# **Overview of Application for Authorization of Nuclear Reactor Installation Change Following Change of** Solidifier in Radioactive Waste Solidifying Equipment at Hamaoka Nuclear Power Station

Chubu Electric Power Co., Inc. has chosen to switch from plastic to cement as the solidifier in its radioactive waste solidifying equipment, and to obtain authorization from the national government for this change, it submitted to the Minister of Economy, Trade and Industry today (October 16, 2009) an "Application for Authorization of Nuclear Reactor Installation Change at Hamaoka Nuclear Power Station (Change of Nuclear Reactor Facilities Nos. 1 - 5)" as based on the Act on the Regulation of Nuclear Source Material, Nuclear Fuel Material and Reactors. The following is an overview of the application.

## 1. About radioactive waste solidifying equipment

Hamaoka Nuclear Power Station has radioactive waste solidifying equipment in its Waste Volume Reducer Equipment Building (Building 1) to solidify concentrated waste liquid<sup>\*1</sup> and end-of-life resin<sup>\*2</sup>. (Fig. 1)

Radioactive waste solidifying equipment dries and solidifies concentrated radioactive waste.

### 2. Overview of application

More than 20 years have passed since the radioactive waste solidifying equipment was installed in 1985. Some of the control components, electric components, and so on are due to be replaced, and to coincide with the update of this equipment, we are switching the solidifier from plastic, which we have used up to now, to cement, which is easy to handle<sup>\*3</sup>. (Fig. 2)

#### 3. Future measures

After receiving authorization to change the nuclear reactor installation, Chubu Electric Power will file a cement solidifier equipment construction plan, have the equipment built at a factory and start equipment installation onsite.

- •Schedule for filing notice of construction plan change: FY2010
- •Schedule to begin equipment building at factory: FY2010
- •Schedule to start equipment installation onsite: April 2011
- •Schedule to finish construction: December 2012





■ Sketch of change to radioactive waste solidifying equipment (Fig. 2)



- Concentrated waste liquid is the waste liquid that results when treating decontamination water at the time of machine inspections and wastewater from a chemical analysis chamber with a heating and distilling process.
- \*2 End-of-life resin is resin that has been used in cleaning filters in reactor coolant cleaning systems, fuel pool cooling systems, condensation systems and liquid waste processing systems.
- \*3 Adopting cement-based solidification will eliminate the need to use dangerous substances as established by the Fire Service Law.

Solidifying equipment after change (using cement	
solidifier)	