# American Nuclear Society

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## guidelines for evaluating site-related geotechnical parameters at nuclear power sites.

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# American National Standard Guidelines for Evaluating Site-Related Geotechnical Parameters at Nuclear Power Sites

Secretariat
**American Nuclear Society**

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## Foreword

(This Foreword is not a part of American National Standard Guidelines for Evaluating Site-Related Geotechnical Parameters at Nuclear Power Sites, ANSI/ANS-2.11-1978.)

The purpose of this standard is to provide guidelines for establishing site-related geotechnical parameters to be considered in site evaluation, and in the design, construction, and performance of foundations and earthwork for nuclear power plants. It is also the intent of this standard to provide guidelines regarding geotechnical information used in preparing Safety Analysis Reports (SAR's) and Environmental Reports (ER's) for nuclear power plants. The user of this standard is encouraged to concentrate his evaluation on those geotechnical parameters which are required for the actual design and safety analysis of the power plant facilities at a specific site. Extraneous information should be kept to a minimum. The guidelines identify those geotechnical parameters which may be necessary for site evaluation, design, construction, or performance monitoring; the exploration methods and laboratory methods which may be used to establish the geotechnical parameters; and a discussion of the philosophy of quality assurance as related to geotechnical work.

This standard does not restrict or limit the use of alternative approaches or innovations for assessing geotechnical parameters.

It is not the intent of this standard to describe procedures for the evaluation of regional geotechnical aspects such as regional structure, regional ground water including dispersion of radionuclides, and seismicity. Many of these aspects are covered in other American Nuclear Society standards. Further, it is not the intent of this standard to describe the use of the geotechnical parameters in design, construction, or performance monitoring. Many of these aspects are covered in draft standards under development by the American Society of Civil Engineers* in guidelines N175, "Foundation Design Criteria," and N725, "Analysis of Nuclear Safety Class I Earth Structures."

This is one of a number of standards currently being developed on individual subjects within the field of site evaluation. The standard was developed under the auspices of the American Nuclear Society Standards Committee by Subcommittee 2, "Site Evaluation." The standard was prepared by Working Group ANS-2.11 of ANS-2.

Working Group ANS-2.11 was formed under Subcommittee ANS-2, "Site Evaluation", of the American Nuclear Society Standards Committee at a meeting held in Philadelphia, Pennsylvania, on June 27, 1974. The first meeting of the working group was held in Chicago, Illinois, on October 25, 1974. At this meeting, a scope and tentative outline for the standard were developed and assignments were made to the working group members for the preparation of various sections of this standard.

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# Contents


Section — Page

1. Scope ..... 1

2. Purpose ..... 1

3. Definitions ..... 1

4. Geotechnical Parameters ..... 2
   4.1 Geologic Parameters ..... 2
   4.2 Ground Water Parameters ..... 3
   4.3 Foundation Engineering Parameters ..... 4
   4.4 Earthwork Parameters ..... 5
   4.5 Observation and Control ..... 6

5. Site Exploration Methods ..... 6

6. Testing ..... 6

7. Quality Measures ..... 6
   7.1 Quality Assurance Requirements ..... 6
   7.2 Quality Considerations for Geotechnical Parameters ..... 7
   7.3 Quality Assurance for Specialty Services ..... 7

8. References ..... 7

Table 1 ..... 8
Table 2 ..... 8
Table 3 ..... 9
Table 4 ..... 10
Table 5 ..... 10
Table 6 ..... 10
Table 7 ..... 11
Table 8 ..... 11
Table 9 ..... 11
Table 10 ..... 12
Table 11 ..... 13
Table 12 ..... 15
Table 13 ..... 17
Table 14 ..... 19
Table 15 ..... 22
Table 16 ..... 26

References for Tables 1-16 ..... 29