U.S.-JAPAN NUCLEAR **WORKING GROUP** STATEMENT ON SHARED STRATEGIC PRIORITIES IN THE AFTERMATH OF THE FUKUSHIMA NUCLEAR ACCIDENT

The Maureen and Mike Mansfield Foundation
Federation of American Scientists
Sasakawa Peace Foundation

The Maureen and Mike Mansfield Foundation

1401 New York Avenue, NW Suite 740 Washington, D.C. 20005-2102

Phone: 202.347.1994 Fax: 202.347.3941

E-mail: info@mansfieldfdn.org

www.mansfieldfdn.org



U.S.-JAPAN NUCLEAR WORKING GROUP

MEMBERS

Nobumasa Akiyama, Associate Professor, Hitotsubashi University & Adjunct Fellow, Japan Institute of International Affairs (JIIA)

Ralph Cossa, President, Pacific Forum CSIS

Craig Hansen, Vice President Nuclear Equipment, Babcock & Wilcox Nuclear Energy

Takuva Hattori, President, Japan Atomic Industrial Forum, Inc. (JAIF)

Susan E. Pickett, Former Associate Professor, Department of Nuclear Engineering and Management, University of Tokyo*

Thomas Sanders, Associate Laboratory Director for Clean Energy Initiatives, Savannah River National Laboratory; Former President, American Nuclear Society

Sharon Squassoni, Director and Senior Fellow, Proliferation Prevention Program, CSIS

Nobuo Tanaka, Former Executive Director, International Energy Agency

Masakazu Toyoda, Chairman, Institute of Energy Economics, Japan

CHAIRMEN

Charles Ferguson, President, Federation of American Scientists

L. Gordon Flake, Executive Director, The Maureen and Mike Mansfield Foundation

OBSERVERS

Man Cho, Director, Energy Industries Team, U.S. Department of Commerce

Mary Beth Nikitin, Specialist in Nonproliferation, Congressional Research Service (CRS)

Masakatsu Ota, Senior & Editorial Writer, Kyodo News**

Tatsujiro Suzuki, Vice Chairman, Japan Atomic Energy Commission

PROGRAM MANAGER

Ryan Shaffer, Associate Director of Programs, The Maureen and Mike Mansfield Foundation

^{*} currently a training officer at the International Atomic Energy Agency

^{**} in participating in U.S.-Japan Nuclear Working Group activities, did not receive resources or support from any organization other than the participant's home institution

OVERVIEW

The tragic March 11th, 2011, Great East Japan Earthquake and tsunami in Japan resulted in the deaths and disappearances of more than eighteen thousand people, with the nuclear accident that followed resulting in the displacement of entire communities. These events also reaffirmed the unique and critical bond between Japan and the United States. In the immediate aftermath of the earthquake and tsunami, American individuals and organizations responded quickly with relief donations, support, and sympathy, while the Japan Self-Defense Forces and U.S. Forces Japan collaborated to great effect on rescue and recovery operations in Tohoku. The efforts underscored the importance of the friendship, the unique level of trust and interoperability between our governments and armed forces, and the value of Japan's support for the thousands of American military personnel based in Japan.

Similarly, the accident at the Fukushima Daiichi Nuclear Power Plant (the "Fukushima accident") that followed the earthquake and tsunami demonstrated that, in parallel with the friendship and military partnership, in many ways Japanese and American national interests are deeply integrated and mutually dependent. As Japan engages in an intense national debate over whether and in what manner to move forward with nuclear power, it is clear that the matter is of profound and personal importance to individuals, families, and communities throughout Japan. It is also undeniably true that the decisions Japan makes on energy policy will have broad implications globally, impacting Japanese foreign policy priorities, many of which are shared by the United States.

BACKGROUND

The U.S.-Japan Nuclear Working Group is an independent, bi-national group of experts that has been convened to examine the broader strategic implications of the Fukushima accident. As reflected in the group's diverse makeup and sponsorship, the group as a whole neither discourages nor advocates for nuclear energy. Nor does the group seek to duplicate the many high quality studies of the causes and immediate lessons of the Fukushima accident. Rather, the group seeks to understand, articulate, and advocate for the broader, bilaterally shared strategic interests that stand to be impacted, positively or negatively, through changes to Japan's nuclear energy paradigm.

To develop a fuller understanding of the circumstances and implications of Japan's fast-evolving energy policy situation, the U.S.-Japan Nuclear Working Group has held discussions with opinion leaders and policymakers in Japan, the United States, and the global nuclear governance community in Vienna, Austria. Over the course of four meetings, the group has met individuals including members of Japan's cabinet

and ministries, editorial writers for Japan's major newspapers, leaders in Japan's anti-nuclear movement, Japanese nuclear industry officials, Japan's mission to UN agencies in Vienna, American diplomats in Japan and Vienna, prominent individuals in the Washington, D.C. and Vienna foreign policy, nonproliferation, and disarmament communities, and key staff at the International Atomic Energy Agency (IAEA), including the director general. (A full list can be found on the U.S.-Japan Nuclear Working Group Web page: http://mansfieldfdn.org/program/dialogues/u-s-japan-nuclear-working-group/)

The group's activities have been made possible primarily through the support of the Sasakawa Peace Foundation, The Maureen and Mike Mansfield Foundation, the Federation of American Scientists, the Smith Richardson Foundation, and the Carnegie Corporation. Generous in-kind support was provided by All Nippon Airways, and supplementary, unrestricted grants were received from Hitachi, Toshiba, Mitsubishi and the Chubu Electric Power Company. Several of the group's members have funded their own participation. The recommendations of the Nuclear Working Group represent the findings of working group members in their individual capacities and do not necessarily reflect the views of their home institutions or any of the organizations from which support for this effort was received.

OUTCOMES

The U.S.-Japan Nuclear Working Group recognizes that Japan's decisions on the future course of its energy policy rest entirely with Japan's people and its representative government; neither this group, nor the United States government, has any formal role in this process. Nevertheless, group members' shared concerns about the strategic interests impacted by changes to Japan's energy paradigm have united them behind a set of concerns and priorities. They believe these strategic concerns and priorities are in the core interest of the Japanese and American people and therefore must be factored into Japan's nuclear energy policy debate and the considerations of the Japanese and American energy and foreign policy communities.

Reflecting these shared concerns the U.S.-Japan Nuclear Working Group has articulated:

- I. Issues that must be addressed irrespective of Japan's energy policy decisions
- II. Broader strategic concerns within Japan's energy policy debate
- III. Strategic recommendations for the industries and governments of Japan and the United States

I – Issues that must be addressed irrespective of Japan's energy policy decisions:

1. Wellbeing of People Affected by the Fukushima Accident

The Fukushima accident clearly demonstrates the irrevocable connection between energy production and its relationship with local communities and political discourse. As such, the wellbeing of those affected by the Fukushima accident must remain paramount.

2. Expeditious Decommissioning and Decontamination

Collectively, the international community has delayed important decisions about standards for radiation safety, environmental clean-up, decommissioning and decontamination, and the treatment of spent nuclear fuel. The Fukushima accident demonstrates the impact of not making these decisions, one example being that the absence of such standards may be unnecessarily delaying the return home of many of those who were evacuated after the Fukushima accident. The inability to expeditiously remediate damage to communities and the natural environment discredits nuclear operations worldwide while generating legitimate anxiety and concern in nuclear reactor host communities and neighbors. Decontamination of the Fukushima area and decommissioning of the Fukushima Daiichi plant must be accomplished as quickly as possible in cooperation with local communities and with the international community, with the recognition that these activities will influence the way the rest of the world approaches decommissioning in the future. Moreover, decommissioning and decontamination in Fukushima must proceed with transparency and accountability in order to reassure the Japanese people and international community.

3. Credible Strategy for Japan's Plutonium Stockpile

The disposition of Japan's sizeable plutonium stockpile is an outstanding issue that must be addressed regardless of whether or not Japan decides to move forward with nuclear power. The issue is one that will become all the more pressing if Japan moves away from nuclear power but retains nuclear fuel cycle capabilities. Absent a credible strategy for reducing Japan's plutonium stockpile, nonproliferation and security concerns will grow over time, undermining Japan's international leadership on nuclear nonproliferation.

4. Global Dissemination of Lessons from the Fukushima Accident

As global leaders in the nuclear energy field, it is essential for Japan, the U.S., the International Atomic Energy Agency (IAEA), and other global institutions to widely disseminate conclusions from the Fukushima accident to the Japanese public, the international community, and especially to states contemplating or using nuclear power.

II – BROADER STRATEGIC CONCERNS WITHIN JAPAN'S ENERGY POLICY DEBATE:

1. Japan's Role as a Leading International Actor

Japan is not a small country. Japan is a leading international actor, and its decisions on its nuclear future will have broad and significant international ramifications. Moreover, these decisions will impact how the rest of the world sees Japan.

2. Global Nuclear Nonproliferation Leadership

Japan has a unique role in the international community as the leading example of a non-nuclear weapons state with advanced nuclear energy capabilities. Should Japan cede this leadership role there is a risk that other nations with less rigorous safety, security, and nonproliferation standards will fill the gap. Furthermore, erosion of Japan's global advantage in nuclear energy technology reduces the leverage with which Japan and the United States are able to affect global efforts to realize a world safer from risks of nuclear proliferation, terrorism and accidents.

3. Japan's Emerging Nuclear Safety Regulations

Japan's development of new regulations for its nuclear industry will be closely watched worldwide, despite the fact that they are being tailored for Japan's unique circumstances and challenges. It will be important to approach these regulations as a "work in progress" — to be refined and adjusted to allow for constant identification, evaluation, and mitigation of emergent risks. The most effective regulatory approaches take a risk-informed approach that acknowledges inherent risks while protecting society through quantification and management of that risk. Japan should take advantage of all existing peer-review processes as it reorients its regulatory framework to ensure the highest standards of safety and security.

4. Climate Concerns

Japan has previously played a leading international role in promoting international responses to climate change. Japan's decisions on its energy future will affect Japan's ability to meet its international commitments to reduce CO2 emissions and its global leadership role in the environmental arena.

5. Japan's Role as a Global Economic and Technology Leader

Japan's decision on its energy future will have major ramifications for its domestic economy and its role as a global economic and technology leader. Japan's energy crisis has already affected the country's trade balance and its relative competitiveness due to an abrupt increase in dependence on oil and gas. Other concerns include Japan's increased vulnerability to energy supply disruptions and concerns over the long-term viability of its utilities.

6. Japan as the Cornerstone of Regional Security

As confirmed by the American "strategic pivot" towards Asia, Japan remains the United States' closest and most important military ally. However, Japan's support for the U.S.-Japan alliance, including hosting eighty-five U.S. military facilities and about 35,000 military personnel, is expensive, and with the prospect of an unstable electricity supply undermining Japan's economic recovery, political and fiscal pressures may limit Japan's capacity to contribute to regional security as an alliance partner.

III – STRATEGIC RECOMMENDATIONS FOR THE INDUSTRIES AND GOVERNMENTS OF JAPAN AND THE UNITED STATES:

1. Tomodachi Energy Communities Alliances

Based on the successful experience of the Energy Communities Alliance in the United States, establish a community-based program to help disseminate information, share best practices and ideas, and promote communication between involved stakeholders among all of the world's communities hosting nuclear power plants. The Fukushima region should also institute a specific community alliance between the people of Fukushima and Hanford, Washington and Savannah River, South Carolina. Such an alliance could provide an important and unique venue for information, support, and consultation for Fukushima residents as they cope with and recover from the ongoing nuclear disaster. The initiative might be appropriate for fiscal and administrative management under the umbrella of the broader Tomodachi Initiative.

2. Joint Work on Decommissioning and Decontamination

Enable meaningful international collaboration for the effective and transparent decommissioning and decontamination of Fukushima. Decommissioning and decontamination, such as that required in Fukushima, is not Japan's problem alone; it is a global problem that requires close collaboration between international organizations and the global nuclear industry. In concert with Japanese authorities, the international community must expeditiously define and articulate reasonable remediation processes and goals accurately reflecting human and ecological health concerns. The U.S. has a special role to play in supplementing Japanese decommissioning and decontamination expertise given the long American experience in radiological remediation and the unique level of trust and interoperability between the American and Japanese governments and nuclear industries.

3. Global Leadership on Spent Fuel and Waste Storage

Initiate a track-one dialogue among Japan, the United States, Korea, and other regional states on seeking joint solutions to shared challenges with spent fuel and nuclear waste management. Within such a forum:

- · Consider possible regional solutions to back end of the fuel cycle.
- Promote the findings of the Blue Ribbon Commission on American's Nuclear Future, prioritizing interim storage as a critical step for enhancing safety and stability of nuclear materials.
- Work with the IAEA and with other countries to share experiences on public involvement practices that can further the implementation of spent fuel and nuclear waste management strategies.

4. Maintain U.S.-Japan Technological Advantage

Seek to enable the private sectors in Japan and the United States to remain competitive for global nuclear energy contracts among state-owned and state-sponsored global competitors. Maintaining technological competitiveness further enables Japanese and American leadership

and influence on nuclear safety, security, and safeguards. Means to sustaining and enabling competitiveness may include:

- Completion of a comprehensive global nuclear liability treaty.
- Accelerating regulatory normalization globally, but particularly between Japan and the United States
- Strengthening Japan-U.S. collaboration to ensure robust and sustainable human resources in the nuclear energy field.
- Consideration of practical legal dispensations enabling collaboration between Japanese and American firms that is nimble and responsive enough to compete in a competitive global environment.
- Expanding collaboration on innovative reactor technologies that have the potential to define
 the competitive marketplace of the future and that may ultimately help to reduce the burden
 on long-term nuclear waste disposal solutions. Working Group members specifically
 discussed Generation IV Technologies, such as the Integral Fast Reactor.

5. Completion of 2005 Amendment to CPPNM

Expeditiously ratify the 2005 amendment to the Convention on Physical Protection of Nuclear Material (CPPNM). This is the most important international convention addressing physical protection of nuclear material. Non-ratification and lack of domestic legal implementation of the amendment by Japan and the United States is inconsistent with shared national interests and undermines leadership on global nuclear nonproliferation and security.

6. Confidence-Building Through Transparency and International Scrutiny

Encourage active and transparent collaboration with American and other foreign expert communities in the continued cultivation of a credible and effective Japanese regulatory regime. Promote institutionalization of international peer review systems for national regulators and industry managers.

7. U.S.-Japan Joint Energy Security

Promote the concept of Joint Energy Security between Japan and the United States, explicitly acknowledging the United States' inherent national interest in Japan's energy security as an essential factor in its ability to contribute to the region's economic, political, and physical security. Specific means may include:

- Prioritization of liquefied natural gas (LNG) export capabilities from the United States
 to Japan to capitalize on expanding American gas resources while diversifying Japan's
 supply options; explicitly articulate this as a foreign policy priority that also benefits the
 U.S. economy.
- Bolstering Japanese and American collaboration on research, development, and
 marketization of innovative clean energy technologies; encourage a serious and urgent
 effort in Japan to incentivize and promote such technologies. While in the near-term a
 drawdown in nuclear energy necessitates increased reliance on imported coal, gas, and
 oil, it also enhances both the urgency and opportunity for long-term investment by the two
 nations in new and innovative energy technologies.

SPONSORS

The Maureen and Mike Mansfield Foundation honors Mike Mansfield (1903–2001), a remarkable public servant, statesman and diplomat who played a pivotal role in many key domestic and international issues of the 20th century as U.S. congressman from Montana, Senate majority leader, and finally as U.S. ambassador to Japan. The Maureen and Mike Mansfield



Foundation was created in 1983 to advance Maureen and Mike Mansfield's life-long efforts to promote understanding and cooperation among the nations and peoples of Asia and the United States. The Foundation sponsors exchanges, dialogues and publications that create networks among U.S. and Asian leaders, explore important policy issues, and increase awareness of Asia in the U.S. The Mansfield Foundation's geographic focus is Northeast Asia and India as it relates to that region. The Foundation receives support from individuals, corporations and philanthropic organizations. It also provides support to The Maureen and Mike Mansfield Center at The University of Montana.

The Federation of American Scientists, an independent, nonpartisan think tank and membership organization, is dedicated to providing evidence-based analysis and practical policy recommendations on national and international security issues connected to science and



technology. Founded in 1945 by many of the scientists who built the first atomic bombs, FAS is devoted to the belief that scientists, engineers, and other technically trained people have the ethical obligation to ensure that the technological fruits of their intellect and labor are applied to the benefit of humankind. The founding mission was to prevent nuclear war. While nuclear security remains a major objective of FAS today, the organization has expanded its critical work at the intersection of science and security to include the issues of bio-security, conventional arms sales monitoring, energy security, government secrecy, international science partnerships, and terrorism analysis. More than 60 Nobel science laureates have endorsed FAS as members of the Board of Sponsors.

The Sasakawa Peace Foundation (SPF) is a private nonprofit organization established in September 1986. It seeks to contribute to the welfare of humanity and the sound development of international



community, and thus to world peace, through activities that foster international interaction and cooperation. The activities include undertaking surveys and research, developing human resources, inviting and dispatching personnel, organizing international conferences and other forums, and conducting other activities fostering international understanding, exchange, and cooperation, as well as collecting, disseminating, and propagating information in order to carry out these and other activities necessary to accomplish the Foundation's mission. It operates with endowments from the Nippon Foundation and the Japanese motorboat racing industry.







