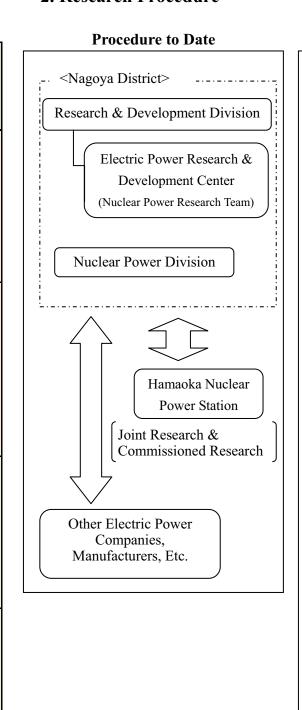
1. Research Topics

Category		Main Research Topics to be Addressed at Present	Previous Initiatives (Joint Research, Etc.)
Research Contributing to Heightened Safety in Nuclear Power Stations	Prevention of Malfunctions in Equipment and Facilities	Study deterioration from aging using equipment of Reactors No. 1 and 2 that are in process of decommissioning (Take study results on state of deterioration and safety tolerances and reflect in future design and maintenance)	• Research on methods for assessing the progress of deterioration from aging in equipment, etc.
	Apply earthquake and tsunami measurement and other information in power station operation	 Accumulate earthquake measurement data and demonstrate reliability of early detection (Apply to shutdown judgment, etc. at Hamaoka Nuclear Power Station) Study applicability of technology to detect tsunami water level rise and speed (Apply to evacuation procedures, etc. of Hamaoka Nuclear Power Station workers) 	• Research on methods for assessing earthquake movement, tsunami, etc.
Research Contributing to Improvement of Operation (Decommissioning) of Reactors No. 1 and 2	Safe, smooth implementation of decommissioning	Develop and verify engineering tools capable of optimal process management in terms of both radiation exposure and cost in preparation for future full-scale dismantlement	• Research surveys, etc. of latest dismantlement methods
Research Contributing to Improvement of Operation (Maintenance and Operability) of Reactors No. 3, 4, and 5	Improve maintenance and operability of equipment and facilities	Develop technology and devices aimed at improving maintainability and operability in a radioactive environment	• Develop non-destructive testing devices, develop radiation exposure mitigation technology, etc.
Research Contributing to Future Technology	Develop technology relating to new-type reactor	 Examine concepts of new-type reactors to heighten reactor safety Research on diversification of energy sources (use of thorium, etc.) 	• Research relating to development of next-generation
	Technical research on next-generation nuclear fuel cycle	 Develop next-generation nuclear fuel cycle technology Develop next-generation technology for processing and disposal of radioactive waste 	light water reactor, fast breeder reactor cycle, etc.

2. Research Procedure



Future Procedure <Nagoya District> Research & Other Power **Development Division** Nuclear Power Companies, Division Manufacturers, Etc. Joint Research & Commissioned Research ------ <Make Hamaoka District a Research Center> **Nuclear Power Safety Technology** Research Center (new) Research Advisors Plans to invite experts in nuclear Hamaoka Nuclear

Shutdown facilities (Reactors No. 1 and 2) Radioactive material analysis

Utilize research resources

Power Station

relating to earthquakes and tsunami Earthquake measurement data,

> Joint research, commissioned research Research by public call for proposals (new)

Meetings to report results (new)

Location: Hamaoka Nuclear Power Station etc.

<Collaboration with Outside Research Institutions> Universities, research institutions, etc.

power, earthquakes, tsunami,

Nuclear Power Researchers

Researchers on disaster prevention

disaster prevention, etc.

To be established: July 1, 2012

Personnel: 12 people

· Collaborate with universities and research institutions with abundant specialized knowledge in nuclear engineering, civil and construction engineering and implement research



Local Communities and Society at Large

- Publish research results on earthquake and tsunami disaster prevention, cooperate with regional disaster management
- Continuously implement nuclear power safety initiatives and disseminate the results