

## 2.0 SITE CHARACTERISTICS

The WAPWR NPB is a standard design intended to be applicable at a wide range of sites. Major structures, equipment and layout will be standardized. Supports and other miscellaneous structures will be standardized to the extent practicable; however, due to the wide range of potential site conditions and the resulting frequency content of the seismic input it may be necessary to modify support locations to avoid the resonant conditions between the distributive systems and the soil-structure system.

### 2.1 GEOGRAPHY AND DEMOGRAPHY

#### 2.1.1 Site Location and Description

##### 2.1.1.1 Specification of Location

Refer to the plant specific applicant's safety analysis report for a discussion of the site location.

##### 2.1.1.2 Site Area Map

Refer to the plant specific applicant's safety analysis report for a map of the site area.

##### 2.1.1.3 Boundaries for Establishing Effluent Release Limits

Figure 2.1-1 shows the range of site boundary distances at Westinghouse designed PWR sites either operating, under construction or proposed. Refer to the plant specific applicant's safety analysis report for a discussion of the boundary lines of the restricted area of the site.

#### 2.1.2 Exclusion Area Authority and Control

Refer to the plant specific applicant's safety analysis report for a discussion of the applicant's exclusion area authority and control.

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### 2.1.3 Population Distribution

Refer to RESAR-SP/90 PDA Module 16, "PRA/Severe Accidents" for the population distribution of the site and surrounding areas which is used for the WAPWR Probabilistic Risk Assessment (PRA) analysis. It is the plant specific applicant's responsibility to confirm that they meet the population distribution requirements.

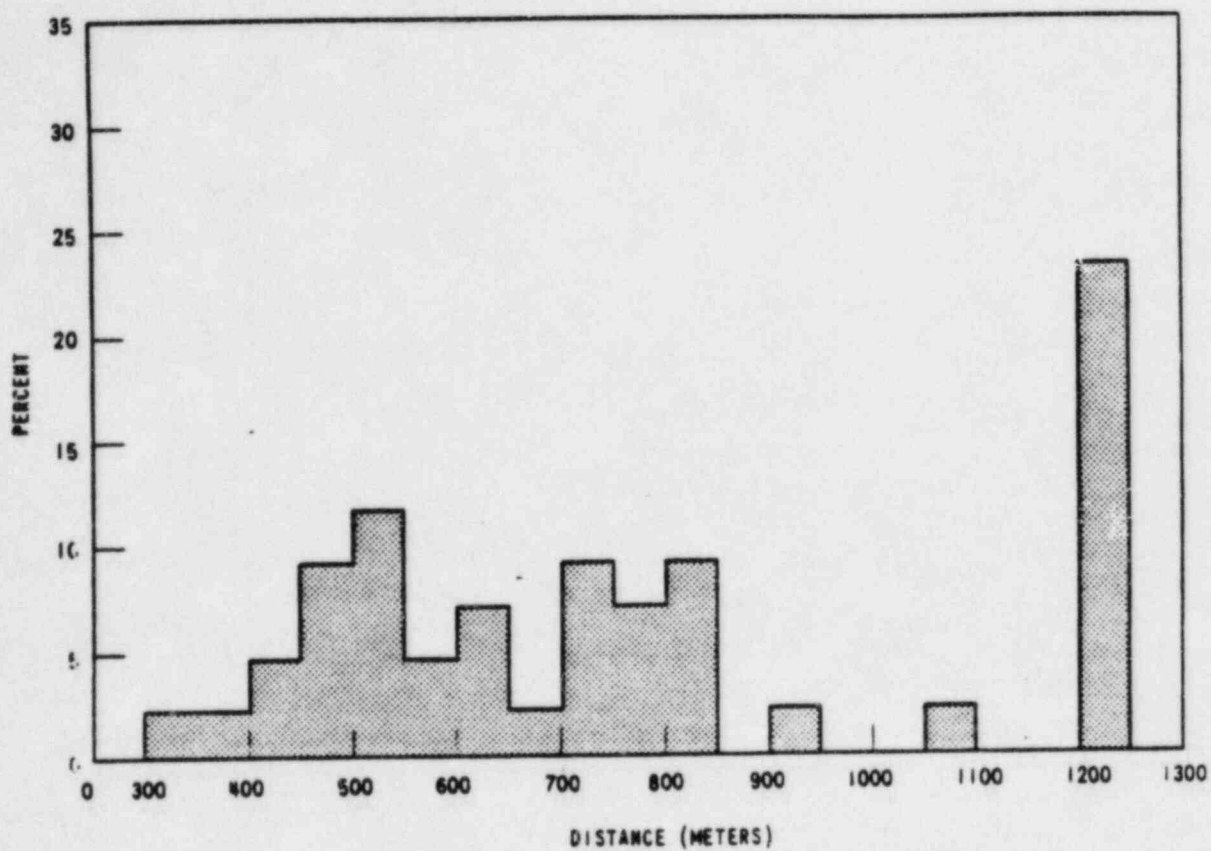


FIGURE 2.1-1 HISTOGRAM OF NEAREST BOUNDARY DISTANCES FOR WESTINGHOUSE PWR SITES.

## 2.2 NEARBY INDUSTRIAL, TRANSPORTATION, AND MILITARY FACILITIES

Refer to the plant specific applicant's safety analysis report for a discussion of industrial, transportation, and military facilities that are in the vicinity of the site. See Appendix 2A of this module for interface requirements relative to accidents external to the plant.

## 2.3 METEOROLOGY

### 2.3.1 Regional Climatology

Refer to the plant specific applicant's safety analysis report for a discussion of the regional climatology of the site and its surrounding areas.

### 2.3.2 Local Meteorology

Refer to the plant specific applicant's safety analysis report for a discussion of the local meteorology of the site and its surrounding areas.

### 2.3.3 Onsite Meteorological Measurements Program

Refer to the plant specific applicant's safety analysis report for a discussion of the preoperational and operational programs for meteorological measurements at the site.

### 2.3.4 Short-Term Diffusion Estimates

Refer to the plant specific applicant's safety analysis report for a discussion of conservative and realistic short-term estimates of atmospheric diffusion at the site.

### 2.3.5 Long-Term Diffusion Estimates

Refer to the plant specific applicant's safety analysis report for a discussion of realistic long-term estimates of annual average atmospheric transport and diffusion characteristics at the site.

#### 2.4 HYDRAULIC ENGINEERING

Refer to the plant specific applicant's safety analysis report for a discussion of the hydrological characteristics of the site.

## 2.5 GEOLOGY, SEISMOLOGY, AND GEOTECHNICAL ENGINEERING

### 2.5.1 Basic Geologic and Seismic Information

Refer to the plant specific applicant's safety analysis report for a discussion of basic site geologic and seismic information.

### 2.5.2 Vibratory Ground Motion

Refer to the plant specific applicant's safety analysis report for a discussion of the seismic design basis for vibratory ground motion at the site. Appendix 2A includes an interface statement concerning the acceptable envelope response spectra for RESAR-SP/90 supplied equipment.

### 2.5.3 Surface Faulting

Refer to the plant specific applicant's safety analysis report for a discussion of surface faulting at the site.

### 2.5.4 Stability of Subsurface Materials and Foundations

Refer to the plant specific applicant's safety analysis report for a discussion of the conditions and engineering properties of subsurface materials at the site.

### 2.5.5 Stability of Slopes

Refer to the plant specific applicant's safety analysis report for a discussion of the static and dynamic stability of slopes at the site.

### 2.5.6 Embankments and Dams

Refer to the plant specific applicant's safety analysis report for a discussion of site embankments and dams.