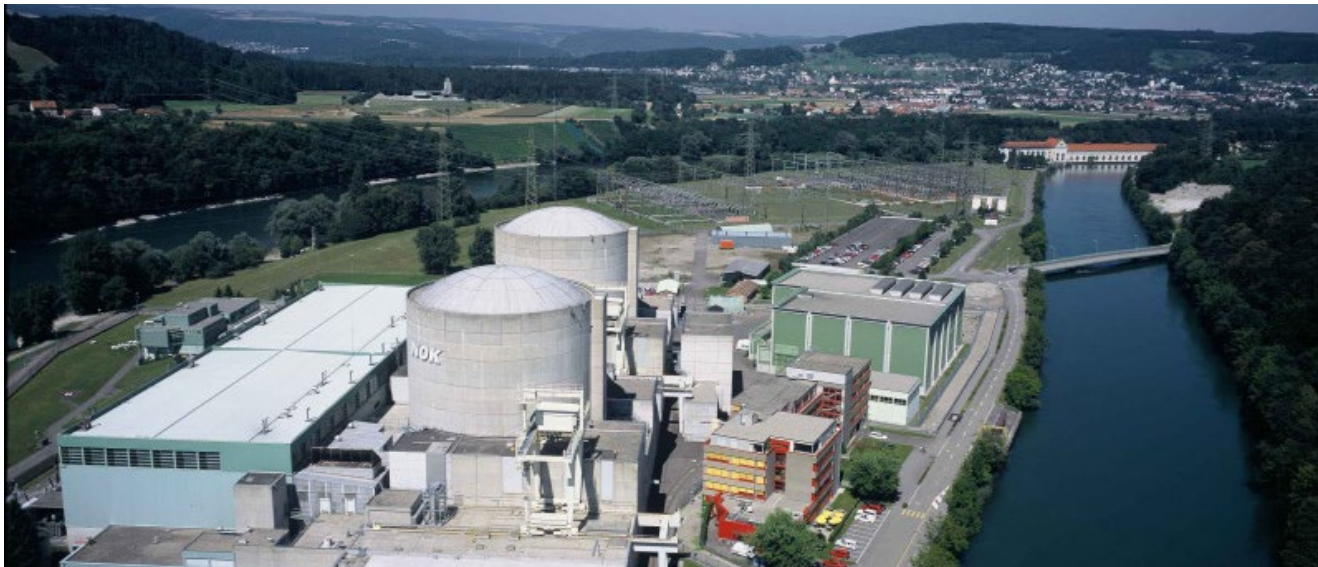


Beznau nuclear power plant (Switzerland)

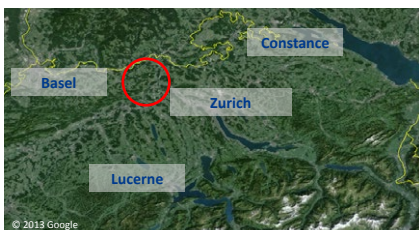


Project description

The Beznau nuclear power plant is a facility of the Swiss energy supplier Axpo. It is located in northern Switzerland, on an artificial island in the Aare river. Producing energy since 1969, it can claim to be the world's oldest operating nuclear power plant based on service life to date.

In the aftermath of the Fukushima accident, additional safety measures were implemented in order to minimise the effects of natural phenomena such as floods and earthquakes. These included the installation of a new diesel powered generator, at an elevated position, which will supply the power needed to turn off the nuclear reactor, if required, in case of loss of normal power. To ensure its ability to survive an earthquake, it was decided to structurally isolate the generator from seismic ground movements by supporting it on seismic isolator bearings.

The power plant is located in northern Switzerland



mageba scope

mageba supplied four LASTO®LRB lead rubber bearings to support the new emergency power generator, isolating it from violent seismic ground movements. These were designed for vertical loads of 320 kN and design displacements of 80 mm.

All of the seismic isolators were subjected to laboratory testing according to EN 15129, in Italy, before delivery to site. This included compression stiffness tests, and tests to determine horizontal characteristics under cyclic deformation.

Following successful completion of testing, the isolators were installed at the plant in 2013.

Testing of a LASTO®LRB lead rubber bearing prior to installation



Highlights & Facts

mageba products:

Type: LASTO®LRB lead rubber bearings

Testing: Italy
Installation: 2013

Structure:

City: Döttingen
Country: Switzerland
Type: Emergency Power Generator

Completed: 1969
Owner: Axpo Holding
Engineer: Studio Sciarini SA

Installation of the LASTO®LRB lead rubber bearings on site at the power plant

