## Main content of increased construction costs for tsunami countermeasures at Hamaoka Nuclear Power Station

Item			Content	Reason
[Flooding prevention measures]	(1)	Installation of sea wall along ocean side of power station site	Establish foundation structure of sea wall (Increase embedment in base rock by average of 2 m, etc.)	Progress in detailed design established dimensions of foundation sections.
	(2)	Reinforce reliability of waterproof doors in outer walls of building	Change double-built specifications (Change reactor building large delivery doors from sliding doors to hinged double doors)	To shorten time for opening and closing reactor building large delivery doors.
		Additional installation and reinforcement of watertight doors	Increase number of locations of equipment inside buildings to be made watertight (Increase from approximately 100 locations to approximately 200 locations)	Expanded applicable equipment required to bring reactor more certainly to a cold shutdown. (*)
- [Strengthen emergency countermeasures]		Diversification of water sources	Increase water storage capacity (Increase water storage facility on high ground from approximately 6,000 m <sup>3</sup> to approximately 9,000m <sup>3</sup> )	Changed to more demanding conditions for thermal load of spent fuel pool.
		Emergency AC power supply equipment (gas turbine generator) installation on high ground	Increase number of gas turbine generators installed (Increase from three units to six units)	It was necessary to reinforce the power generating capacity because the necessary power load was established.
		Installation of power panels and switch panels on upper floors or on high ground	Increase number of power panels and switch panels installed (Increase from approximately 100 panels to approximately 300 panels) and accompanying new installation of changeover power boards (approximately 150 units)	With a view to still greater redundancy and diversity, cooling facilities supplied with power from gas turbine generators were expanded from one system to multiple systems. (*)

In addition, the costs relating to improvement of the east side of Hamaoka Nuclear Power Station are also included. (Already announced on February 13, 2012.)

\* Findings obtained from the accident at Fukushima Daiichi Nuclear Power Station