Report regarding survey and result of modification of the malfunctions of seismometers (Recording device) confirmed during the Tohoku-Taiheiyou-Oki Earthquake occurred on 2011 (Digest)

1. Introduction

The data recording was interrupted in several voluntary located seismometers during 130 to 150 seconds after the initiation of recoding due to the malfunction of recording devices allocated to correct seismic data (hereinafter “recording devices”) during the Tohoku-Taiheiyou-Oki Earthquake occurred on March 11th, 2011. (hereinafter “the event”)
Accordingly, this digest is designed to report result of survey and modification of the malfunctions of seismometers allocated to correct seismic data on the basis of instruction document * from NISA.

* Instruction

Actions following the analysis of seismic data collected at Fukushima Daiichi nuclear power station and Fukushima Daini nuclear power station during the Tohoku-Taiheiyou-Oki Earthquake (Instruction)

(NISA No.6, 2011 May 16)

2. Survey and Modification

We have surveyed seismometers allocated to correct seismic data for analysis of observed seismic data collected at Fukushima Daiichi nuclear power station, Fukushima Daini nuclear power station and Kashiwazaki Kariwa nuclear power station, after classified (classification A to C) based on manufacturer and specification. The survey was implemented the program coded to finish the record and presence or absence of backup function.
The survey has revealed that we do not need modification for classification A. We will modify classification B accordingly for improvement of reliability. Classification C is required modification in a prompt manner.
According to the result, we implemented program updates for the recording devices in observable state at present.

3. Conclusion

According to the result of survey, we have finished modification of the recording device of classification C in observable state (Fukushima Daiini: 18 devices, Kashiwazaki Kariwa: 31 devices) and recording devices of classification B (Kashiwazaki Kariwa: 3 devices) for improvement of reliability.
We have a plan to modify recording devices for improvement of reliability accordingly in consideration of working environment. We will also modify recording devices which is not in observable state by the time when we restart observation.

END