SAFETY MANAGEMENT OF GEOTHRMAL POWER PLANTS

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ABSTRACT

The geothermal power plants in northern part of Japan survived at the huge earthquake on March 11, 2011. There might be various reasons why those geothermal power plants survived, and this paper introduces some of the design features which could be a very good reasons to withstand huge earthquakes.
First aspect is the design of construction considering the seismic loads. Geothermal resources are located in the volcanic area, and the seismic loads to be considered in the design of the construction are normally defined in each geothermal country.
Second aspect is the design of safety features in the events of unusual operation conditions. For example, even a geothermal power plant itself survives at a huge earthquake, a plant may be affected due to failures of transmission lines. Such safety features due to both internal and external causes will be introduced.