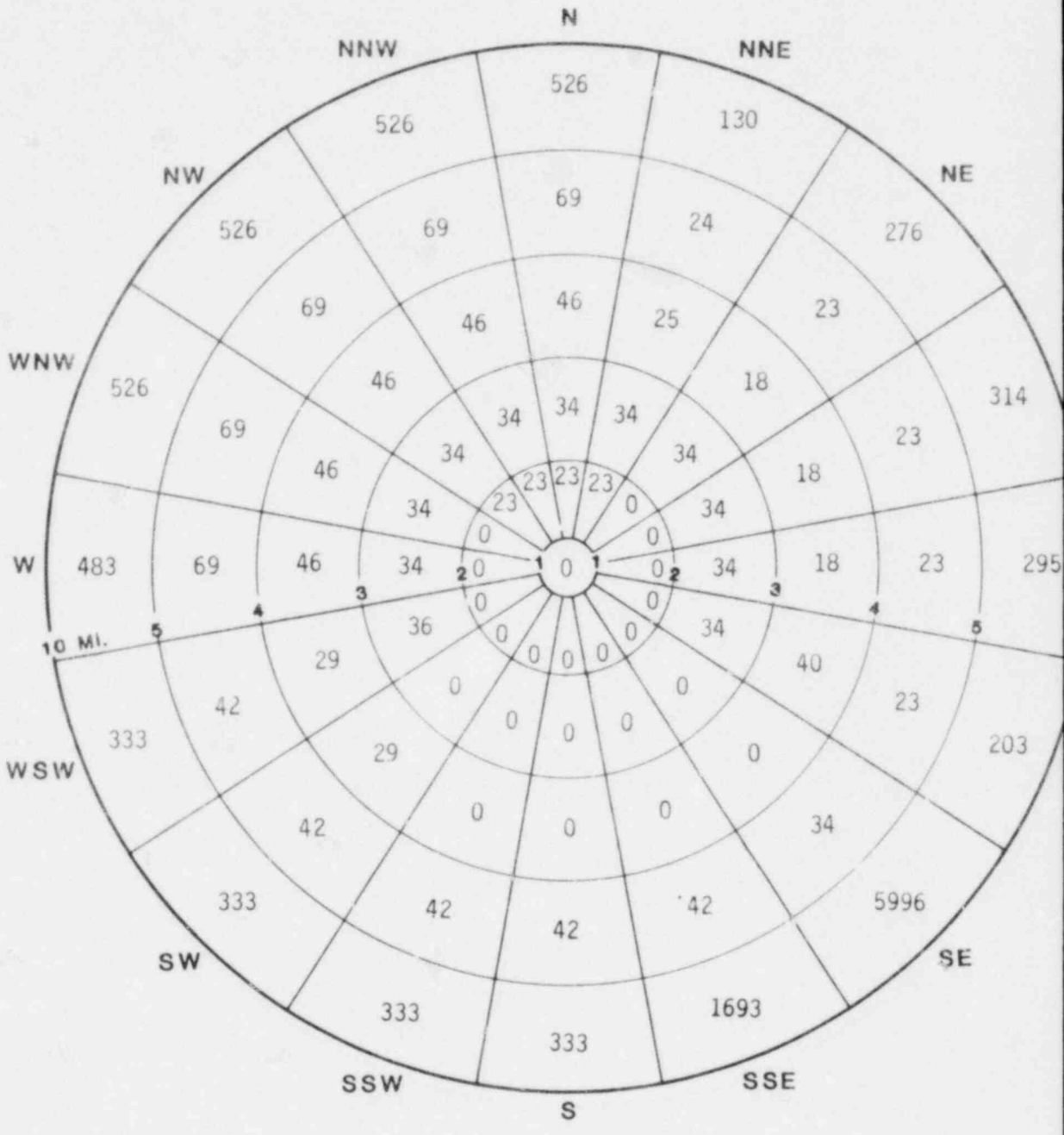
SOUTH TEXAS PROJECT UNITS 1 & 2

POPULATION DISTRIBUTION,
0-10 and 10-50 MILES,
SOUTH TEXAS PROJECT, 2020

FIGURE 2.2-5

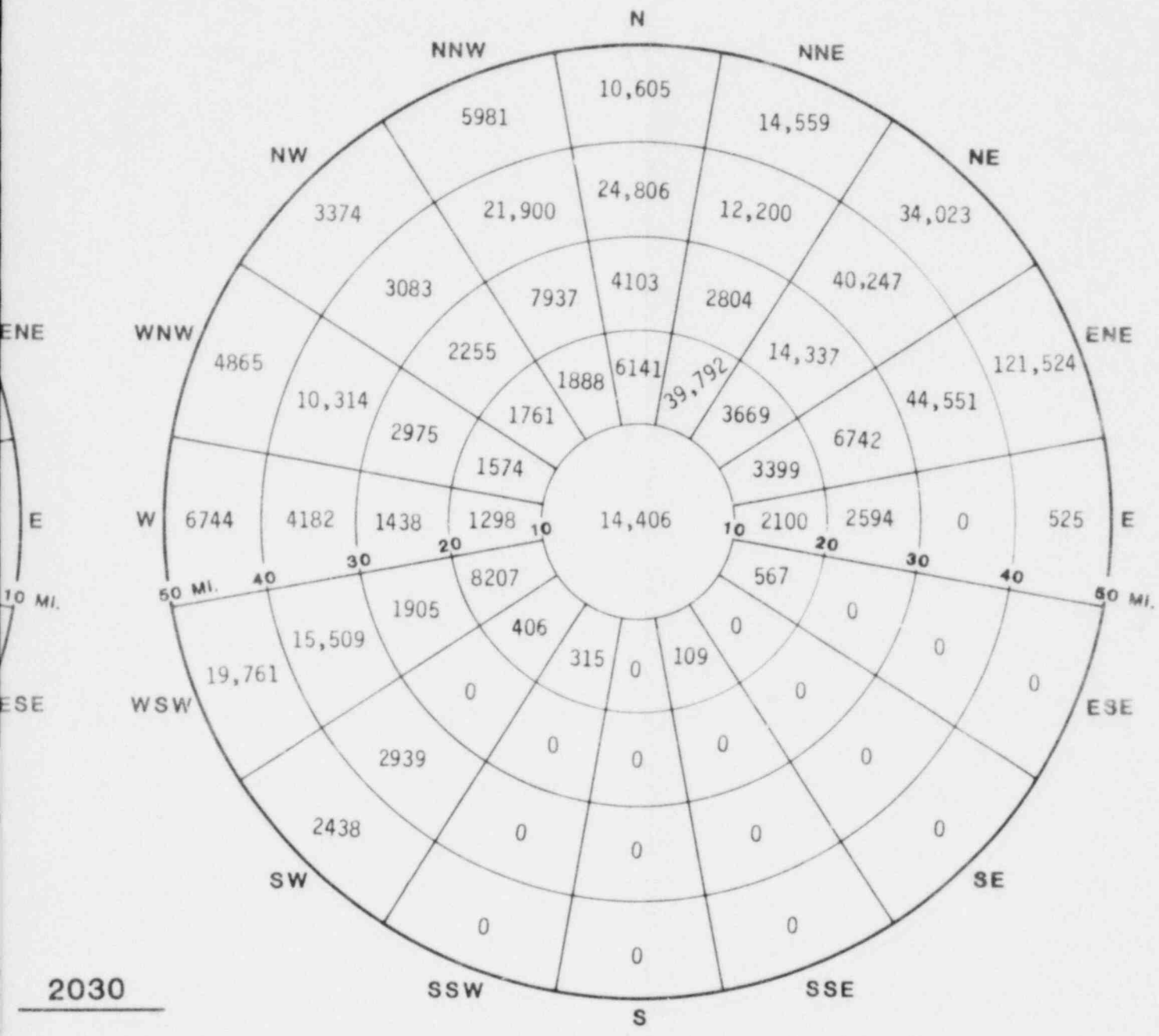
TOTALS

Annulus	0-1 Mi.	1-2 Mi.	2-3 Mi.	3-4 Mi.	4-5 Mi.	0-5 Mi.	0-10 Mi.
Population	0	92	376	407	705	1580	14,406



NOTE: ASSUMES NO RESIDENT POPULATION ON LAND OWNED BY STP.

TOTALS						
Annulus	10-20Mi	20-30Mi	30-40Mi	40-50Mi.	10-50Mi.	0-50Mi.
Population	71,226	47,090	179,731	224,399	522,446	536,852



2030

Amendment 5

SOUTH TEXAS PROJECT UNITS 1 & 2

POPULATION DISTRIBUTION, 0-10 and 10-50 MILES, SOUTH TEXAS PROJECT, 2030

FIGURE 2.2-6

APPENDIX E
SOUTH TEXAS PROJECT
UNITS 1 AND 2

RESPONSES TO NRC
APRIL 28, 1982
REQUEST FOR ADDITIONAL INFORMATION

RESPONSES TO NRC
APRIL 28, 1982
REQUEST FOR ADDITIONAL INFORMATION

TABLE OF CONTENTS

Question 311.1

a) Provide a drawing(s) or a detailed scale map(s) which clearly delineates the exclusion area and low population zone, together or separately, with respect to the reactors and related plant structures within the exclusion area and in relation to the site property and immediate area surrounding the plant. Indicate the scale, orientation, and distances of the various entities.

b) For clarification, please specify if the 1430 meter minimum exclusion area boundary distance is measured from the center, surface, or midway between the containment buildings.

Response

a) Requested information is provided on revised Figure 2.1-4.

b) Requested information is provided in revised Section 2.1.

Question 311.2

The current population documentation is outdated, and in some instances inconsistent. Please provide an updated Section 2.1.3 which incorporates the 1980 census population data including population projections to the year 2030. Please revise the figures and tables so that they are consistent with the text.

Response

Requested information is provided in revised Section 2.1.3.

Question 311.3

Section 2.2.1.4.1 refers to four roads (Fig. 2.1 -5) that are located within five miles of the site. Except for FM 521, these roads are not very evident and the information about them is sketchy. To clarify the situation please provide the following information:

a) A map or drawing of the area which clearly shows the roads in relation to the plant.

b) The closest major highway in the area near the site.

c) The specific designation or classification of each road.

d) The types and quantities of hazardous material transported over these roads, points of origin and destination if available, and the hazards they may present to safety structures at the plant if an accident should occur.

Response

The section referenced in the request is located in the FSAR. A response to this request will be provided in the FSAR.