

**Analysis of how earthquakes in California can affect nuclear power plants
which can affect the population in the region.**

-Sachin Mohan Sujir

California is one of the most earthquake-prone regions in the US. The bay area has several fault lines that may cause earthquakes. Currently, California has two nuclear power plants. This can be dangerous if it lies in a fault line region and causes huge catastrophes like the one that happened in the Fukushima plant in 2011 killing hundreds of people. Such catastrophes can create several casualties and spread nuclear materials into the atmosphere. My research will help in answering the following questions 1) Are these nuclear facilities in the earthquake-prone region? 2) If these plants are disturbed by an earthquake how will the population be affected? 3) What measures can be taken in such situations? Methods to address these questions include 1) Usage of California fault line data sets 2) Analysis of earthquakes in Bay Area and 3) Applying the applications of spatial concepts.

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