

عنوان مقاله:

Seismic Hazard Analysis Based on Probabilistic and Deterministic Methods (Case Study of Mohammad Abad Dam
(Site

محل انتشار:

اولین کنفرانس بین المللی و سومین کنفرانس ملی سد و نیروگاههای برق آبی (سال: 1390)

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نویسندگان:

Samaneh Soleymani - *Expert of Engineering Seismology Group of Dam Construction, Toossab Company, Mashhad, Iran*

Abbas Mahdavian - *Academic Member Department of Civil Engineering, Power and Water University of Technology, Tehran, Iran*

خلاصه مقاله:

The Mohammadabad dam site is located in the north of Iran in a region of high seismicity. A seismic hazard analysis was performed based on the most recent seismotectonic data to determine the design ground motion parameters. These parameters estimated four different design levels. The ground motion parameters for the Maximum Design Level (MDL) and Design Basis Level (DBL) were obtained from a probabilistic seismic hazard analysis (PSHA) whereas the MCL was derived from a deterministic analysis (DSHA). The PSHA followed the conventional pattern consisting of the following elements: (i) identification of the seismic sources within a certain radius from the site, (ii) definition of the seismicity through a recurrence relationship for each source using the Kijko-Sellevoll approach, (iii) selection of suitable attenuation relationships, and (iv) generating curves showing the probability of exceeding different levels of ground motion at the site during a specified period of time. For the DSHA, the characteristics of faults within the area of interest was assessed based on topographic, geologic and aeromagnetic maps, air photos, field investigation, and a comprehensive search in the literature. Results are presented in terms of peak ground acceleration (PGA) and acceleration response spectra.

کلمات کلیدی:

Seismic hazard analysis, Fault, Seismo-tectonics, Design ground motion, Iran

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