

Niigata-Chuetsu Earthquake Effects Differed at Each Reactor Unit

On October 12, the first joint meeting was held of two working groups – one on earthquakes and tsunamis, and the other on geological features and grounds – under the Advisory Committee for Natural Resources and Energy's working committee on seismic structural design. They discussed items to be addressed in the future concerning seismic safety at the Kashiwazaki Kariwa NPS, damaged in the Niigata-Chuetsu Offshore Earthquake. Also, they heard a report by the Japan Nuclear Energy Safety Organization (JNES) and the Tokyo Electric Power Co. (TEPCO) on the progress of the analyses of recorded data.

Jointly, the two working groups will carry out detailed analyses on ground acceleration and its effects on the NPS. In addition, they will carry out an evaluation of its soundness. They will also address the safety of the NPS at ground acceleration to be assumed based on future deliberations.

At the meeting, JNES explained that its analysis of the ground acceleration – which was stronger than the reactor's design parameters – revealed that large amplitude wave pulses were found to be different for each reactor unit. In order to understand the factors generating such waves in more detail, the observed waves will be compared with basic wave pulses using a model of the fault believed to have been the seismic source.

In regard to the earthquake data, TEPCO noted that ground acceleration exceeded the designed response throughout almost the entire period of the quake, and that the shaking motion at Units 1-4 was greater than at Units 5-7. TEPCO explained that the difference in shaking was the result of the large-amplitude wave pulses observed during the latter half of the ground acceleration, and explained how it intended to verify that phenomenon from now on. TEPCO also gave an interim report on changes in the ground at the site.

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