The 45th JAIF Annual Conference
JAIF Chairman's Address

Takashi Imai, Japan Atomic Industrial Forum, Inc. (JAIF)

I am Takashi Imai, chairman of the Japan Atomic Industrial Forum. It is a pleasure to welcome you and to offer a few remarks to open this, the 45th JAIF Annual Conference.

More than a year has passed since the Great East Japan Earthquake. Yet as a result of the accident at Tokyo Electric Power Co.'s Fukushima Daiichi Nuclear Power Station, many people are still living in very difficult circumstances.

As advocates and promoters of the peaceful uses of nuclear energy, we apologize again and continue to pray for quick reconstruction of the affected areas and the soonest possible return home of the evacuees.

The accident at Fukushima not only fundamentally damaged trust in the safety of nuclear power in Japan. It also greatly affected development of nuclear power around the world.

All nuclear-related parties in Japan must concentrate their energies on recovery and reconstruction of the municipalities around the station, and on decommissioning the Fukushima reactors themselves, with a belief that "without recovery of Fukushima Prefecture, there is no future for nuclear power in Japan."

At the same time, in order to prevent anything similar from occurring anywhere ever again – no matter the magnitude of whatever natural disaster may be involved – the experience of the accident and the lessons learned from it should be shared with the world. There will have to be thorough implementation of safety measures, as well as greater transparency. All of this, necessary in its own right, will also help in regaining lost trust.

I believe we must recognize this as our starting point – new starting point – for energy and nuclear policy hereafter.

Toward recovery and reconstruction of Fukushima Prefecture, decontamination of radioactively contaminated environments will be a major challenge in order to reduce radiation exposure of the people at large. The problems of radiation exposure and temporary and interim storage facilities for the radioactive waste from decontamination work must also be solved.

People's concerns about radiation exposure lie at the root of many issues. In particular, experts appear to have different views on the effects of low-dose exposure, and residents are not sure what statements they can trust. This causes their psychological burden and they suffer from the delayed progress of recovery and reconstruction program.

In such circumstances, the government started in April a renewed operation procedure of food contamination control based on more than enough safety standards for radiation protection.

Nevertheless there are a couple of initiatives among producers and marketers who define independently their own standards and try to meet the request of some consumers pursuing even safer food products. Such movement is not necessarily limited to food products. A similar tendency is seen in other non-food areas such as in receiving and processing rubbles and wreck generated by the earthquake and tsunami.

The underlying background of such tendency may be the impaired credibility of the government and experts who were confused since the accident in disseminating essential information to the nation regarding the standards of, and elaboration on, radiation protection of the people.

Such tendency to pursue even stricter standards for low contamination may cause excessive burden to the society, may expand harmful rumors and may delay the recovery and reconstruction.

Intensive dialogue for deepening the understanding of the people on radiation and intensified effectiveness of radiation protection measures are needed for facilitating the recovery and reconstruction of Fukushima Prefecture

I would like to urge the government and all stakeholders to keep this need firmly in mind and try to proactively and sincerely explain with one voice to the society the sufficiency of new standards to reduce risks. I also urge their constant effort to operate the new standards appropriately and strictly for removing the fears of the nation.

When it comes to radioactive material released by the accident, I think Japan can learn a great deal from the views and opinions of people around the world. In particular in the Ukraine, Belarus and Russia, considerable experience and information has been accumulated since Chernobyl on radiation protection and technology for decontaminating the environment.

In order for people in Fukushima Prefecture to be able to return to their hometowns and live normally, it is important that decommissioning at the Fukushima Daiichi Nuclear Power Station be carried out safely and steadily.

It is said that the entire decommissioning process will take some 40 years. New technologies for removing melted fuel safely and completing the decommissioning will be needed, and huge amounts of money and numbers of people will be required.

The world is watching to see how Japan follows through in the medium and long term.

My view is that Japan will have to promote decommissioning as an international project – rather than alone – opening it to the world and making use of all available wisdom. Japan must, of course, share the results with the world, thus further contributing to the development of nuclear technology.

To those ends, discussions have begun toward establishing a base for international research on decommissioning in Fukushima Prefecture.

Through the establishment of such an international research center in Fukushima Prefecture, ties and exchanges of human resources with the world will be deepened and Fukushima will become a focus for the dissemination of decontamination technology. This will not only be significant for the reconstruction of the prefecture, but will also benefit the development of global human resources.

Turning to Japan's other domestic nuclear power plants, most plants have completed their periodic inspections but have not restarted.

Of the total 54 units, only Unit 3 at the Tomari Nuclear Power Station of the Hokkaido Electric Power Co. is operating today. When it is suspended for its periodic inspection on May 5, there will be no reactors in operation.

As a result, all utility companies will have to make up for their lost nuclear generation by mostly thermal means. Japan's dependence on thermal power generation will reach approximately 90%.

Being combined with increased global demand for fossil fuels and hikes in fuel prices as a result of the worsened political situation in the Middle East, fuel costs for utilities are sharply increasing, seriously affecting them financially. It has been calculated that if this situation continues, utilities' fuel costs will increase this year by more than three trillion yen (about US$ 37 billion).

Increased imports of fuel for power generation are a major factor in Japan's trade balance, which, I fear, will have an adverse effect on Japan's national strength and national interests.

According to calculations by the government, if this summer is as hot as the one in 2010, there will be about a 10% electricity shortage during peak summer demand. That possibility cannot be ignored.

If a reliable, stable supply of electricity is not certain, domestic manufacturers have to think about moving to other countries, which in turn would lead to a hollowing out of industry and a loss of domestic employment. The national economy would clearly suffer.

Voluntary saving campaign of electricity is not sufficient enough to avert such situations. Needs to restart nuclear power plant operation this summer are being intensified than last year. Of course, safety should be assured before restart.

The Nuclear and Industrial Safety Agency requested electric power companies to take actions for 30 items of technical measures from the experience at Fukushima.

In response, the government has defined three criteria for judging restart: (1) Implementation of safety measures to mitigate the accident situation even if all station powers are lost; (2) Confirmation of no fuel damage even if the plants are hit by the beyond-the-design-basis earthquake and tsunami of the Fukushima scale; and (3) Implementation planning by the nuclear operators of further safety improvement measures on a pre-defined schedule, prompt response to the renewed regulatory requirements, and the voluntary safety initiative attitudes.

For the first two criteria, the electric power companies have completed quantitative evaluation through their stress tests of their power stations. The regulators already confirmed their appropriateness in meeting the criteria.

For the third criterion of strengthening safety measures of the power stations, the electric companies are determined to implement them in the soonest period possible, by newly installing the containment vessel filter venting, for instance.

The government is doing its effort to restore the environment for restarting operations of

nuclear power plants, by ensuring maximum possible safety at the moment, in order to avert foreseeable power shortages ahead and to minimize the economic vulnerability.

The industrial sector is looking forward to the government earliest decision to restart the nuclear power plant operation through gracious explanation of its needs to the nation and getting public understanding and consent including those of the residents of local communities.

The accident at Fukushima was a direct result of tsunami. Of course it has been noted that there was insufficient recognition of the risk of a natural disaster leading to a nuclear accident of this magnitude.

We must squarely face the fact that Japan's nuclear operators and regulatory authorities were self-satisfied and not keen enough to actively learn from the world when it came to safe management of nuclear power stations.

Various bodies, including the national administration and the Diet, are investigating and verifying the accident. The nuclear industry has been doing so as well.

With the recognition that utilities are primarily responsible for ensuring nuclear safety, all utility companies have already strengthened safety measures at their individual plants. They endeavor proactively – voluntarily and continuously – to improve and ensure nuclear safety and they are working now on medium- and long-term measures based on new technological information obtained from the accident at Fukushima.

They will also establish within this year a new organization as part of their system to continuously carry out activities to ensure safety. Through it, they will reflect good practices and the latest knowledge from both in and outside the country, aiming at the world's highest level of safety and recovery of public trust.

Nationally, the government is working on a new regulatory system featuring guaranteed independence and improved capabilities – *also* seeking to restore trust in nuclear safety administration – based on what has been learned from the accident.

To improve the effectiveness of safety regulation, the quality in regulation must be changed, including meeting global standards. This includes safety principles of the International Atomic Energy Agency (IAEA), and the pursuit of scientific, rational judgments based on risk information.

Indeed, it is quite regrettable that the Nuclear Regulatory Agency – the new national body – is not yet operational, delayed by deliberations in the Diet. I strongly urge the government to act so that the agency can begin its work.

Debate is also set as part of a review of energy policy. With both "energy policy" and a "Framework for Nuclear Energy Policy" consistent with global warming measures to be decided in this summer, various energy-mix options are expected to be presented soon and the national debate will begin.

Energy underlies people's lives as well as industrial and economic activities – the nation itself.

Thus, when deciding energy policy, transparency in the policy-making process will have to

be ensured, and all aspects of security, improvement in the trade balance, creation of employment and more, together with safety, stable supply, low-carbon emissions and economy, will have to be analyzed and evaluated in a cool manner based on a long, international perspective and hard data.

I believe that in order for Japan to continue sustainable growth as a nation committed to trade based on science and technology, nuclear power generation will remain an important energy source, playing a certain role from the viewpoint of the 3 E's: energy security, environmental compatibility and economic efficiency.

The basic premises for this are priority on safety improvement based on the lessons from the accident, further increasing transparency, and recovering lost trust.

Elsewhere in the world, it is true that there have been moves to stop using nuclear power in, for example, Germany and Switzerland in the wake of the accident at Fukushima.

Many countries, however, have decided to continue nuclear development in order to ensure stable supplies of energy and to combat global warming.

Similarly, countries planning to introduce nuclear generation hereafter have affirmed their expectations that Japan will assist them with its technological strength.

Given these trends, too, in other countries, Japan is being urged to share the lessons learned from the accident with the world, contributing to the realization of safer nuclear generation systems everywhere.

The Japanese nuclear industry is aware of this role and this responsibility, and is determined to meet the expectations the world has of it.

The keynote theme of this annual conference is "Think Globally, Act Locally - Ways to Rebirth." Three sessions will be staged over the course of two days, following special presentations.

Overall, however, to reiterate: We, the nuclear industry, will learn what should be learned from the accident at the Fukushima Daiichi Nuclear Power Station. Based on that, we will endeavor to restore the image and position of nuclear energy. We hope to share all such recognitions with nuclear-related parties in and outside the country and, together, to continue to look deeply into them.

In closing, I hope debate among the many concerned parties will be deepened through this conference and that it will be a significant, fruitful opportunity for each of you.