



GLOBAL NUCLEAR ENERGY PARTNERSHIP (GNEP) STEERING GROUP ACTION PLAN

An Action Plan for the Safe, Secure Global Expansion of Nuclear Energy
Adopted 13 December 2007

1. Background

On September 16, 2007, sixteen States jointly signed the “GNEP Statement of Principles” (Appendix 1). GNEP Partner States share the common vision of the necessity of the expansion of nuclear energy for peaceful purposes in a safe and secure manner. The GNEP Partners decided to establish a three-tiered structure consisting of an Executive Committee comprised of ministerial-level officials from each Partner State, a Steering Group comprised of authorized representatives for each Partner, and Working Groups comprised of designated experts from each Partner. As a first step in implementing cooperation, the Executive Committee determined to establish two Working Groups, one to address nuclear infrastructure development and one to address reliable nuclear fuel services, and requested the Steering Group to develop Terms of Reference for each of these Working Groups. Other Working Groups may be established at the direction of the Executive Committee. The Executive Committee also approved the development of a Steering Group Action Plan. This Plan is to describe initial steps that contribute to realization of the common vision and goals for nuclear energy expansion as described in the GNEP Statement of Principles.

2. Goal

The Steering Group goal is to facilitate cooperation among the GNEP Partners in pursuing the expansion of clean, sustainable, nuclear energy worldwide in a safe and secure manner, while at the same time reducing the risk of nuclear proliferation. The Steering Group will develop and coordinate a program to promote the benefits of GNEP for its participants.

3. Objectives

The objectives, established by the GNEP Statement of Principles, are:

- Expand nuclear power to help meet growing energy demand in a sustainable manner and in a way that provides for safe operation of Nuclear Power Plants and management of wastes.

- In cooperation with the IAEA, continue to develop enhanced nuclear safeguards to effectively and efficiently monitor nuclear materials and facilities, to ensure nuclear energy systems are used only for peaceful purposes.
- Establish international supply frameworks to enhance reliable, cost-effective fuel services and supplies to the world market, providing options for generating nuclear energy and fostering development while reducing the risk of nuclear proliferation by creating a viable alternative to acquisition of sensitive fuel cycle technologies.
- Develop, demonstrate, and in due course deploy advanced fast reactors that consume transuranic elements from recycled spent fuel.
- Promote the development of advanced, more proliferation resistant nuclear power reactors appropriate for the power grids of developing countries and regions.
- Develop and demonstrate, inter alia, advanced technologies for recycling spent nuclear fuel for deployment in facilities that do not separate pure plutonium, with a long term goal of ceasing separation of plutonium and eventually eliminating stocks of separated civilian plutonium. Such advanced fuel cycle technologies, when available, would help substantially reduce nuclear waste, simplify its disposition and draw down inventories of civilian spent fuel in a safe, secure, and proliferation resistant manner.
- Take advantage of the best available fuel cycle approaches for the efficient and responsible use of energy and natural resources.

4. Initial Actions

The Executive Committee established Working Groups at its September 16, 2007 meeting to provide focus for concrete activities and progress to address GNEP objectives. The objectives of these Working Groups are defined below. Additional detail regarding the initial efforts in these two priority areas is provided in the Working Groups' Terms of Reference, Appendix 2. In exercising its activities, the Working Groups will recognize the critical and complementary roles of industry, governments, the International Atomic Energy Agency and other international institutions and fora (e.g. Generation IV International Forum).

As other actions are identified by the GNEP Executive Committee and the Executive Committee requests the Steering Group to establish additional Working Groups and approve their draft Terms of Reference (which will outline goals, objectives, deliverables, and schedule for the activities proposed), they will be added to this Action Plan.

4.1 Infrastructure Development Working Group

The Infrastructure Working Group is established to carry out work on the issues specified in the Scope section of the Terms of Reference to support the GNEP Statement of Principles objective to “expand nuclear power to help meet growing energy demand in a sustainable manner and in a way that provides safe operations of Nuclear Power Plants and management of wastes” by facilitating the development of the infrastructure needed for worldwide expansion of clean, sustainable, nuclear energy worldwide in a safe and secure manner, while at the same time reducing the risk of nuclear proliferation, in

accordance with the Statement of Principles. The Terms of Reference for the Infrastructure Development Working Group is attached in Appendix 2.

4.2 Reliable Nuclear Fuel Services Group

The Reliable Nuclear Fuel Services Working Group is established to carry out work on the issues specified in the Scope section of the Terms of Reference to support cooperation of the Partners to reach the objective to “establish international supply frameworks to enhance reliable, cost-effective fuel services and supplies to the world market, providing options for generating nuclear energy and fostering development while reducing the risk of nuclear proliferation by creating a viable alternative to acquisition of sensitive fuel cycle technologies,” as set forth in the GNEP Statement of Principles. The Terms of Reference for the Reliable Nuclear Fuel Services Working Group is attached in Appendix 2.

5. Structure for GNEP Execution

A framework for achieving GNEP goals and objectives as adopted by the Executive Committee is represented in Figure 1. Specifics regarding the roles and responsibilities of the Executive Committee, Steering Group, and Working Groups are provided in Appendix 3. A current list of GNEP members is included in Appendix 5 and will be updated as appropriate.



Figure 1. GNEP Partnership Structure

Milestones for the Steering Group to implement this Action Plan have been developed and are summarized in Appendix 4.

6. Partnership Resources

The resources used to carry out GNEP Partnership activities are voluntary and envisioned to come either from contributions by GNEP Partners, or third-parties if appropriate, and accepted by the Partners. Resources may include in-kind resources (e.g., facilities, expertise, training, materials, and assessment tools) and funding. Overall management and oversight of resources received by or contributed to the Partnership is to be the responsibility of the Steering Group, on behalf of the Executive Committee. Such oversight is intended to be executed in a manner consistent with requests or requirements of contributors. At the direction of the Steering Group, Working Groups are to provide management and coordination of resources contributed towards their activities. The Chair of the Steering Group, in coordination with the Vice-Chairs, will manage and maintain overall accounting of such resources and report the use of such resources to the Executive Committee on an annual basis.

7. Summary

This Action Plan outlines initial priorities, mechanisms for executing cooperative efforts, and initial milestones for cooperative activities. The result of this work is intended to support the realization of the vision and goals described in the GNEP Statement of Principles. The Action Plan is to be updated as needed to assure continued progress towards achieving this goal.

APPENDIX 1

Global Nuclear Energy Partnership Statement of Principles

September 16, 2007

Global Nuclear Energy Partnership Statement of Principles

Global Nuclear Energy Partnership (GNEP) is cooperation of those States that share the common vision of the necessity of the expansion of nuclear energy for peaceful purposes worldwide in a safe and secure manner. It aims to accelerate development and deployment of advanced fuel cycle technologies to encourage clean development and prosperity worldwide, improve the environment, and reduce the risk of nuclear proliferation.

States participating in this cooperation would not give up any rights, and voluntarily engage to share the effort and gain the benefits of economical, peaceful nuclear energy.

Commitments and international obligations, including IAEA safeguards and the requirements of UN Security Council Resolution 1540, will be strictly observed. The highest levels of nuclear safety and security will be maintained.

The cooperation will be carried out under existing and, where appropriate, new bilateral arrangements as well as existing multilateral arrangements such as the Generation IV International Forum and the International Project on Innovative Nuclear Reactors and Fuel Cycles.

While recognizing the need for a variety of approaches and technical pathways in achieving a long-term vision of the future global civilian nuclear fuel cycle, which will help ensure that nuclear energy makes a major contribution to global development in the 21st century consistent with non-proliferation and safety objectives, this cooperation will be pursued with the following objectives:

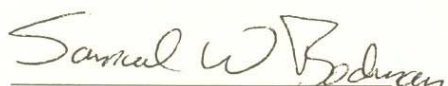
- Expand nuclear power to help meet growing energy demand in a sustainable manner and in a way that provides for safe operations of Nuclear Power Plants and management of wastes.
- In cooperation with the IAEA, continue to develop enhanced nuclear safeguards to effectively and efficiently monitor nuclear materials and facilities, to ensure nuclear energy systems are used only for peaceful purposes.

September 16, 2007

- Establish international supply frameworks to enhance reliable, cost-effective fuel services and supplies to the world market, providing options for generating nuclear energy and fostering development while reducing the risk of nuclear proliferation by creating a viable alternative to acquisition of sensitive fuel cycle technologies.
- Develop, demonstrate, and in due course deploy advanced fast reactors that consume transuranic elements from recycled spent fuel.
- Promote the development of advanced, more proliferation resistant nuclear power reactors appropriate for the power grids of developing countries and regions.
- Develop and demonstrate, inter alia, advanced technologies for recycling spent nuclear fuel for deployment in facilities that do not separate pure plutonium, with a long term goal of ceasing separation of plutonium and eventually eliminating stocks of separated civilian plutonium. Such advanced fuel cycle technologies, when available, would help substantially reduce nuclear waste, simplify its disposition and draw down inventories of civilian spent fuel in a safe, secure, and proliferation-resistant manner.
- Take advantage of the best available fuel cycle approaches for the efficient and responsible use of energy and natural resources.

Other countries that share this vision will be welcome to participate.

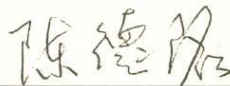
We voluntarily affirm this Statement of Principles while acknowledging its non-binding nature.



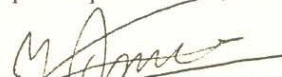
Samuel W. Bodman
Secretary of Energy
United States



Alain Bugat
Chairman, French Atomic Energy Commission
France

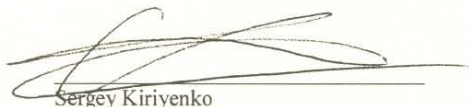


Chen Deming
Vice Chairman, National Development and
Reform Commission
People's Republic of China



Yukio Amano
Ambassador, Permanent Mission of Japan
to the International Organization to Vienna
Japan

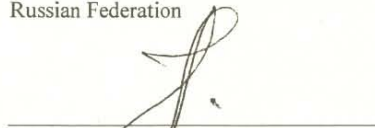
September 16, 2007



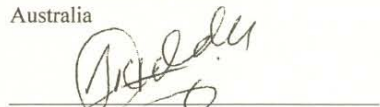
Sergey Kiriyyenko
Head of Federal Atomic Energy Agency
Russian Federation



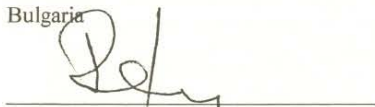
John Carlson
Director General, Australian Safeguards and
Non-Proliferation Office
Australia



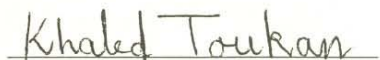
Chavdar Zhechev
Ambassador Extraordinary and Plenipotentiary
of the Republic of Bulgaria to the United
Nations
Bulgaria



Joseph Adda
Minister of Energy
Ghana



József Rónaky
Director General, Hungarian Atomic Energy
Authority
Hungary



Khaled Toukan
Khaled Toukan
Minister of Higher Education and Scientific
Research
Jordan




Kayrat Abdrakhmanov
Ambassador Extraordinary and Plenipotentiary
of the Republic of Kazakhstan to the Austrian
Republic
Kazakhstan



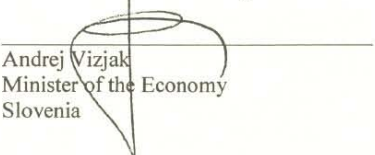
Artūras Dainius
Undersecretary, Ministry of Economy
Lithuania



Piotr Woźniak
Minister of Economy
Poland



Valica Gorea
President of the Romanian Nuclear Agency
Romania



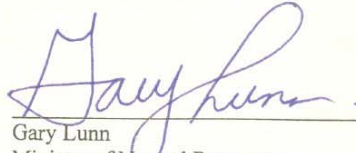
Andrej Vizjak
Minister of the Economy
Slovenia



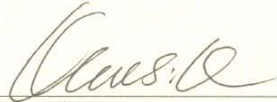
Yuriy Boyko
Minister of Fuel and Energy
Ukraine



Pier Luigi Bersani
Minister of Economic Development
Republic of Italy
November 13, 2007



Gary Lunn
Minister of Natural Resources
Canada
December 4, 2007



Woo Sik Kim
Deputy Prime Minister and
Minister of Science and Technology
Republic of Korea
December 10, 2007

APPENDIX 2

Terms of Reference for Working Groups

GNEP WORKING GROUP ON INFRASTRUCTURE DEVELOPMENT

Terms of Reference

Adopted 13 December 2007

This Terms of Reference describes a proposed scope, objectives and initial set of deliverables for the GNEP Infrastructure Working Group to support the cooperative goals outlined in the GNEP Steering Group Action Plan. It is understood that the specific activities may evolve as the Infrastructure Working Group engagement matures and continues to be integrated with other initiatives.

OBJECTIVE

The Infrastructure Working Group (Working Group) is established to carry out work on the issues specified in the Scope section below to support the GNEP Statement of Principles objective to “expand nuclear power to help meet growing energy demand in a sustainable manner and in a way that provides safe operations of Nuclear Power Plants and management of wastes” by facilitating the development of the infrastructure needed for worldwide expansion of clean, sustainable, nuclear energy worldwide in a safe and secure manner, while at the same time reducing the risk of nuclear proliferation, in accordance with the Statement of Principles.

SCOPE

This Working Group is to identify common interest among the partners, recommend practical measures, and carry out activities as specified below and without prejudice to market and commercial operations to address the critical elements needed for the development and implementation of a robust nuclear energy infrastructure to meet the above mentioned objective. These include, but are not limited to, cooperation among Partner States in the areas of national planning for nuclear energy introduction, grid management requirements for the introduction of NPP's, including regional sharing, human resource development, meeting nonproliferation and safeguards requirements, legal frameworks, regulatory requirements, nuclear safety, financing considerations, environmental impacts, emergency management, radiation protection, quality assurance, codes and standards, operational practices and experiences, physical protection and security, spent fuel, waste management and transportation, while taking full advantage of IAEA and bilateral efforts. When possible and necessary, activities are to be coordinated with the Working Group on Reliable Nuclear Fuel Services.

ACTIVITIES

To help leverage GNEP Partners' resources as they may make available for this purpose (e.g. technical capabilities, experience) and to focus cooperative efforts and prioritize infrastructure development activities, the Working Group will exchange views on the following issues:

- Improving the understanding of needs, challenges and potential solutions necessary for taking GNEP Principles from concept to reality. This could include the following:
 1. Determining infrastructure needs of GNEP partners.
 2. Identifying areas of global infrastructure that could be improved through international cooperation (fuel services notwithstanding) in coordination with multilateral organizations and fora such as the IAEA or GIF.
 3. Identifying relevant on-going activities to support infrastructure development (multilateral, bilateral, and other) in GNEP Partner countries.
 4. Identifying resources and potential opportunities for GNEP cooperation.
 5. Characterizing financial and organizational barriers to introduction/expansion of nuclear power and identify means to address them.
- Developing a path forward that reflects the interests, concerns, and contributions of GNEP Partner States.
- Evaluating options for additional resources, such as in-kind (*inter alia* cost-free experts, internships, university programs) assistance or funding mechanisms to support the relevant activities.
- Implementing concrete actions and investments. Take realistic and pragmatic next-steps that increase benefits to GNEP Partners.

In exercising its activities, the Working Group recognizes the critical and complementary roles of industry, governments, the International Atomic Energy Agency and other international institutions.

NEXT STEPS

- Form and organize the working group. In the near-term, identify participants who are to work together to define a process enabling the Working Group activities.
- Invite relevant international organizations and fora such as Generation IV International Forum, based upon consensus, to cooperate closely with the Working Group activities.
- Develop a program plan for the Infrastructure Working Group.
- Complete fact finding on issues specified and prepare report to the Steering Group.

GNEP WORKING GROUP ON RELIABLE NUCLEAR FUEL SERVICES

Terms of Reference

Adopted 13 December 2007

OBJECTIVE

The Reliable Nuclear Fuel Services Working Group (Working Group) is established to carry out work on the issues specified in the Scope section below to support cooperation of the Partners to reach the objective to “establish international supply frameworks to enhance reliable, cost-effective fuel services and supplies to the world market, providing options for generating nuclear energy and fostering development while reducing the risk of nuclear proliferation by creating a viable alternative to acquisition of sensitive fuel cycle technologies,” as set forth in the GNEP Statement of Principles.

SCOPE

A variety of approaches have been proposed for enhancing reliability of nuclear fuel services, especially with regard to the front-end of the fuel cycle. For the establishment of reliable comprehensive fuel service arrangements, including spent fuel management, it is essential to consider pathways and constraints that suppliers and users might have in particular with regard to legal, political, and commercial considerations.

The Working Group will identify common interest among the Partners and recommend practical measures for moving towards reliable comprehensive fuel service arrangements, including spent fuel management. In developing these measures, the Working Group will:

- Emphasize the need for approaches that are consistent with equal rights and obligations, without prejudice to market and commercial operations;
- Seek solutions that are independent of the specific country or region; and
- Emphasize the need for solutions that meet public acceptability requirements and are technically feasible and economically viable.

ACTIVITIES

The ability to meet the proposed activities and target dates is subject to agreements among the GNEP Partners for providing sufficient resources for the work. To address these issues, the Working Group will:

- Exchange views on and, as appropriate, identify, assess and develop possible responses on:
 - Government and non-governmental capabilities.
 - Common practices.
 - Limitations.
 - Recipient and user requirements.
 - Respective legal and regulatory frameworks.
 - Respective commercial frameworks.
 - The relationship between state-level fuel supply assurances and commercial providers of uranium and fuel cycle services.

- Public acceptability requirements.
- Consult with other GNEP working group(s) as needed.
- Submit a report to the GNEP Steering Group summarizing the work accomplished, recommending practical measures to move towards comprehensive reliable fuel service arrangements, and recommendations for the next phase of the Working Group's work.

In exercising its activities, the Working Group recognizes the critical and complementary roles of industry, governments, the International Atomic Energy Agency and other international institutions.

NEXT STEPS

- Identify Working Group Members and agree on work assignments and specific schedules.
- Invite relevant international organizations and fora, such as Generation IV International Forum, based upon consensus, to cooperate closely with the Working Group activities.
- Complete fact finding on issues specified in the Scope section.
- Report to the GNEP Steering Group on the findings of this group; recommend critical pathways forward in the development of a reliable fuel service arrangement(s).

APPENDIX 3

Global Nuclear Energy Partnership Operating Documents

Partners and Observers

- The Global Nuclear Energy Partnership (GNEP) is formed through the cooperation of those sovereign States that share the common vision of the necessity of the expansion of nuclear energy for peaceful purposes worldwide in a safe and secure manner. A state may become a Partner by affirming and signing the GNEP Statement of Principles. Invitations to join GNEP are sent on behalf of Partners taking into account compliance with nonproliferation commitments and international obligations, international standards in the nuclear area, appropriate safeguards and the requirements of UN Security Council Resolution 1540. During a reasonable period of time that States take to consider accepting the invitation to join GNEP, such states may be described as Candidate Partners. By consensus of GNEP Partners, a country that is not a Candidate Partner may also be invited to participate as an Observer for a reasonable period of time. Inter-governmental organizations that have a direct relationship to nuclear energy matters may also be deemed as Observers to GNEP. The admission of any membership or observership in GNEP is to be decided by consensus within GNEP. Only officials from Partner States may take part in decisions, which are to be made by consensus.

Executive Committee, Steering Group and Working Groups

Cooperation based on GNEP Principles and Objectives requires coordination of GNEP activities and decision-making processes. For this purpose, the following organization structure is proposed

- Executive Committee: members are the Ministerial-level officials designated from each GNEP Partner or Observer. Each GNEP Observer may also designate a Senior Official to sit on the Executive Committee. The Executive Committee is expected to convene annually, or more often as may be determined by the members of the Executive Committee. When the Executive Committee meets in a Partner state, that Partner is expected to serve as the Chair for and host of the Executive Committee meeting.
- Steering Group: members are designated by the GNEP Partner senior officials from the Executive Committee. All activities are to be carried out at the direction of, and consistent with, decisions of the Executive Committee. The Steering Group serves as the body to carry out actions on behalf of GNEP and may seek guidance from the Executive Committee as necessary. The Steering Group may establish a Chair and Vice-Chairs, as determined by consensus of the Steering Group. The Chair and Vice-Chairs should serve for a period of not longer than two years, unless incumbents of those positions are reaffirmed for an additional term or terms.
- Working Groups are to be established at the request of the GNEP Partner senior officials of the Executive Committee or the Steering Group in order to carry out work in particular areas. The Steering Group is expected to approve Terms of

Reference for each Working Group and the duration of the Working Group's activity. The Working Groups may establish a Chair and Vice-Chairs, as determined by consensus of the Working Group. Each Working Group is to carry out its activities at the direction of and consistent with recommended Terms of Reference and recommendations of the Executive Committee and Steering Group. The Working Groups may recommend to the Steering Group to disband itself or amend their Terms of Reference. The Chair and Vice-Chair of each Working Group should serve for a period of not longer than two years, unless incumbents of those positions are reaffirmed for an additional term.

APPENDIX 4

Global Nuclear Energy Partnership Steering Group Initial Milestones

Proposed Delivery Date	Proposed Actions
December 2007	<ol style="list-style-type: none"> 1. Hold the first official GNEP Steering Group meeting in Vienna, Austria, and elect a Chair and Vice-Chair(s). 2. Receive base-line briefings on matters relevant to GNEP. 3. Review draft “GNEP Steering Group Action Plan,” modify as necessary and seek approval. 4. Review proposed Working Groups, “Terms of Reference”, modify as necessary and seek approval. 5. Nominate Working Group members and seek approval. 6. Agree on a date and host country for the next Steering Group meeting. 7. Propose a date and host site for the next Executive Committee meeting in 2008. 8. Agree on a “standard format” for future Steering Group meetings. Sample Format: <ol style="list-style-type: none"> a) Welcome by Chair b) Welcome by host country c) Approval of Minutes of last meeting d) Working Group Status Reports e) Call for old business f) Call for new business g) Adjourn 9. Discuss GNEP resources and next steps. 10. Chair to compile minutes of the meeting and distribute to Steering Group members within 15 business days from the close of the meeting.
January – June 2008	<ol style="list-style-type: none"> 1. Meeting(s) of the Reliable Nuclear Fuel Services and Infrastructure Working Groups - agree on work assignments, specific schedules, and initiate work. 2. Working Groups prepare summaries of progress to date for presentation at next Steering Group meeting; forward to Chair no less than two weeks prior to next Steering Group meeting.
April – June 2008	<ol style="list-style-type: none"> 1. Hold second GNEP Steering Group Meeting using agreed upon “standard format” from the initial meeting. (See above)

	<ol style="list-style-type: none"> 2. New GNEP Partners provide an overview of their goals and objectives as a GNEP Partner. 3. Review reports from the Working Groups. 4. Initiate planning for the third GNEP Executive Committee meeting and draft an agenda. 5. Agree on a date and host country for the next Executive Committee meeting. 6. Initiate draft of GNEP Partner's Annual Report 7. Agree on a date and host country for the next Steering Group meeting – note this could possibly be held in conjunction with (before) the annual Executive Committee meeting, and draft an agenda. 8. Chair to compile minutes of the meeting and distribute to Steering Group members within 15 business days from the close of the meeting.
June – November 2008	<ol style="list-style-type: none"> 1. Working Groups continue activities in accordance with the Terms of Reference. 2. Working Groups prepare summaries of progress to date for presentation at next Steering Group meeting; forward to Chair no less than one month prior to next Steering Group meeting.
August – November 2008	<ol style="list-style-type: none"> 1. Prepare draft Steering Group summary report of the activities to date. 2. Hold third GNEP Steering Group meeting, (possibly immediately prior to the annual Executive Committee meeting) using agreed upon “standard format” from the last meeting. Note: Host Country will Chair the Executive Committee meeting. 3. Seek approval of GNEP Partners Annual Report; if approved, submit to the Executive Committee. 4. Review reports from the Working Groups. 5. Agree on a date and host country for the next Steering Group meeting, and draft an agenda. 6. Chair to compile minutes of the meeting and distribute to Steering Group members within 15 business days after the meeting. 7. Prepare Steering Group summary report of first year activities; submit to Executive Committee.
November 2008 and forward	<ol style="list-style-type: none"> 1. Working Groups continue their activities as directed by the Steering Group and Executive

	<p>Committee; prepare summary of progress to date.</p> <ol style="list-style-type: none">2. Hold fourth GNEP Steering Group Meeting using agreed upon “standard format” from last meeting.3. Review reports from the Working Groups.4. Steering Group to execute any new action resulting from the Executive Committee meeting. This may include new topics for investigation, new working groups, or other GNEP relevant topics for discussion or action.5. Agree on a date and host country to hold next Steering Group meeting, and draft an agenda.6. Chair to compile minutes of the meeting and distribute to Steering Group members within 15 business days from the close of the meeting.
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APPENDIX 5
List of Global Nuclear Energy Partnership Partners and Observers
(As of December 13, 2007)

GNEP Partners

(Note: Additional countries are still in the process of considering the invitation to joint GNEP)

Australia

Bulgaria

Canada

China

France

Ghana

Hungary

Italy

Japan

Jordan

Kazakhstan

Korea, Republic of

Lithuania

Poland

Romania

Russia

Slovenia

Ukraine

United States

GNEP Observer Organizations

IAEA

Generation IV International Forum

Euratom