## The 47th 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 for me to open this – our 47th – annual conference.

Three years have passed since the Great East Japan Earthquake.

As a result of the accident at TEPCO's Fukushima Daiichi Nuclear Power Station, local residents have been forced into difficult, on-going existences as evacuees. We express again our sincere sympathy to them.

The current Japanese government has fundamentally reviewed the energy strategy of the previous government under the Democratic Party of Japan. In February, the government released a draft of its Basic Energy Plan, to be the basis for medium- and long-term energy policy. On April 11, the plan was approved by the Cabinet.

The draft begins by declaring that "the government squarely faces the grief of those suffering from the accident and will apply itself fully to restoring and reconstructing Fukushima. The government reviewed the energy strategy formulated before the accident from scratch and will reduce dependence on nuclear energy as much as possible. Rebuilding the country's energy policy starts here."

All who are involved in energy issues will have to share this thought.

For the past three years, there has been no rest for any of us in responding to the affected area. The mission of all related organizations is to integrate their efforts and accelerate reconstruction so that the sufferers can return to their normal lives as quickly as possible.

The basic aim of the plan is to build a "multi-layered, diverse and flexible energy supply and demand structure" from an international perspective and the viewpoint of domestic economic growth. It positions nuclear power as a "key base-load power source" contributing to the stability of that structure – premised, of course, on secured safety.

We recognize the determination of the Abe administration to establish a responsible energy policy. We highly evaluate the plan as showing the future course of Japan's nuclear policy to people both in and outside the country.

Nevertheless, given that there are no clear prospects for restarts of nuclear power plants currently shut down, the percentage of nuclear power in Japan's future energy mix is unknown.

This – taken together with the percentage of renewable energies – means that Japan cannot present a target for reducing greenhouse gas emissions. From this point of view, also – responsibility to the global community – the issue should be resolved as soon as possible.

With no nuclear plants in operation, imports of liquefied natural gas and crude oil to fuel thermal plants have sharply increased, pushing up the 2013 trade deficit to 11.5 trillion yen.

This new cost is a factor in higher power rates, which increase the burden on families and industry, including manufacturing.

Some utility companies are now considering further rate hikes because of the prolonged shutdown period. The *burden* on the people is becoming very real.

As a result of extended shutdowns, economies in the siting areas are collapsing.

Regions and communities that have long supported the foundations of Japan's energy policy now face wretched conditions. This situation, too, should be corrected promptly.

As stated in the Basic Energy Plan, if the Nuclear Regulation Authority recognizes that plants comply with regulatory standards that are considered to be the most strict in the world, that judgment will be respected and resumption of operation will be carried out. In this, the government will come to the forefront and endeavor to obtain understanding and cooperation from siting municipalities and other related parties.

The nuclear industry itself is highly appreciative of this government's attitude and approach, and will do its utmost so that nuclear power can play the strategic role of base-load power source once again.

The unfortunate reality, however, is that this new awareness and these changes have not restored people's trust in nuclear power.

Multiple opinion polls show a majority against restarting the plants. Ninety percent of the people fear another accident like Fukushima.

Based on reflection on the lessons from the accident, regulation was strengthened. But, the people may still retain an unspecified fear for their safety.

One of the reasons that anxiety over nuclear energy cannot be alleviated is that no answer to the question of final disposal of high-level radioactive waste has been provided.

Spent fuel is an inevitable byproduct of nuclear power. Measures to deal with it are our responsibility, those of us here today, not future generations.

In doing so, efforts to date should be fundamentally reviewed. Then, with greater involvement by the government, it is essential that we carry out spent fuel measures comprehensively, including reviewing the manner of selection of a final disposal site, and expanding storage capacity.

For the past three years, reflecting on the accident, the industry – nuclear operators and manufacturers – has worked proactively, voluntarily, to further improve safety, not content merely with obeying regulations.

Specifically, recognizing that they themselves are primarily responsible for ensuring safety, the operators established the Japan Nuclear Safety Institute – JANSI – in 2012, which is independent of the operators and has strong authority.

It conducts third-party evaluations of each operator's safety-improvement activities, helping to ensure reliability.

When they created JANSI, the heads of the utilities pledged leadership, a commitment to fostering safety culture, and to always aim higher.

Opinion polls also show, however, that when it comes to such efforts by the operators, I am afraid that such activities by the operators have not necessarily been conveyed to the general public.

Society advances by recognizing and dealing with risks.

A "safety myth" existed before the accident. Having put that in the past – facing now the risks – operators have changed and will continue to change. This, too, must be clearly conveyed to the people. Indeed, understanding it should help ease their anxiety.

In particular, the heads of the utilities are expected to include their personal determination as a pillar of their management, committing themselves to there never again being an accident like the one at the Fukushima Daiichi Nuclear Power Station.

I want to emphasize this to everyone here today. I want every participant to understand it.

Let me shift to the matter of human resources and the cosmopolitan quality of nuclear energy.

Turning an eye to the world, the trend is to continue to use nuclear power from the viewpoints of ensuring energy stability and combatting global warming. Countries including Turkey, Saudi Arabia, UAE and Vietnam, planning to introduce nuclear

generation, hold high expectations for Japan to support them with our technological abilities and expertise.

During the last fifty years Japan carried out an uninterrupted program of construction of nuclear power reactors – 57 of them in all. In the process, we overcame various problems through improvements and modifications, and created a domestic nuclear technology.

Accumulated technological abilities – particularly in manufacturing high-quality equipment and facilities, and in completing construction projects on time and within budgets – is something we can be proud of in the world.

Now it is important that we meet the expectations of countries all over the world by using our accumulated technological abilities and by sharing with other countries the lessons learned from accident at the Fukushima Daiichi Nuclear Power Station.

Japan also has been consistent in its absolute commitment to peaceful use. It is a model for activities to sustain and improve the nuclear non-proliferation regime. This, too, is our very serious responsibility to the global community.

Additionally, in the current global security environment, Japan and all parties should consider actively what further efforts for nuclear security they can make.

In these and other respects, when considering energy and nuclear energy issues, it is increasingly important to have a global perspective.

What is needed for successful international cooperation and development are technological capabilities, bargaining skills, and an international way of thinking. Ensuring and fostering globally minded individuals of the next generation is a challenge to be tackled urgently by the public and private sectors.

This has been a consistent focus of activities at JAIF, and it will continue to be.

Next I would like to speak about decommissioning.

What happens at Fukushima Daiichi is of obvious interest internationally.

Nothing will happen if we do not solve the contaminated water problem.

Groundwater bypass for uncontaminated water will be implemented with the understanding of local parties and is a step forward.

The operator will next establish a safe, stable system to purify contaminated water as soon as possible, strive to obtain understanding from local parties and the international community, and release the processed water into the sea.

The Fukushima decommissioning will involve challenges never faced or contemplated – including removal of melted fuel – and is expected to take up to 40 years.

Organic cooperation and collaboration among TEPCO, the government, research institutes, and more, will be required.

Given, though, the unprecedented severity of the actual work that lies ahead, I urge that a primary recognition of all parties be the need to create a working environment for front-line personnel that enables them to do their jobs.

The safety and health of workers must be properly managed. Morale at the site must be maintained.

As I said, the technological difficulties in decommissioning Fukushima Daiichi are unprecedented. We need the wisdom and experience of the world, fully integrated into the effort.

It will then be Japan's responsibility to share new knowledge and understanding so that they, too, may be incorporated into safety research and aid in future decommissionings. In this sense, one of the best ways to exchange ideas, information, and so on, will be at research and development locations, which we hope will provide invaluable opportunities for young researchers from around the world. In other words, technological development will fuel very-much-needed human resource development.

Additionally, I hope the work of those research facilities will accelerate the decommissioning, increase related employment, and be a benefit, in that sense, to the restoration of Fukushima.

Which brings me to recovery and reconstruction.

Since the accident, a range of activities has been carried out in the affected areas of the prefecture.

In the past year, the government has stepped into the lead on various issues, including reclassification of areas subject to evacuation orders, narrowing down sites for medium-term storage facilities, and decommissioning issues themselves. Each has been a step forward.

Yet the suffering continues for many. The most conspicuous issue is, of course, decontamination, but there are others.

With recognition that *there is no future for nuclear power in Japan without restoration of Fukushima,* we, the nuclear industry, have been cooperating with an extensive range of related organizations.

The Japan Atomic Industrial Forum, already close to and sharing the perspective of local people, continues to promote dialogue and exchange activities with them, for their better understanding of radiation and more.

In the current severe circumstances for nuclear power in Japan, as I have described them, we selected "Rebuilding Public Trust in Nuclear Energy" as the main theme for this year's conference.

Here, following the special presentations, there will be three sessions over two days.

The first session will confront the reality of domestic public opinion, where a majority express doubts about nuclear energy. It will then look at the industry's activities and determination toward restoration of trust. Referring also to examples in other countries, the matter will be discussed.

The second session will address the role that nuclear energy plays over the long term (to 2050) in establishing a sustainable society. Actual situations in various regions of the world will be considered.

In the third session, we will hear about what's happening in Fukushima now. The session will discuss issues to be tackled for recovery and reconstruction of the region, referring to examples in the wake of the Chernobyl accident.

We will share issues among the presenters from Japan and overseas, and discuss with all participants the future we desire for nuclear energy. I am confident that this conference will be significant for the further sound development of nuclear energy.

Before closing, I want to take this opportunity to express my deep gratitude to all of the presenters for their efforts and for taking the time to be with us, despite their very busy schedules.

This concludes my comments. Thank you for your attention.