



*Atoms for Peace and Development*

الوكالة الدولية للطاقة الذرية

国际原子能机构

International Atomic Energy Agency

Agence internationale de l'énergie atomique

Международное агентство по атомной энергии

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The Secretariat of the International Atomic Energy Agency (IAEA) presents its compliments to the IAEA's Member States and has the honour to draw their attention to the following draft safety standard:

***Seismic Hazards in Site Evaluation for Nuclear Installations***  
**(DS507)**

Member States and their experts are hereby provided with an opportunity to review and evaluate this draft safety standard, which is available online at:

<https://www.iaea.org/resources/safety-standards/draft-standards-for-ms-comment>

A hard copy of the draft text will be sent out upon request.

Any proposed changes to this draft text resulting from the review by Member States will be taken into account in the finalization of the safety standard.

Member States are kindly requested to provide comments on the draft text following the guidance given in the attached Explanatory Note.

The Secretariat of the International Atomic Energy Agency avails itself of this opportunity to assure the IAEA's Member States of its highest consideration.



2018-12-13

Enclosures: Explanatory Note

Form for Comments

Statement by the Commission on Safety Standards



## Explanatory Note

### *Seismic Hazards in Site Evaluation for Nuclear Installations (DS507)*

The draft text for review, entitled *Seismic Hazards in Site Evaluation for Nuclear Installations*, was prepared as a draft Safety Guide publication to be issued in the IAEA Safety Standards Series and has already been reviewed through consultants' meetings, as well as by the Nuclear Safety Standards Committee (NUSSC) and the Waste Safety Standards Committee (WASSC).

The objective of this draft text, as accepted by the Commission on Safety Standards (CSS), is to provide recommendations on how to meet the requirements established in *Site Evaluation for Nuclear Installations* (IAEA Safety Requirements No. SSR-1) in relation to the evaluation of hazards generated by earthquakes that could affect a nuclear installation site. In particular, it provides recommendations on how to determine the vibratory ground motion hazards necessary to establish the design basis ground motions and other relevant parameters for the design and safety assessment of both new and existing nuclear installations, on how to determine the potential for, and rate of, fault displacement phenomena that could affect the feasibility of the site for a new nuclear installation or the safe operation of the existing installation at that site, and how to determine the earthquake parameters necessary for assessing the associated geological and geotechnical hazards (e.g. soil liquefaction, landslides and differential settlements, and collapse due to cavities and subsidence phenomena) and concomitant events (e.g. external flooding phenomena, such as tsunamis, and fires). This Safety Guide is intended for use by regulatory bodies responsible for establishing regulatory requirements, and for operating organizations directly responsible for the evaluation of seismic hazards at a nuclear installation site.

Comments are requested in relation to:

- Relevance and usefulness — Are the stated objectives appropriate, and are they met by the draft text?
- Scope and completeness — Is the stated scope appropriate, and is it adequately covered by the draft text?
- Quality and clarity — Does the guidance in the draft text represent the current consensus among specialists in the field, and are they expressed clearly and coherently?

Comments of an editorial nature will be considered; however, it should be noted that the draft text will be comprehensively edited by the IAEA Secretariat.

Any comments should be made in English, should refer to the relevant paragraph number in the draft text being reviewed, and should propose alternative text where appropriate. Please use the attached Form for Comments to record all comments.

The responsible IAEA officer is Mr Y. Fukushima of the Department of Nuclear Safety and Security, who may be contacted for further information in connection with this subject by telephone at: +43 1 2600 22064 or via email at: [Y.Fukushima@iaea.org](mailto:Y.Fukushima@iaea.org)

Any comments should be sent through the established official channels to the responsible IAEA officer by **30 April 2019**.



**Form for Comments**  
*Seismic Hazards in Site Evaluation for Nuclear Installations (DS507)*

| COMMENTS BY REVIEWER               |               |                          |        | RESOLUTION |                                   |          |                                   |
|------------------------------------|---------------|--------------------------|--------|------------|-----------------------------------|----------|-----------------------------------|
| Reviewer:<br>Country/Organization: |               | Page.... of....<br>Date: |        |            |                                   |          |                                   |
| Comment No.                        | Para/Line No. | Proposed new text        | Reason | Accepted   | Accepted, but modified as follows | Rejected | Reason for modification/rejection |
|                                    |               |                          |        |            |                                   |          |                                   |



## Statement by the Commission on Safety Standards

Publications in the IAEA Safety Standards Series are prepared and reviewed in accordance with a uniform process. To this end, the Commission on Safety Standards (CSS) and five committees with harmonized terms of reference — the Emergency Preparedness and Response Standards Committee (EPRaSC), the Nuclear Safety Standards Committee (NUSSC), the Radiation Safety Standards Committee (RASSC), the Transport Safety Standards Committee (TRANSSC) and the Waste Safety Standards Committee (WASSC) — have been established. The CSS has a special overview role with regard to the IAEA's safety standards and provides advice to the Director General on the IAEA's overall programme with regard to regulatory aspects of safety.

The uniform preparation and review process involves organizing expert group meetings; arranging at different stages of preparation for the internal review of draft texts; submitting the texts to the relevant Committee(s) for review; submitting draft texts to the IAEA's Member States for comment; and submitting the approved final draft of the safety standard<sup>1</sup> for endorsement by the CSS before publication.

The CSS stresses the importance of Member States' comments to the preparation and review process for safety standards. Publications in the IAEA Safety Standards Series not only should be of the requisite quality but also should represent the consensus view of the Member States and should address the issues of importance to the Member States. While the CSS, the Committees and the Secretariat strive to provide safety standards that satisfy these criteria, the review of draft standards by experts in the Member States is an essential stage in obtaining the broadest possible technical consensus and the highest possible quality and relevance.

Member States are also encouraged to provide the IAEA with feedback on their use of the safety standards. The status of safety standards extant and in preparation can be seen on the IAEA's website, where there are also links to electronic files for existing publications, including those in other official languages.<sup>2</sup> The responsible IAEA officer is Mr Dominique Delattre, Head of the Safety and Security Publications Unit of the Department of Nuclear Safety and Security. He may be contacted for further information in connection with this subject by telephone at: + 43 1 2600 22696 or via email at: [D.Delattre@iaea.org](mailto:D.Delattre@iaea.org).

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<sup>1</sup> Safety Guides are published under the authority of the Director General. Safety Fundamentals and Safety Requirements publications require the approval of the Board of Governors, after endorsement by the CSS.

<sup>2</sup> See <http://www-ns.iaea.org/committees/files/CSS/205/status.pdf>.