

Japan Nuclear Technology Institute's
Mid-term Vision

Self-improvement: Becoming an organization
that better meets your expectations



Japan Nuclear Technology Institute

Introduction

Nuclear energy is an excellent source of energy in terms of securing a stable power supply and preventing global warming. Therefore, it is important that Japan, a nation poor in energy resources, promote nuclear energy generation as a core source of power and establish the nuclear fuel cycle, all while keeping safety as its utmost priority. In order to do so, the entire nuclear power industry must make a full-scale effort to enhance their voluntary safety activities, ensure safe and stable plant operation, gain public confidence, and revitalize the nuclear power industry.

The Japan Nuclear Technology Institute (JANTI) was established in March 2005 by consensus of the nuclear power industry as an organization that, being independent of the nuclear operators, will support and lead the nuclear industry in achieving these goals from a third-party standpoint.

In recent years, there has been a renewed recognition of the necessity of nuclear power generation in overcoming the problem of global environmental conservation and the risk of expanding energy demand, resulting in a global trend known as the "nuclear renaissance." It is necessary for us to have an accurate understanding of the trends related to the nuclear power industry both at home and abroad, and to be prepared to deal with the developments of the new era in a bold manner. Thus, with a renewed awareness of the importance of our duties, we took a serious look at our activities that we have been implementing up until now, and realizing a need to restructure our business activities and future vision, we have conducted a dynamic review of our organization starting last fall. We have consolidated the results of our review into the mid-term vision.

In this vision, we have positioned as our missions the "pursuit of the high level of safety" and "pursuit of the world's highest level of operating performance." To accomplish these missions, we have determined that it is vital to steadily implement self-improvement strategies and grow into an organization that can meet our members' expectations while gaining their cooperation and support. We thus have as the subheading, "Self-improvement: Becoming an organization that better meets your expectations." We hope that our vision will be considered as a "common language" not only among the employees of JANTI alone but also among all of our members, and serve as an important guideline for our future activities so that we can build JANTI into a vibrant and reliable organization.

Our members' cooperation is absolutely crucial in ensuring that we get closer to realizing the "revitalization of the nuclear power industry." We strongly hope that we will positively reinforce one another through our activities and members' cooperation, and thus greatly contribute to the development of the nuclear power industry. Thank you so much for your continued support and cooperation.

June 2009

Japan Nuclear Technology Institute

Takao Fujie, President

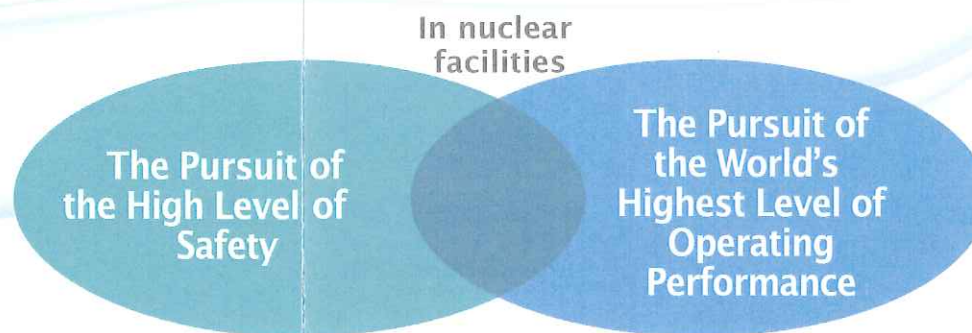
Pursue the high level of safety and the world's highest level of operating performance, and contribute to the revitalization of the nuclear power industry

Mission and Action Principles

JANTI was established based on the principle that the entire nuclear power industry makes a full-scale effort to enhance their voluntary safety activities, ensure safe and stable plant operation, gain public confidence, and revitalize the nuclear power industry. In order to realize this principle, we established a "mission" and "action principles" so that the employees of JANTI would have a common aim in terms of the direction of the Institute's activities and to exercise the collective strength of its organization.

Mission

JANTI shall work on developing the technological foundation shared by its members and promoting our members' voluntary safety activities in order to accomplish our mission, which is a common interest of both the Institute and its members.



Action Principles

As we follow through with our mission, we shall develop our activities with the following items as our "action principles":

- We shall comply to laws, regulations, etc., as a member of society, and act according to the ethics of engineers
- We shall continue to enhance our safety culture
 - We shall seek scientific and rational decisions, and enhance our engineering skills and foresight
 - We shall maintain our third-party standpoint that is independent of our members
 - We shall actively respond to our members' requests for support
 - We shall value the exchange of opinions and partnerships with related organizations

We shall continue to be an organization that contributes to the revitalization of the nuclear power industry

Striving towards our vision of what JANTI should be like in ten years

In the future, nuclear power will take on even more importance, and it is anticipated that in a decade from today, the issues facing the nuclear power industry will be greater in number as well as more diverse. JANTI has established five objectives to achieve in order to continue being an organization that contributes to the revitalization of the nuclear power industry after ten years from now.

Objective 1 JANTI consolidates and systemizes engineering information and contributes to its effective use.

We consolidate a wide-range of highly accurate and objective engineering information and analyze them by effectively using accumulated engineering skills, domestic and international best practices, and the cooperation of academic experts. The analysis results are provided/proposed in a manner that can be effectively used by our members, and can contribute to the safety of Japan's nuclear power industry.

Objective 2 JANTI realizes its motivating and checking role to the fullest extent.

As well as giving feedback to our members regarding the analysis results of information and objective assessments on voluntary safety activity level, we also actively encourage efforts towards members' improvement. In addition, we promote activities in which members aim for self-improvement, such as publicizing the situation of such efforts.

We make suggestions, etc., to the government and local municipalities from a third-party standpoint.

Objective 3 JANTI supports the development of human resources and organizational climate.

Based on JANTI's "Seven principles regarding safety culture," we support members in the development of safety culture. In addition, we contribute to the maintenance and enhancement of our members' engineering skills by enhancing our members' training programs and qualification systems.

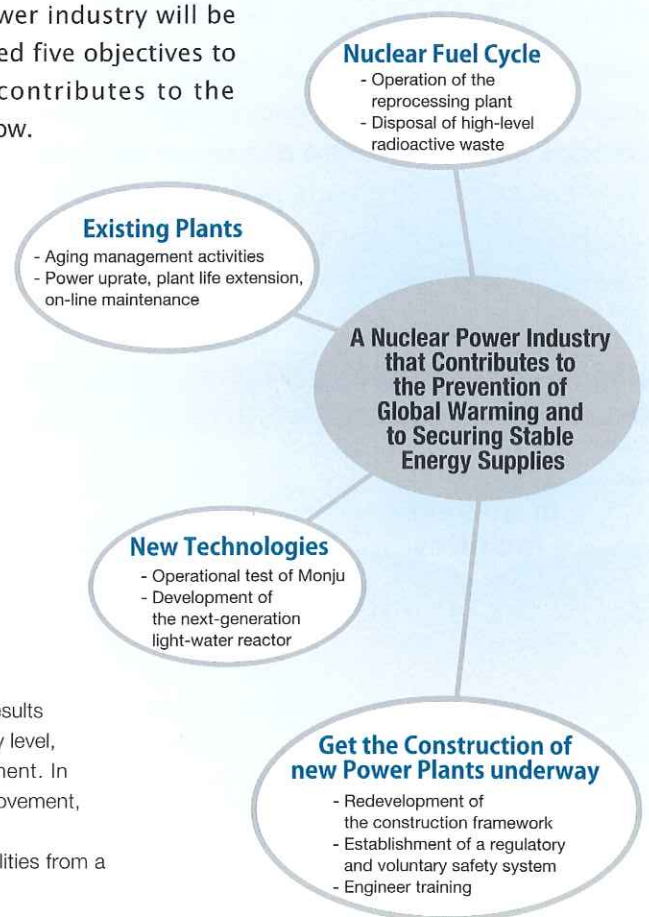
Objective 4 JANTI responds to its members' requests for support.

We respond sincerely to our members' requests for support. In addition, we grasp our members' situation and needs, and actively make suggestions for support.

Objective 5 JANTI realizes a synergistic effect through cooperation with related organizations.

By cooperating closely with various industrial organizations, we can contribute to continuous and effective improvement of the industry as a whole. In addition, the industrial world will make effective use of JANTI by regarding the information of the industry consolidated by the Institute as a common asset.

We shall provide high-quality accomplishments to our members by making effective use of the knowledge/skills of academic institutes and research institutes, knowledge from abroad, etc., as well as work towards making global contributions by taking advantage of our skills and experiences.



Swift actions required to achieve our objectives

Priority issues for the next five years

In order to realize our five objectives, we shall implement self-improvement by establishing the following items as our “priority issues for the next five years.”

Reform 1 **Clarification of our Mission and Fostering a Common Awareness**

JANTI is primarily made up of loaned employees. Therefore, we shall further permeate our mission into employee training, and strive to achieve the enhancement and unification of awareness.

Reform 2 **Reinforcement of Collaboration with Executives**

We shall revitalize organizational management while maintaining our third-party standpoint which is unique from the nuclear operators, and in order to make accurate decisions in a prompt manner, we will visit our members' top management on a periodic basis to report JANTI's achievements as well as to grasp their needs.

Reform 3 **Cross-organizational Efforts**

We shall respond to external requests by launching a cross-organizational task force, in order to realize JANTI's potential in a comprehensive manner.

In addition, we shall also handle the issuance of important documents such as recommendations and peer review reports, and analytical assessment of operating experiences, etc., in a cross-organizational manner.

Reform 4 **Reinforcement of Proactive Management**

In order to resolve issues related to safety engineering under private initiative, we shall collaborate with related organizations in the industry to pick out issues, and play a leading role in the development of a mechanism to establish policies to deal with such issues.

Reform 5 **Enhancement of Engineering Skills**

In order to further enhance the effectiveness of JANTI's activities, we shall systematically hire highly skilled engineers, and build an employee training program to systematically reinforce the engineering skills that we possess.

Cooperation with our members

JANTI is steadily implementing efforts towards achieving our vision of what JANTI should be like in ten years. In our efforts, we shall work to educate and improve ourselves, but in addition, our members should make active use of JANTI as well as to support JANTI and strive to improve themselves — in other words, cooperation with our members is indispensable.

Outline of our Efforts in the Next five years

At JANTI, we draw up a five-year road map to accomplish our objectives, and we conduct our activities while carrying out reviews every year, taking into consideration our progress and external conditions.

◆ Promoting Safety Culture

- We conduct efforts to accomplish issues regarding the safety culture assessment, such as implementing an increasingly sophisticated diagnostic method for even further diagnosis, shortening the time from field diagnosis to reporting, and making suggestions for improvement measures based on diagnosis results.
- In order to enhance the quality of peer reviews for nuclear power stations, we secure and train high-level reviewers. For peer reviews of plant manufacturers, fuel processing manufacturers, etc., we implement continuous improvement such as tailoring the review content to conform to the characteristics of the line of work.

◆ Collection, Analysis, and Use of Operating Experiences

- We establish a mechanism that enables further use of the Institute's specialists and manufacturers' engineering skills during information screening, etc., and further enhance the quality of information such as recommendations that we provide to our members.
- We provide results of operating performance assessment and comparison/analysis results with foreign plants as suitable to power company members, and by conducting follow-ups of their use, we can provide support in terms of the power station's awareness of their current situation, reducing problems, and improving operation, etc.
- For members other than power companies, such as manufacturers, we provide information that should be reflected in their design, production, and maintenance, and thus contribute to the enhancement of the quality level of the nuclear power industry as a whole.

Enhancing
our Core Business



◆ Development and Promotion of Voluntary Consensus Codes and Standards

- In order to speed up the establishment of voluntary consensus codes and standards, we aim for a system that can handle "the writing of the standards document" and "society operating lead" in an integrated manner.
- We reinforce activities to establish guidelines, etc., for areas other than society standards in which it would be suitable for the industry to systemize knowledge on their own.

◆ Development of a Common Electric Power Company Technological Foundation

- As a short-term goal, we aim to put on track the "maintenance information library" and "on-site engineers network," which form the center of the common electric power company technological foundation, and we enhance/develop them while rotating through the PDCA cycle.
- For the maintenance information library, we carry on with collecting and sharing documents and so on, which should be shared among electric power companies, as well as promoting the construction and development of an effective sharing system and information database.
- We establish the on-site engineers network as a system in which information, such as experiences and knowledge that will be useful to the maintenance optimization of the companies, is shared, and in which best practices are selected for feedback, and in addition, operate the network so that effective items are extracted through discussions.

◆ Training Engineers and Keeping them Competent

- We steadily assess the competency of persons responsible for operation while rotating through the PDCA cycle.
- We establish a domestic qualification system for maintenance skills, clarifying the qualification objective and methods of use.
- We prepare a standard guidebook for training after surveying the training conditions at power stations, and thus improve the members' training programs.
- We systematically organize the Institute's seminars as the "Nuclear Power Academy." We also consider areas of improvement for existing programs, and gradually enhance these programs by adding items that will be required in the future.

towards Accomplishing our Objectives

◆ Responding to Members' Requests for Support

- We use accumulated know-how in order to respond to support requests that are assumed to increase and become more diverse in the future, and exercise our collective strength in order to further meet our members' needs by establishing a cross-organizational task force, etc.

◆ Reinforcement of Proactive Management

- We establish basic concepts regarding proactive management procedures and role-sharing upon discussion with related organizations with the aim of resolving issues related to safety engineering under private initiative.
- We establish a "Safety Issue Management Group" that is independent from the existing division, extract trends in domestic and international regulations and issues based on operating experience, and contribute to the establishment of response policies through conference-based operation.

◆ Considering Plant Assessment

- We make considerations regarding the establishment of necessary criteria, training of evaluation engineers, and effective usage method of evaluation results, looking to objectively assess the voluntary safety level of each plant in the future, in comparison with the best performance.

Efforts Made by Exercising
our Collective Strength

Revitalization of Institution Operation

- We organize communications with the members' top management, and reinforce efforts and cooperation as well as share issues.
- In order to work on various issues concerning the nuclear power industry, we discuss and exchange opinions with various related organizations on an equal footing, and cooperate with them in an effective manner.

Revitalization of Business Operations

- We promote the development of the technological foundation, and actively consolidate information and intellectual resources in order to effectively use them as common assets. In addition, we make effective use of the skills and knowledge of employees in a cross-organizational manner.
- We conduct activities to promote understanding in order to share this vision with members.
- We effectively use the technical advisor system, etc., and incorporate the knowledge and skills of academic experts and senior engineers into this Institute.
- In the event that an engineering issue that is crucial for nuclear safety occurs, we provide accurate engineering information not only domestically to the mass media and local municipalities, and so on, but also internationally.

Securing and Training of Employees

- In order to aspire for autonomous business operation, we secure an appropriate number of employees for the amount of business conducted, with an appropriate composition ratio of loaned employees and regular employees.
- We build an employee training program that clearly shows the desired qualification level, and enhance and unify the employees' awareness while also deepening the employees' understanding of their work.



Enhancement of Member Services

- We enhance the quality and types of core business services offered so that all members can be satisfied by the services of the Institute.
- We actively introduce the activities of the Institute through its home page, e-mail newsletters, engineering seminars, etc., in order to promote understanding of the Institute's business to our members.
- We establish our own criteria and consider the creation of a system that rewards excellent nuclear facilities, in order to enhance member incentives.

Overview of JANTI

Record of 2008 Activities	Peer review 8 times
	Safety caravan 8 times
	Analysis of operating experiences (collected in FY2008)
	370 domestic cases
	2,893 overseas cases
	Number of draft standard proposals to academic institute 23 proposals (FY2008)

Number of Members	122 companies (as of October 2009)
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Number of Employees (full-time)	86 (as of October 2009)
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Operating Expenditure	2.131 billion yen (FY2008)
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Japan Nuclear Technology Institute

7F NOF Shiba Bldg., 4-2-3 Shiba Minato-ku, Tokyo 108-0014, Japan
TEL: +81-3-5440-3601 FAX: +81-3-5440-3606
URL <http://www.gengikyo.jp/>