

NUCLEAR POWER PLANT AND REACTOR EXPORTERS' PRINCIPLES OF CONDUCT

Seoul, Korea | January 1, 2015*

CONTENTS

PREAMBLE

PRINCIPLE 1. Safety, Health, and Radiological Protection

PRINCIPLE 2. Physical Security

PRINCIPLE 3. Environmental Protection and the Handling of Spent Fuel and Nuclear Waste

PRINCIPLE 4. Compensation for Nuclear Damage

PRINCIPLE 5. Nonproliferation and Safeguards

PRINCIPLE 6. Ethics

APPENDIX A. Appendix to Principle 5: Nonproliferation and Safeguards

APPENDIX B. References

PREAMBLE

Considering that responsible use of nuclear power plant technology is vital to help meet global energy requirements and address climate change in a sustainable manner;

Desiring to continuously improve safety, security, and environmental protection;

Conscious of the sensitive nature of nuclear materials and technology, and thus the necessity of using nuclear power plant technology exclusively for peaceful purposes;

Inspired by and seeking to complement national laws and regulations, international laws and norms, and the recommendations of vital institutions such as the International Atomic Energy Agency that promote the peaceful use of nuclear technology as a safe, secure, reliable, and efficient source of energy;¹

Committing to export strictly in compliance with **Nuclear Suppliers Group guidelines** and with the laws and policies of Vendor and Customer States;

Recognizing that the establishment of any nuclear power program requires an effective legal and regulatory framework and technological and industrial infrastructure, and qualified personnel;

**In keeping with the Preamble, participants will review and revise the Principles of Conduct as appropriate. To allow for regular updating of the text, vendors have agreed that new updates to the text will go into effect on January 1 of the subsequent year. The Principles of Conduct were first finalized in Brussels, Belgium, in May 2011. They have been updated as follows:*

- Seoul, Korea, October 22, 2014
- Brussels, Belgium, March 6, 2014
- Toronto, Canada, September 26, 2013
- Tokyo, Japan, January 16, 2013
- Pittsburgh, PA, U.S.A., July 10, 2012
- Moscow, Russia, December 8, 2011
- Brussels, Belgium, May 20, 2011

*1 These Principles cite documents in Appendix B, which will be reviewed by the participants as they evolve. Documents are highlighted in **boldface text**.*

Mindful that a harmful event at a nuclear power plant anywhere can be considered to be a harmful event everywhere, and limit the contributions of nuclear energy;

Seeking to enhance public confidence by upholding high standards of transparency, integrity, ethical behavior, and social responsibility and to promote continuous improvement toward the implementation of global best practices;

Acknowledging that Customer States have the ultimate responsibility to regulate the construction, operation, and decommissioning of nuclear power plants in their jurisdictions;

Vendors adopting these Principles of Conduct will undertake good faith efforts to implement the best practices described in six principles: Safety, Security, Environmental Protection, Compensation for Nuclear Damage, Nonproliferation, and Ethics.

These principles are based upon best practices derived from the experience of nuclear power plant vendors and operators and the guidelines of the International Atomic Energy Agency. They were developed for the public good over several years through a nongovernmental consensus process facilitated by the Carnegie Endowment for International Peace, with input and advice from regulators, operators, and internationally recognized experts.

These Principles have been and will be reviewed and revised as appropriate, including to reflect the lessons learned from the Fukushima nuclear accident following the earthquake and tsunami.

Participating Vendors express their intention to follow these principles in designing nuclear power plants and in performing their activities. Participating Vendors will inform their customers, suppliers,

subcontractors, and other participants in the nuclear power plant industry about the nature, purposes, and benefits of these Principles of Conduct, and recommend their cooperation in applying them.

These Principles are voluntary, create no legal duty, and are not legally binding, but nevertheless reflect the genuine aspiration of the participants to apply these principles and make a good faith effort to achieve these goals. The reference language of these Principles of Conduct is English.

PRINCIPLE 1: SAFETY, HEALTH, AND RADIOLOGICAL PROTECTION

Before entering into a contract to supply a nuclear power plant to a Customer, Vendors expect that the Customer State:

- 1.1 Is an active party to the IAEA's **Convention on Nuclear Safety**, or has indicated its intention to become an active party before operation of the plant begins.

Before entering into a contract to supply a nuclear power plant to a Customer, Vendors will have made a reasonable judgment that the Customer State has:

- 1.2 A legislative, regulatory, and organizational infrastructure needed for implementing a safe nuclear power program with due attention to safety either in place or under development following the guidance provided in the **IAEA Safety Standard "Establishing the Safety Infrastructure for a Nuclear Power Programme"** (The information on infrastructure and the plans concerning its development should be provided by the Customer State based on its self-assessment or an independent external assessment such as a peer review conducted under the auspices of the IAEA);

- 1.3 Either an existing industrial infrastructure to support safe long-term operation, or a credible plan to develop such an infrastructure before operation of the nuclear power plant begins; and²
- 1.4 Taken into account international operating experience and severe accident considerations in determining the plant site.

Vendors commit to:

- 1.5 Export nuclear power plants that:
 - 1.5.1 Apply consistent, high safety standards, reflecting the Vendors' safety goals and which are compatible with physical security requirements;
 - 1.5.2 Reflect the uncompromising application of recognized safety principles, including the **IAEA Fundamental Safety Principles**;
 - 1.5.3 Are based on reliable technology, which is proven either a) in operation or b) by a test program or analysis consistent with internationally recognized safety principles, before operation of the plant begins;
 - 1.5.4 Are designed in accordance with the **IAEA Safety Requirements**,³ giving due consideration to relevant **IAEA Safety Guides**, and meeting regulatory requirements of the Customer State;
 - 1.5.5 Use components manufactured in accordance with the Vendors' technical specifications consistent with appropriate nuclear standards;
 - 1.5.6 Ensure their supply chain is subject to the Vendors' rigorous overall corporate quality assurance requirements; and

- 1.5.7 Incorporate design provisions to address severe accident management and to take into account emergency response requirements.
- 1.6 Exchange information with the scientists and experts of the Customer State, as needed, to assist plant designers in adequately understanding the site-specific environmental and other circumstances affecting nuclear safety so as to be able to adapt the design as necessary to local conditions. Specifically, the adaptation should adequately address the extreme site specific hazards that may challenge safe plant operations.

When contracting to supply a nuclear power plant, Vendors will address the tasks and issues that require due attention during project implementation for achieving and demonstrating a high level of safety and quality. The responsibility for these tasks and issues should be clearly assigned in the contractual arrangements between the Vendor and the Customer.

- 1.7 Among the tasks which the parties should seek to address in contracting are:
 - 1.7.1 Provision of safety documentation and validated safety analysis reports that are at least as rigorous as what one would provide if the nuclear power plant was built in the Vendor State;
 - 1.7.2 Promotion of a high safety culture as defined in the IAEA International Nuclear Safety Group report "**Key Practical Issues in Strengthening Safety Culture**," in all

² An essential part of this industrial infrastructure is a power transmission grid suitable to provide reliable external power supply to the nuclear power plant.

³ See entry in Appendix B under **IAEA Safety Standards**.

- work on the nuclear power plant site throughout the construction project;⁴
- 1.7.3 Assurance of competent construction management;
 - 1.7.4 Assurance that the systems, structures, and components of the plant are constructed or manufactured and installed to meet the requirements in the specified standards;
 - 1.7.5 Making possible subcontracts on design, construction, manufacturing, installation, and quality control only with companies that have proven their qualifications and competence or have been evaluated and found to meet the requirements by the Vendor;
 - 1.7.6 Managing the work of the subcontractors as needed to ensure their performance in compliance with the specified standards and requirements;
 - 1.7.7 Development of the Customer's human resources and competencies for safe, long-term operation; and
 - 1.7.8 Development of written work procedures, and other guidance needed for safe operation, including emergency operating procedures and severe accident management procedures.

Recognizing that the prime responsibility for existing nuclear power plants they have provided rests with their operators but that Vendors do possess pertinent expertise and share with the operators a strong commitment to their safe operation. Vendors agree to:

- 1.8 Partake in identifying appropriate safety improvements to the nuclear power plants they have supplied;

- 1.9 Integrate essential safety enhancements in future nuclear power plants they offer; and
- 1.10 Implement these changes, when requested and separately agreed upon with the operators.

Recognizing their unique expertise, Vendors may provide, if requested by the Customer and separately agreed, relevant information and guidance to the Customer's State and the Customer to help:

- 1.11 Improve the elements of the Customer State's national infrastructure that influence safe nuclear power plant operation, for example:
 - 1.11.1 Safety aspects of the site selection process;
 - 1.11.2 Development of local skills needed to maintain the nuclear plant in safe operational conditions;
 - 1.11.3 Development of comprehensive plans for offsite emergency management, including local and regional infrastructure;
 - 1.11.4 Transparent and public communication, including timely provision of information in emergency situations.⁵

Before operation of the nuclear power plant begins, the Vendors will inform Customers of the benefits of establishing connections with other operators of nuclear power plants, including pre-start-up reviews by the IAEA and World Association of Nuclear Operators,⁶ and study their relevant best practices for the purpose of learning from others' experiences and safety practices.

⁴ Vendors can also draw attention to the World Association of Nuclear Operators' Principles "Traits of a Healthy Safety Culture" as best practices for implementing the IAEA general principles on safety culture.

⁵ As specified by the **Convention on Early Notification of a Nuclear Accident and the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency**.

⁶ For more information, see the **Charter of the World Association of Nuclear Operators**.

PRINCIPLE 2: PHYSICAL AND CYBER SECURITY

In designing nuclear power plants, Vendors will:

- 2.1 Incorporate comprehensive design provisions made for security, including cyber security;
- 2.2 Ensure security design provisions are compatible with safety and emergency response requirements;⁷
- 2.3 Cooperate with the Customer to incorporate the Customer State's Design Basis Threat;
- 2.4 Incorporate within design provisions the potential for damage from security threats in accordance with the Customer State's Design Basis Threat.

Before entering into a contract to supply a nuclear power plant to a Customer, Vendors will have made a reasonable judgment that the Customer State has or in a timely fashion and in good faith will have:

- 2.5 Provided information to the Vendor on the results of the Customer State's Design Basis Threat analysis sufficient to allow the Vendor to complete the design. The threat and risk analysis should take into account plant location and conditions in the region, consideration of the threat posed by potential cyber-attacks as well as internationally accepted standards;
- 2.6 Become an active party to the IAEA's **Convention on the Physical Protection of Nuclear Materials** and its **2005 Amendment**;
- 2.7 Participated in the United Nations **International Convention for the Suppression of Acts of Nuclear Terrorism**; and
- 2.8 Developed a national legislative and regulatory infrastructure for nuclear

security, including adequate policies and procedures governing:⁸

- 2.8.1 Allocation of responsibility for security among government and plant management;
- 2.8.2 Implementation of a security response capability appropriate to the Design Basis Threat; and
- 2.8.3 The interests of the population at large with respect to physical security provisions.

Recognizing their unique expertise in support of effective security provisions, Vendors may provide, if requested by the Customer and separately agreed, relevant information and guidance to the Customer State and the Customer to help establish in a timely fashion that:

- 2.9 Plant physical security provisions have been undertaken based on a well-established standard, such as the IAEA's **Convention on the Physical Protection of Nuclear Materials**, which typically:
 - 2.9.1 Use the Design Basis Threat to determine how to appropriately equip security staff and to limit the potential use of force to only that necessary;
 - 2.9.2 Establish appropriate standards for the selection, training, and testing of security staff and provisions to enforce them;
 - 2.9.3 Incorporate and address plant design sensitivities, including provisions for the protection of sensitive information and sensitive information assets

⁷ As discussed in the International Nuclear Safety Group's report on the **Interface between Safety and Security at Nuclear Power Plants**.

⁸ An example of such a nuclear security framework is given by the IAEA's **Nuclear Security Fundamentals: Objective and Essential Elements of a State's Nuclear Security Regime**.

- 2.9.4 Take into account provisions for efficient plant operation, safety, and emergency response in security planning; and
- 2.9.5 Ensure physical plant security and acknowledge respect for human rights;
- 2.10 Routine evaluations of the sufficiency of security response capabilities are undertaken.
- 2.11 An integrated safety and security oversight organization is established with responsibility for establishing, monitoring, and continuously adjusting the balance among security, safety, emergency response, and efficient plant operation; and
- 2.12 Continuous improvement and coordination between law enforcement, other Customer State agencies, and plant security are undertaken through follow-up, support, and joint training.

PRINCIPLE 3: ENVIRONMENTAL PROTECTION AND THE HANDLING OF SPENT FUEL AND NUCLEAR WASTE

Before entering into a contract to supply a nuclear power plant to a Customer, the Vendor will have made a reasonable judgment that the Customer State either has or will have in a timely manner:

- 3.1 Enacted national nuclear laws or developed a regulatory framework that:
 - 3.1.1 Formalizes and keeps current a credible national strategy and/or a plan to, in a safe, secure and environmentally sound manner:
 - 3.1.1.1 Store, treat/recycle, or otherwise manage spent fuel and radioactive waste;
 - 3.1.1.2. Decommission closed-down nuclear facilities; and

- 3.1.1.3. Dispose of all radioactive wastes;
- 3.1.2 Addresses safeguards obligations, safety, national and international security, human health, effective management of radioactive releases at all times, and environmental stewardship; and
- 3.2 Ratified, accepted, or otherwise applied the principles of the IAEA's **Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management**.

Vendors will seek to design plants that:

- 3.3 Enhance environmental benefits and minimize environmental impact in operations, including waste production, by applying relevant best practices such as those defined by International Standards Organization and the IAEA;⁹
- 3.4 Provide for safe and secure on-site storage of spent fuel; and
- 3.5 Facilitate ultimate plant decommissioning.

In contracting to sell nuclear power plants, Vendors will seek to:

- 3.6 Address the responsible management by Customers of spent fuel and other radioactive materials and waste.

Recognizing their unique expertise, Vendors will undertake, as specifically agreed, to cooperate with and provide relevant information to pertinent governments and Customers to help promote:

- 3.7 Protection of the environment through the responsible use of natural resources, the reduction of waste and emissions, and the minimization of harmful impacts to the

⁹ Including the ALARA principle.

environment, in accordance with the best technically and economically sound practices of the worldwide nuclear power industry;

- 3.8 A precautionary approach to the environment consistent with the definition provided in the **United Nations Global Compact and the Rio Declaration**; and
- 3.9 Development in Customer States of systems for the long-term management of spent fuel and/or radioactive waste that are rational, economic, safe, secure, and consistent with Customer States' safeguards obligations.

PRINCIPLE 4: COMPENSATION FOR NUCLEAR DAMAGE

Before entering into a contract to supply a nuclear power plant to a Customer, the Vendor will independently make a reasonable judgment that the Customer State has in force, or will have in force before fuel is delivered in the Customer State's territory, a legal regime providing adequate and prompt compensation for the public in the unlikely event of an accident, with protection in effect equivalent to one or more of the following best practices:

- 4.1 A legal regime for compensation and nuclear liability that, *inter alia*:
 - 4.1.1 Contains adequate liability limits and financial protection consistent with current international standards;
 - 4.1.2 Is backed by Customer State guarantees;
 - 4.1.3 Ensures that claims for compensation by possible victims will be channeled to the operator of the nuclear power plant(s) that would be strictly and exclusively

liable and will be channeled to one single competent court;

- 4.1.4 Includes compensation for personal injury, property damage, environmental damage, loss of income, economic loss, and preventive measures;
- 4.1.5 Does not allow compensation amounts to be set aside or reduced by unilateral strict reciprocity requirements; and/or
- 4.2 A treaty relationship with the Vendor State under either the IAEA's **Vienna Convention on Civil Liability for Nuclear Damage**, as amended or, if eligible, the Organisation for Economic Cooperation and Development's **Paris Convention on Third Party Liability in the Field of Nuclear Energy**, as amended; and/or
- 4.3 The IAEA's **Convention on Supplementary Compensation for Nuclear Damage** (CSC)—which is the IAEA's unified global nuclear liability regime that any State can join if it is a Party to the Vienna Convention or Paris Convention or has a domestic law that is consistent with the CSC Annex. Such action would enable global treaty relations crucial to assure worldwide compensation and liability protection during plant operation and transnational transport.

PRINCIPLE 5: NONPROLIFERATION AND SAFEGUARDS

The Vendors are committed to the peaceful use of nuclear energy.

Each Vendor recognizes that its Vendor State is committed to a policy that nuclear power plants

and related materials, equipment, and technology¹⁰ shall be provided to and used by Customer States exclusively for peaceful purposes, consistent with the **Treaty on the Non-Proliferation of Nuclear Weapons**, and in conformity with **Nuclear Suppliers Group Guidelines** and **pertinent United Nations Security Council Resolutions**.

Each Vendor further recognizes that its Vendor State has enacted export laws and/or regulations intended to implement that policy, declares that it is bound by and fully committed to implementing that policy, and supports a strong non-proliferation regime.

Accordingly, each Vendor exports nuclear power plants and related materials, equipment, and technology solely in accordance with relevant national export laws and/or regulations, which implement the foregoing.

As a manifestation of their strong commitment to peaceful uses of nuclear energy and nonproliferation, Vendors undertake to:

- 5.1 Pay special attention to and promote proliferation-resistant designs and take IAEA safeguards requirements into account in design;
- 5.2 Pay special attention to the exclusively peaceful use of trigger list and sensitive dual use items delivered by the Vendor, including the requirements, as applicable to Vendors, in bilateral agreements between Vendor State and Customer State, **Nuclear Suppliers Group guidelines, pertinent United Nations Security Council Resolutions**, and Vendor contracts;
- 5.3 Seek to obtain a commitment from the Customer to implement in a timely manner

at the facility a System of Accounting for and Control of Nuclear Materials and a safeguards approach consistent with its IAEA obligations;

- 5.4 Inform in a timely manner the appropriate authority of the Vendor State and, as appropriate, other Vendors adhering to these Principles, of any serious nonproliferation concerns related to the equipment, materials, and technology provided by the Vendor to the Customer; and
- 5.5 Consult closely with the Vendor State and act in accordance with its instructions upon being informed by the Vendor State or becoming directly aware of actions or events that would raise serious concerns about compliance with the global nonproliferation regime.¹¹

*In addition to the above-mentioned provisions, Vendors welcome the inclusion by Vendor States of provisions in bilateral agreements requiring a Customer State to implement effective nuclear export controls and to have an **IAEA Additional Protocol** in force.*

PRINCIPLE 6: ETHICS

To enhance confidence in nuclear power, vendors undertake to:

- 6.1 Comply with the highest ethical standards in their interactions with Regulators and Customers;
- 6.2 Communicate with good faith, and in the spirit of transparency, about these principles;

¹⁰ As defined in the latest revision of IAEA INFCIRC/254/Part 1.

¹¹ Examples of such actions or events are given in the Appendix A.

- 6.3 Promote worker safety and protect public health and the environment;
- 6.4 Take into account the principle of sustainable development, including the effects of projects on the environment and society;
- 6.5 Proactively cooperate with Customers to inform and consult in a participatory manner with nearby communities regarding public information about planned project activities and their potential social and environmental effects;
- 6.6 Have in place internal programs to discourage corruption and conflicts of interest and to encourage compliance with anticorruption laws, such as those implementing the **United Nations Convention Against Corruption** and/or the **OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions**, and seek to obtain a reciprocal commitment from Customers;
- 6.7 Respect through word and deed fundamental labor rights, including the prohibitions on child and forced labor, non-discrimination in employment, and the rights to freedom of association and collective bargaining;
- 6.8 Respect human rights pursuant to the **Universal Declaration of Human Rights**, recognizing that States bear responsibility for protecting human rights; and
- 6.9 Encourage their suppliers, subcontractors, and other participants in the nuclear power plant industry to demonstrate the same respect for these ethical commitments.

APPENDIX A: APPENDIX TO PRINCIPLE 5: NONPROLIFERATION AND SAFEGUARDS

Examples of actions and events that would constitute serious concerns about compliance with the global nonproliferation regime:

- A.1 A State issues a withdrawal notification from the **Treaty on the Non-Proliferation of Nuclear Weapons** or has unilaterally terminated or suspended the implementation of a safeguards agreement with the IAEA;
- A.2 The IAEA finds, with respect to a State's activities, that the IAEA is no longer able, because of the obstruction by or lack of transparency and cooperation from a State, to fully implement the **IAEA Comprehensive Safeguards Agreement** or the **IAEA Additional Protocol**, or verify that there has been no diversion of nuclear material required to be safeguarded;
- A.3 A State is found by the IAEA to be in non-compliance with its safeguards agreement(s) under Article XII.C of the IAEA Statute; and/or
- A.4 A State proceeds with the test of a nuclear explosive device.

Upon being informed by the Vendor State or becoming directly aware of any such case the Vendor will consult and act in accordance with instructions from the appropriate authorities of the Vendor State. Vendor State responses may include, among others, those indicated in **UN Security Council Resolution 1887**, in the **Final Document of the 2010 NPT Review Conference**, and consistent with Article XII.C of the IAEA Statute.

APPENDIX B: REFERENCES

INTERNATIONAL CONVENTIONS

United Nations Convention Against Corruption—Adopted by the UN General Assembly in resolution A/RES/58/4, October 31, 2003.

OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions—Adopted by the Organisation for Economic Cooperation and Development, signed December 17, 1997.

Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency, Reproduced in IAEA INFCIRC/336, adopted September 26, 1986.

Convention on Early Notification of a Nuclear Accident, Reproduced in IAEA INFCIRC/335, adopted September 26, 1986.

Convention on Nuclear Safety—“Convention on Nuclear Safety,” IAEA INFCIRC/449, adopted June 17, 1994.

Convention on the Physical Protection of Nuclear Material (CPPNM)—Reproduced in IAEA INFCIRC/274/Rev.1, May 1980, and including its amendment, reproduced in GOV/INF/2005/10-GC(49)/INF/6, September 6, 2005.

Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management—“Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management,” Reproduced in IAEA INFCIRC/546, adopted December 1997.

Convention on Supplementary Compensation for Nuclear Damage (CSC)—“Convention on Supplementary Compensation for Nuclear Damage,” IAEA INFCIRC/567, adopted September 12, 1997.

International Convention for the Suppression of Acts of Nuclear Terrorism—Adopted by the UN General Assembly in resolution A/RES/59/290, April 2005.

Paris Convention on Third Party Liability in the Field of Nuclear Energy—Adopted by the Organisation for Economic Cooperation and Development, February 12, 2004.

Vienna Convention on Civil Liability for Nuclear Damage, Reproduced in IAEA INFCIRC/566, adopted September 12, 1997.

IAEA DOCUMENTS

“Considerations to Launch a Nuclear Power Programme”—“Considerations to Launch a Nuclear Power Programme,” International Atomic Energy Agency, Reproduced in IAEA GOV/INF/2007.

“IAEA Action Plan on Nuclear Safety”—Approved by the Board of Governors on 13 September 2011.

IAEA SAFETY STANDARDS

Standards of safety issued pursuant to Article III(A) (6)10 of the IAEA Statute. Safety standards issued since 1997 in the IAEA Safety Standards Series are designated as Safety Fundamentals, Safety Requirements or Safety Guides.

“Establishing the Safety Infrastructure for a Nuclear Power Programme”—“Establishing the Safety Infrastructure for a Nuclear Power Programme,” Specific Safety Guides, IAEA Safety Standards Series, No. SSG-16, 2012.

IAEA Fundamental Safety Principles—“Fundamental Safety Principles,” Safety Fundamentals, IAEA Safety Standards Series No. SF-1, 2006.

IAEA Safety Requirements—Refers to “Safety of Nuclear Power Plants: Design,” Specific Safety Requirements, IAEA Safety Standards Series No. SSR 21, 2012.

IAEA INTERNATIONAL NUCLEAR SAFETY GROUP (INSAG) REPORTS

“Key Practical Issues in Strengthening Safety Culture”—“Key Practical Issues in Strengthening Safety Culture,” Report by the IAEA International Nuclear Safety Group, INSAG-15, 2002.

“The Interface between Safety and Security at Nuclear Power Plants”—“The Interface between Safety and Security at Nuclear Power Plants,” Report by the IAEA International Nuclear Safety Group, INSAG-24, 2010.

IAEA SECURITY STANDARDS

IAEA Nuclear Security Fundamentals—“Objective and Essential Elements of a State’s Nuclear Security Regime”, IAEA Nuclear Security Series No. 20, 2013.

IAEA Nuclear Security Recommendations—“Nuclear Security Recommendations on Physical Protection of Nuclear Material and Nuclear Facilities”, INFCIRC/225/Rev5, 2011.

IAEA SAFEGUARDS

IAEA Additional Protocol—“Model Protocol Additional to the Agreement(s) between State(s) and the International Atomic Energy Agency for the application of Safeguards,” International Atomic Energy Agency, INFCIRC/540 (Corrected), September 1997.

IAEA Comprehensive Safeguards Agreement—“The Structure and Content of Agreements Between the Agency and States Required in Connection with the Treaty on the Non-proliferation of Nuclear Weapons,” International Atomic Energy Agency, INFCIRC/153 (Corrected), June 1972.

State System of Accounting for and Control of Nuclear Materials—See “Systems of Accounting for and Control of Nuclear Material,” *IAEA Bulletin* vol. 17, no. 2, 1975.

OTHER DOCUMENTS AND INTERNATIONAL AGREEMENTS

Charter of the World Association of Nuclear Operators—February 1, 2010.

Final Document of the 2010 NPT Review Conference—NPT/CONF.2010/L.2, May 27, 2010.

Nuclear Suppliers Group Guidelines—Refers to 1) “Guidelines for Nuclear Transfers,” Reproduced in IAEA INFCIRC/254/Part 1, as amended November 7, 2007; and 2) “Guidelines for Transfers of Nuclear-Related Dual-Use Equipment, Materials, Software and Related Technology,” Reproduced as IAEA INFCIRC/254/ Part 2, as amended March 20, 2006.

Pertinent United Nations Security Council Resolutions—Refers to resolutions adopted by the United Nations Security Council under Chapter VII of the UN Charter that address issues relevant to nuclear nonproliferation and illicit trafficking. It includes UN Security Council resolutions S/RES/1540 (2004), S/RES/1810 (2009), S/RES/1887 (2009) and state-specific resolutions such as S/RES/1718 (2006) and S/RES/1929 (2010).

Rio Declaration—Rio Declaration on Environment and Development, A/CONF.151/26 (vol. I), adopted June 14, 1992.

Treaty on the Non-Proliferation of Nuclear Weapons (NPT)—Reproduced in IAEA INFCIRC/140, March 5, 1970.

United Nations Global Compact—“Ten Principles of the United Nations Global Compact,” 2000.

UN Security Council Resolution 1887—Adopted by the UN Security Council in S/RES/1887, September 24, 2009.

Universal Declaration of Human Rights—Adopted by the UN General Assembly in resolution A/RES/217(III) A, December 10, 1948.

WANO Principles “Traits of a Healthy Safety Culture”—PL 2013-1, May 2013.

ADOPTERS



ROSATOM

TOSHIBA



SUPPORTING EXPERTS

Omer F. Brown, II, Attorney-at-Law, Omer F. Brown, II Law Office

Jacques Bouchard, Adviser to the Chairman, CEA (Commissariat à l'énergie atomique); former Chairman, Generation IV International Forum; Chairman, IAEA Standing Advisory Group for Nuclear Energy (SAGNE)

Michael Gadbow, Distinguished Senior Fellow and Adjunct Professor, Institute for International Economic Law, Georgetown University Law Center

Pierre Goldschmidt, Nonresident Senior Associate, Carnegie Endowment; former Deputy Director General-Safeguards, IAEA

KunMo Chung, former Minister of Science and Technology, South-Korea; co-founder of the International Risk Governance Council; fellow of the American Nuclear Society and the Korean Academy of Science and Technology; distinguished research Professor, George Mason University and Ajou University

Jukka Laaksonen (until January 2012), Director General, STUK (Finnish Radiation and Nuclear Safety Authority); Chairman, Western European Nuclear Regulators Association (WENRA); Vice Chairman, IAEA International Nuclear Safety Group (INSAG)

André-Claude Lacoste, former Chairman, Autorité de Sûreté Nucléaire; former Chairman, Multinational Design Evaluation Program Policy Group, OECD/NEA; Chairman of the Commission on Safety Standards, IAEA; President of the 6th review meeting of the Convention on Nuclear Safety

Richard Meserve, President, Carnegie Institution of Science; former Chairman, Nuclear Regulatory Commission; Commissioner, U.S. Department of Energy Blue Ribbon Committee on America's Nuclear Future; Chairman, IAEA INSAG

Nathalie Horbach, Independent Nuclear Law Consultant, Dundee University

Irving Rotter, Partner, Sidley Austin, LLP

Frank Saunders, Vice President-Nuclear Oversight and Regulatory Affairs, Bruce Power

Gare Smith, Partner, Foley Hoag LLP



CARNEGIE
ENDOWMENT FOR
INTERNATIONAL PEACE

The Principles of Conduct are intended to promote free and fair competition in the market for nuclear power plants and to enhance the likelihood that the global development of nuclear energy will proceed sustainably and beneficially.

Visit nuclearprinciples.org to learn more.