November 11, 2011
Nuclear and Industrial Safety Agency

Regarding Implementation of Safety Assessment Concerning the Impact of Seismic Ground Motion and Tsunami on the Nuclear Facilities Based on the Knowledge of the 2011 Off the Pacific Coast of Tohoku Earthquake

This is to inform the public that the Nuclear and Industrial Safety Agency (NISA) formulated the policy for future investigations for implementing the safety assessment regarding the impact of earthquakes and tsunamis on nuclear facilities in light of the knowledge identified to date concerning the 2011 Off the Pacific Coast of Tohoku Earthquake and directed nuclear operators to implement investigations based on the investigation policy.

1. Pursuant to Regulatory Guide for Reviewing Seismic Design of Nuclear Power Reactor Facilities revised in September 2006, NISA requested nuclear operators to conduct the seismic back check (seismic safety assessment in light of the revised guide). Interim reports focusing on the formulation of standard seismic ground motion Ss have been submitted from nuclear operators since March 2008, and NISA has completed the evaluations of the reports except those for some sites. However, almost none of the tsunami evaluations have been undertaken, and the final assessment including evaluations of the impact on each plant due to seismic motion has not been completed.

2. Moreover, the following points concerning the 2011 Off the Pacific Coast of Tohoku Earthquake have been identified to date:
   1) Large-scale seismic ground motion and tsunami occurred associated with the trench type earthquake due to a greatest amount of slides ever observed and simultaneous occurrence of seismic source segments exceeding the assumed scale.
   2) The amplitude of tsunami occurred associated with the earthquake...
increased due to comparatively long-period waves and short-period waves superimposed each other.

3) Due to the crustal deformations exceeding the assumed scale occurred associated with the earthquake, stress field was affected across a wide area and normal fault type earthquakes also occurred.

3. In resuming the seismic back check, based on the knowledge listed above and in terms of the fact that it is extremely important to make efforts to ensure the seismic safety at nuclear power stations, NISA obtained opinions from experts, at the hearings on earthquake and tsunami held on October 30, 2011, with regard to the above knowledge concerning the earthquake and the NISA's policy plan for future investigations into the events that have been considered as outstanding in the process of assessing the seismic back check.


5. Incidentally, NISA will present the investigation policy to other nuclear operators and direct them to conduct their assessments as needed.

6. In addition, NISA will post the progress of the seismic back check examinations on the NISA website.

Attachment 1: Regarding Implementation of Safety Assessment Concerning the Impact of Seismic Ground Motion and Tsunami on Nuclear Facilities Based on the Knowledge of the 2011 Off the Pacific Coast of Tohoku Earthquake (Direction) (To Hokkaido Electric Power Co., Inc.)

Attachment 2: Regarding Implementation of Safety Assessment Concerning the Impact of Seismic Ground Motion and Tsunami on Nuclear Facilities Based on the Knowledge of the 2011 Off the Pacific Coast of Tohoku Earthquake (Direction) (To
Tohoku Electric Power Co., Inc.)

Attachment 3: Regarding Implementation of Safety Assessment Concerning the Impact of Seismic Ground Motion and Tsunami on Nuclear Facilities Based on the Knowledge of the 2011 Off the Pacific Coast of Tohoku Earthquake (Direction) (To Chubu Electric Power Co., Inc.)

Attachment 4: Regarding Implementation of Safety Assessment Concerning the Impact of Seismic Ground Motion and Tsunami on Nuclear Facilities Based on the Knowledge of the 2011 Off the Pacific Coast of Tohoku Earthquake (Direction) (To Kansai Electric Power Co., Inc.)

Attachment 5: Regarding Implementation of Safety Assessment Concerning the Impact of Seismic Ground Motion and Tsunami on Nuclear Facilities Based on the Knowledge of the 2011 Off the Pacific Coast of Tohoku Earthquake (Direction) (To Japan Atomic Energy Agency)

Attachment 6: Regarding Implementation of Safety Assessment Concerning the Impact of Seismic Ground Motion and Tsunami on Nuclear Facilities Based on the Knowledge of the 2011 Off the Pacific Coast of Tohoku Earthquake (Direction) (To Japan Atomic Power Co., Inc.)

(Contact Person)
Mr. Toshihiro Bannai
Director, International Affairs Office
NISA/METI
Phone: +81-(0)3-3501-1087