

**PART III – List of Documents,  
Exhibits, And Other Attachments**

**Section J**

**Appendix G**

**DOE Research and Development Bilateral  
And Multilateral Agreements**

## Office of Policy and International Affairs

### All In Force Bilateral Agreements

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
61	407	8/1/1996	8/1/2001	Primary DOE			None	Energy Research and Development	Energy Technology Cooperation
<p><b>Title:</b> <i>Specific Arrangement between the Department of Energy of the United States of America and the Public Works and Services Secretariat of the Argentine Republic in the Area of Energy Technology Cooperation</i></p> <p><b>Comment:</b> Energy Forecasting meeting was hosted by FE in Oct. of 97. Seminar on New Technologies for the Energy Sector was held in Buenos Aires in Dec 98. EERE has work on energy efficiency and renewable projects started under a statement of intent which was a precursor to this agreement. In Dec of 97 four priority areas of work were identified - energy efficiency, energy and environment, energy planning, and renewable energy by then Secretaries of Energy.</p>									
62	409	10/16/199	10/16/200	Primary DOE			None	Arms Control and Nonproliferation	Nuclear Technologies
<p><b>Title:</b> <i>Implementing Arrangement between the Department of Energy of the United States of America and the National Atomic Energy Commission of the Argentine Republic for Technical Exchange and Cooperation in the area of Peaceful Uses of Nuclear Energy</i></p> <p><b>Comment:</b> Expanded sister lab arrangement supporting Article IV of the NPT. Existing annexes cover work in Molybdenum-99 production for LEU, boron neutron capture therapy, decontamination and decommissioning, and LEU advanced fuels.</p>									
475	431	4/13/1998	10/16/200	Secondary DOE		62	Primary DOE	Arms Control and Nonproliferation	Annex 1 - LEU Moly-99 production
<p><b>Title:</b> <i>Project Annex 1 Cooperation in the Field of Molybdenum-99 Production from Low-Enriched Uranium</i></p> <p><b>Comment:</b> In force as long as the Implementing Arrangement. Action sheets are under development.</p>									
521	431	2/8/1999	2/8/2003	Tertiary DOE		475	Secondary DOE	Nuclear Energy	Action Sheet 1 - Project Annex 1
<p><b>Title:</b> <i>Action Sheet 1 pursuant to Project Annex 1 for Cooperation in the Field of Molybdenum-99 Production for Low-Enriched Uranium between the National Atomic Energy Commission of the Argentine Republic and the University of Chicago, as Operator of Argonne National Laboratory</i></p> <p><b>Comment:</b></p>									
476	431	4/13/1998	10/16/200	Intergovernmental		62	Primary DOE	Arms Control and Nonproliferation	Annex 2 - Boron Neutron Capture Therapy
<p><b>Title:</b> <i>Project Annex 2 Cooperation in the Area of Boron Neutron Capture Therapy</i></p> <p><b>Comment:</b> In force as long as the Implementing Arrangement. Expert visits are underway.</p>									
503	431	8/11/1998		Tertiary DOE		476	Secondary DOE	Arms Control and Nonproliferation	Action Sheet 1
<p><b>Title:</b> <i>Action Sheet 1 Pursuant to Project Annex 2 Cooperation in the Field of Boron Neutron Capture Therapy</i></p> <p><b>Comment:</b> Technical exchange visits.</p>									

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477	431	4/13/1998	10/16/2000	Secondary DOE		62	Primary DOE	Arms Control and Nonproliferation	Annex 3 - D&D of Nuclear Facilities
<b>Title:</b> <i>Project Annex 3 Cooperation in the Field of Decontamination and Decommissioning of Nuclear Facilities</i>									
<b>Comment:</b> In force as long as the Implementing Arrangement. Workshop was successfully held in fall of 98 at ANL.									
496	431	8/18/1998	10/16/2000	Secondary DOE		62	Primary DOE	Arms Control and Nonproliferation	Annex 4 - Advanced Fuels
<b>Title:</b> <i>Project Annex 4 Cooperation in Field of Low Enriched Uranium Advanced Fuels</i>									
<b>Comment:</b> Remains in force as long as the Implement Arrangement. Action sheets are under development.									
555	431	2/8/1999	2/8/2003	Tertiary DOE		496	Secondary DOE	Arms Control and Nonproliferation	Action Sheet 1 Annex 4, Dart Code Development
<b>Title:</b> <i>Action Sheet 1 Pursuant to Project Annex 4 for Cooperation in the Field of Low Enriched Uranium Advanced Fuels between the National Atomic Energy Commission of the Argentine Republic (CNEA) and the University of Chicago, as Operator of Argonne National Laboratory</i>									
<b>Comment:</b>									
63	331	4/18/1994	4/18/2004	Primary DOE			None	Arms Control and Nonproliferation	International Safeguards Applications
<b>Title:</b> <i>Agreement between the United States Department of Energy and the National Atomic Energy Commission of Argentina Concerning Research and Development in Nuclear Material Control, Accountancy, Verification, Physical Protection, and Advanced Containment and Surveillance Technology for International Safeguards Applications</i>									
<b>Comment:</b> Cooperate in research, development, testing, and evaluation of technology, equipment and procedures in order to improve nuclear material control, accountancy, verification, physical protection and advanced containment and surveillance technologies for international safeguards applications.									
64	387	5/29/1996	5/29/2006	Primary DOE			None	Environmental Restoration and Waste Management	Radioactive and Mixed Waste Management
<b>Title:</b> <i>Implementing Arrangement between the Department of Energy of the United States of America and the National Atomic Energy Commission of the Argentine Republic for Technical Exchange and Cooperation in the Area of Radioactive and Mixed Waste Management</i>									
<b>Comment:</b> Study radioactive and mixed waste management activities in such areas as: preparation and packaging; decontamination and decommissioning; surface and subsurface storage; characterization of geologic formations; disposal in geologic formations, etc.									

## Country: Australia

509	456	9/15/1998	9/14/2008	Primary DOE			None	Arms Control and Nonproliferation	Safeguards Arrangement
<b>Title:</b> <i>Arrangement between the United States Department of Energy and the Australian Safeguards and Nonproliferation Office Concerning Research and Development in Nuclear material Control Accountancy, Verification, Physical Protection, Advance Containment and Surveillance Technologies for International Safeguards</i>									
<b>Comment:</b>									

## Country: Austria

**All In Force Bilateral Agreements**

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
65	337	9/18/1994		Primary DOE			None	Energy Efficiency and Renewable Energy	EE/Conservation and Climate Change
<p><b>Title:</b> <i>Memorandum of Understanding on Cooperation in Environmental Aspects of Energy Policy and the Protection of Global Climate</i></p> <p><b>Comment:</b> Cooperate in areas of sufficient growth of energy supplies; energy efficiency and conservation measures and protection of the biosphere (climate change).</p>									

**Country: Bangladesh**

501	450	12/15/199		Statement of Intent			None	Energy Research and Development	SOI in Enrgy Cooperation
<p><b>Title:</b> <i>Joint Statement of Cooperation in Energy</i></p> <p><b>Comment:</b></p>									
514	460	2/11/1999	2/11/2004	Primary DOE			None	Information and/or Personnel Exchange	Exchange of Energy Information
<p><b>Title:</b> <i>Arrangement between the Department of Energy of the United States of America and the Ministry of Energy and Mineral Resources, Government of the People's Republic of Bangladesh for Exchange of Energy Information</i></p> <p><b>Comment:</b> EIA will work with an agency designated by MEOMR to establish a reasonably balanced exchange of energy information.</p>									

**Country: Botswana**

600	495	12/15/200		Statement of Intent			None	Fossil Energy	Cooperation in the Field of Fossil Energy
<p><b>Title:</b> <i>Statement of Intent Between The Department of Energy of the United States of America and The Ministry of Minerals, Energy and Water Affairs of the Republic of Botswana for Cooperation in the Field of Fossil Energy Technology</i></p> <p><b>Comment:</b></p>									

**Country: Brazil**

26	391	9/30/1996		Statement of Intent			None	Fossil Energy	Clean Coal Technologies
<p><b>Title:</b> <i>Joint Statement of Intent on Clean Coal Technologies between the Department of Energy of the United States of America and the State of Rio Grande do Sul and the State of Santa Catarina, and the Sindicato Nacional da Industria da Extracao do Carvao, Eletrabras, and the Ministry of Mines and Energy of the Federal Republic of Brazil</i></p> <p><b>Comment:</b> Intention to cooperate between DOE, the State of Rio Grande do Sul, the State of Santa Catarina, The Sindicato Nacional da Industria da Extracao do Carvao, Electrobras, and the Ministry of Mines and Energy of Brazil in clean coal technologies.</p>									
655	550	6/20/2003	6/20/2008	Primary DOE			None	Science and Technology	Cooperation in Nuclear Energy
<p><b>Title:</b> <i>Agreement between the Department of Energy of the United States of America nd the Ministry of Science and Technology of the Federative Republic of Brazil Concerning Cooperation in Nuclear Energy</i></p> <p><b>Comment:</b></p>									



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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
75	412	10/14/1999	10/14/2000	Primary DOE			None	Energy Research and Development	Energy Technology
<p><b>Title:</b> <i>Implementing Arrangement between the United States of America and the Federative Republic of Brazil for Cooperation in the Area of Energy Technology</i></p> <p><b>Comment:</b> Umbrella Agreement</p>									
279	412	10/14/1999	10/14/2000	Secondary DOE		75	Primary DOE	Fossil Energy	Annex 1 - Coal and Power Systems
<p><b>Title:</b> <i>Annex I to the Implementing Arrangement between the United States of America and the Federative Republic of Brazil for Cooperation in the Area of Energy Technology in the Field of Coal and Power Systems</i></p> <p><b>Comment:</b> Exchange experience and views on clean coal technologies, advanced power systems, advanced coal preparation, and environmental monitoring technologies and standards.</p>									
280	412	10/14/1999	10/14/2000	Secondary DOE		75	Primary DOE	Energy Efficiency and Renewable Energy	Annex 2 - Renewable Energy
<p><b>Title:</b> <i>Annex II to the Implementing Arrangement between the United States of America and the Federative Republic of Brazil for Cooperation in the Area of Energy Technology in the Field of Renewable Energy</i></p> <p><b>Comment:</b> Collaboration on renewables resource assessment, integration in electric utility, policy analysis, and identification of opportunities for renewable energy in Brazil.</p>									
281	412	10/14/1999	10/14/2000	Secondary DOE		75	Primary DOE	Energy Efficiency and Renewable Energy	Annex 3- Energy Efficiency
<p><b>Title:</b> <i>Annex III - to the Implementing Arrangement between the United States of America and the Federative Republic of Brazil for Cooperation in the Area of Energy Technology in the Field of Energy Efficiency</i></p> <p><b>Comment:</b> Collaboration to increase energy, efficiency, promote global environmental protection, and stimulate the market in Brazil for energy efficiency goods and services.</p>									
76	332	4/18/1994	4/18/2004	Primary DOE			None	Arms Control and Nonproliferation	International Safeguards Applications
<p><b>Title:</b> <i>Agreement between the United States Department of Energy and the Brazilian-Argentine Agency for Accounting and Control of Nuclear Materials Concerning Research and Development in Nuclear Material Control, Accountancy, Verification, and Advanced Containment and Surveillance Technologies for International Safeguards Applications</i></p> <p><b>Comment:</b></p>									
77	376	9/19/1995	9/19/2000	Primary DOE			None	Arms Control and Nonproliferation	International Safeguards Applications
<p><b>Title:</b> <i>Agreement between the United States Department of Energy and the National Nuclear Energy Commission of Brazil Concerning Research and Development in Nuclear Material Control, Accountancy, Verification, and Physical Protection, and Advanced Containment and Surveillance Technologies for International Safeguards Applications</i></p> <p><b>Comment:</b></p>									
651	546	9/17/2001	9/17/2006	Secondary DOE		77	Primary DOE	Arms Control and Nonproliferation	Extension - Agreement bet. DOE and the National Nuclear Energy Commission
<p><b>Title:</b> <i>Agreement to Extend the Agreement between the Department of Energy of the United States and the National Nuclear Energy Commission of Brazil Concerning Research and Development in Nuclear Material Control, Accountancy, Verification, Physical Protection, and Advanced Containment and Surveillance Technologies for International Safeguards Applications</i></p> <p><b>Comment:</b> 5- year extension</p>									

Country: Canada

## All In Force Bilateral Agreements

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
28	363	7/21/1995		Statement of Intent		21	Broad	Energy Efficiency and Renewable Energy	Building Energy Simulation Tools
<b>Title:</b> <i>Statement of Intent between the United States Department of Energy and the Department of Natural Resources of Canada on Building Energy Simulation Tools</i>									
<b>Comment:</b> Collaborate in building energy simulation R&D and information dissemination.									
614	509	10/22/200	10/22/200	Primary DOE			None	Energy Efficiency and Renewable Energy	Arrangement between DOE and Dept. of Natural Resources Canada
<b>Title:</b> <i>Implementing Arrangement between the Department of Energy of the United States of America and the Department of Natural Resources Canada for Cooperation in the areas of Microgeneration and Community Energy Systems</i>									
<b>Comment:</b>									
632	527	5/10/2000	5/10/2005	Primary DOE			None	Science and Technology	Cooperation in the area of Bioenergy
<b>Title:</b> <i>Implementing Arrangement between the United States Department of Energy and the Department of Natural Resources of Canada for Cooperation in the area of Bioenergy</i>									
<b>Comment:</b>									
656	551	6/17/2003	6/17/2008	Primary DOE			None	Nuclear Energy	Nuclear Energy Research
<b>Title:</b> <i>Implementing Arrangement between the United States Department of Energy and the Department of Natural Resources of Canada and Atomic Energy of Canada Limited for Collaboration in the area of Nuclear Energy Research</i>									
<b>Comment:</b> Foreign Party for Atomic Energy of Canada Limited signed this agreement also on June 17, 2003.									
81	425	3/18/1998	3/18/2008	Primary DOE			None	Energy Research and Development	Energy R&D
<b>Title:</b> <i>Memorandum of Understanding between the Department of Energy of the United States of America and the Department of Natural Resources of Canada on Collaboration in Energy Research and Development</i>									
<b>Comment:</b> Establish wider areas of cooperation for mutual benefit									
524	469	2/1/2000	2/1/2005	Secondary DOE		81	Primary DOE	Fossil Energy	DOE/NRCan Fuel Cells Implementing Arrangement
<b>Title:</b> <i>Implementing Arrangement between the Department of Energy of the United States of America and the Department of Natural resources Canada for Cooperation in the area of Fuel Cells</i>									
<b>Comment:</b> Automatic Renewal after 5 years with written agreement of the participants.									
525	470	2/1/2000	2/1/2005	Secondary DOE		81	Primary DOE	Fossil Energy	DOE/NRCan Fossil Fuels Implementing
<b>Title:</b> <i>Implementing Arrangement between Department of Energy of the United States of America and the Department of Natural Resources Canada for Cooperation in the area of Fossil Fuels</i>									
<b>Comment:</b> Automatic renewal for 5 years with written agreement of the participants.									

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646	541	9/11/2002	9/11/2007	Tertiary DOE		525	Secondary DOE	Fossil Energy	Project Annex 1 - Weyburn CO2 Sequestration <b>Title:</b> <i>Project Annex 1 - Weyburn CO2 Sequestration Project under the Implementing Arrangement Between the Department of Energy of the United States of America and the Department of Natural Resources Canada for Cooperation in the Area of Fossil Fuels</i> <b>Comment:</b>
27	341	11/18/199		Statement of Intent		21	Broad	Energy Efficiency and Renewable Energy	Biennial Biomass Conf. of the Americas <b>Title:</b> <i>Statement of Intent between the United States Department of Energy and the Department of Mines and Resources on Biennial Biomass Conference of Americas</i> <b>Comment:</b> Collaborate in a biennial conference to present the latest results in biomass energy research and development.

## Country: Chile

35	352	3/7/1995		Statement of Intent			None	Energy Efficiency and Renewable Energy	Control Emissions of Greenhouse Gases <b>Title:</b> <i>Statement of Intent for Sustainable Development Cooperation and Joint Implementation of Measures to Control Emissions of Greenhouse Gases Between the Department of Energy of the United States of America and the National Energy Commission of Chile</i> <b>Comment:</b> Intent to facilitate the development of joint implementation projects in order to encourage: market deployment of greenhouse gas-reducing technologies, including energy efficiency and renewable energy technologies; education and training programs, etc.
474	430	4/18/1998	4/12/2000	Statement of Intent			None	Energy Efficiency and Renewable Energy	Natural Gas-Powered Bus Pilot Project <b>Title:</b> <i>Statement of Intent Concerning the Natural Gas-Powered Bus Pilot Project in the Metropolitan Region of Chile</i> <b>Comment:</b> Signed in Santiago, Chile, during the SOAII

## Country: China

1	427	1/31/1979	4/30/2001	Intergovernmental			None	Science and Technology	Gov't to Gov't S&T <b>Title:</b> <i>Agreement between the Government of United States of America and the Government of People's Republic of China on Cooperation in Science and Technology</i> <b>Comment:</b> Need copy of agreement
238	123	5/11/1983	4/30/2001	Primary DOE		1	Intergovernmental	Fusion Energy	Protocol on Nuclear Physics and Magnetic Fusion <b>Title:</b> <i>Protocol between the Department of Energy of the United States of America and the Ministry of Science and Technology of the People's Republic of China on Cooperation in the Fields of Nuclear Physics and Controlled Magnetic Fusion Research</i> <b>Comment:</b> Cooperate in promoting each other's program in Nuclear Physics and Controlled Magnetic Fusion. Co-terminates with umbrella S&T agreement.
290	223	9/28/1987	4/30/2001	Secondary DOE		239	Primary DOE	Fossil Energy	Annex 2 - Mine Safety and Health <b>Title:</b> <i>Annex II to the Protocol on Cooperation in the Field of Fossil Energy Research and Development between the Department of Energy of the United States of America and the Ministry of Coal Industry of the People's Republic of China in the Area of Mine Safety and Health</i> <b>Comment:</b> Co-terminates with the Protocol

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291	217	8/19/1987	4/30/2001	Secondary DOE		239	Primary DOE	Energy Research and Development	Annex 3 - Atmospheric Trace Gasses
<p><b>Title:</b> <i>Annex III to the protocol on fossil energy R&amp;D on Cooperation in the field of atmospheric trace gases</i></p> <p><b>Comment:</b> Co-terminates with the Protocol</p>									
292	226	10/13/198	4/30/2001	Secondary DOE		239	Primary DOE	Fossil Energy	Annex 4 - Coal Preparation & Waste Stream Utilization
<p><b>Title:</b> <i>Annex IV to protocol on cooperation in field of fossil energy R&amp;D between U.S. Department of Energy &amp; Ministry of Coal Industry of the People's Republic of China in the area of coal preparation and waste stream utilization</i></p> <p><b>Comment:</b> TASKS PLANNED WERE COMPLETED IN 10/90. DISCUSSIONS ON POSSIBLE FURTHER COOPERATION IN COAL PREP. Co-terminates with the Protocol</p>									
293	227	10/13/198	4/30/2001	Secondary DOE		239	Primary DOE	Fossil Energy	Annex 5 - Atmospheric Fluidized Bed Combustion Info Exchange
<p><b>Title:</b> <i>Annex V to protocol on cooperation in field of fossil energy R&amp;D between U.S. Department of Energy - Ministry of Coal Industry of the People's Republic of China in the area of atmospheric fluidized bed (AFB) combustion information exchange</i></p> <p><b>Comment:</b> EXCHANGE OF REPORTS AND DATA. Co-terminates with Protocol</p>									
296	349	2/23/1995	2/23/2000	Secondary DOE		239	Primary DOE	Fossil Energy	Annex 11 - Coal Bed Methane Recovery and Utilization
<p><b>Title:</b> <i>Annex XI to the Protocol for Cooperation in the Field of Fossil Energy Research and Development between the Department Energy of the United States of America and the Ministry of Coal Industry of the People's Republic of China for Cooperation in the Area of Coalbed Methane Recovery and Utilization</i></p> <p><b>Comment:</b> Promote technological and economic cooperation in coal bed methane recovery and utilization technology in order to make positive contributions toward improving recovery efficiency and utilization of globally significant natural gas energy resources.</p>									
297	348	2/23/1995	2/23/2000	Secondary DOE		239	Primary DOE	Fossil Energy	Annex 12 - Regional Climate Research
<p><b>Title:</b> <i>Annex XII to the Protocol on Cooperation in the Field of Fossil Energy Research and Development between the Department Energy of the United States of America and the Ministry of Coal Industry of the People's Republic of China for Cooperation in the Area of Regional Climate Research with the China Meteorological Administration</i></p> <p><b>Comment:</b> Establish a program of joint R&amp;D and information exchange to document regional climate and climate change, to predict regional climate and climate change and to identify regional impacts of climate</p>									
485	439	11/14/199	11/14/200	Secondary DOE		239	Primary DOE	Fossil Energy	Annex 13 - Fossil Fuel Utilization
<p><b>Title:</b> <i>Annex XIII to the Protocol for Cooperation in the Field of Fossil Energy Research and Development between the Department of Energy of the United States of America and the Ministry of Coal Industry of the People's Republic of China in the Area of Fossil Fuel Utilization for Production of Chemicals</i></p> <p><b>Comment:</b> Co-terminates with Protocol</p>									
298	413	11/14/199	11/14/200	Secondary DOE		239	Primary DOE	Fossil Energy	Annex 14 - Bilateral Consultations on Coal Industry
<p><b>Title:</b> <i>Annex XIV to the Protocol for Cooperation in the field of Fossil Energy Research &amp; Development between the Department of Energy of the United States of America and the Ministry of Coal Industry of the People's Republic of China on Bilateral Consultations and Exchanges on Coal Industry Development and Information</i></p> <p><b>Comment:</b> Co-terminates with the Protocol</p>									

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618	513	12/7/2000	12/7/2005	Secondary DOE		239	Primary DOE	Fossil Energy	Annex III - for Cooperation in the areas of Oil and <b>Title:</b> <i>Annex III to the Protocol for Cooperation in the Field of Fossil Energy Technology Development and Utilization between the Department of Energy of the United States of America and The Ministry of Science and Technology of the People's Republic of China for Cooperation in the areas of Oil and Gas</i> <b>Comment:</b>
240	351	2/23/1995	2/22/2005	Primary DOE		1	Intergovernmental	Energy Efficiency and Renewable Energy	Protocol for Energy Efficiency and Renewable <b>Title:</b> <i>Protocol for Cooperation in the Fields of Energy Efficiency and Renewable Energy Technology Development and Utilization between the Department of Energy of the United States of America and the Ministry of Science and Technology of the People's Republic of China</i> <b>Comment:</b> Desire to conduct bilateral energy consultations by forming a Chinese-American Ministerial Working Group to enhance the understanding of energy issues and promote the exchange of information on energy policies, programs and technologies.
478	432	6/27/1995	6/27/2000	Secondary DOE		240	Primary DOE	Energy Efficiency and Renewable Energy	Annex 1 - 100 Counties Renewable Energy <b>Title:</b> <i>Annex I to the Protocol for Cooperation in the Field of Energy Efficiency and Renewable Energy between the Department of Energy of the United States of America and the Ministry of Science and Technology of the People's Republic of China for Developing Cooperative Activities in the Area of Renewable Energy Under the Hundred Counties Integrated Rural Energy Development Program in China between the Department of Energy of the United States of America and the Ministry of Agriculture of the People's Republic of China</i> <b>Comment:</b> Remains in force for five years or until termination of the Protocol, whichever occurs first
299	420	10/25/199	10/25/200	Secondary DOE		240	Primary DOE	Energy Efficiency and Renewable Energy	Annex 2 - Wind Energy Development <b>Title:</b> <i>Wind Energy Development in China Developing Cooperative Activities between the Department of Energy of the United States of America and the Ministry of Electric Power of the People's Republic of China ANNEX II under the Protocol for Cooperation in the Fields of Energy Efficiency and Renewable Energy Technology Development and Utilization between the Department of Energy of the United States of America and the State Science and Technology Commission of the People's Republic of China</i> <b>Comment:</b> Remains in force for five years or until termination of the Protocol, whichever occurs first.
300	422	10/25/199	10/25/200	Secondary DOE		240	Primary DOE	Energy Efficiency and Renewable Energy	Annex 3 - Energy Efficiency <b>Title:</b> <i>Annex III to the Protocol for Cooperation in the Fields of Energy Efficiency and Renewable Energy Technology Development and utilization between the Department of Energy of the United States of America and the State Science and Technology Commission of the People's Republic of China for Cooperation Between the Department of Energy of the United States of America and the State Planning Commission of the People's Republic of China in the Area of Energy Efficiency</i> <b>Comment:</b> Remains in force for five years or until termination of the Protocol, whichever occurs first
301	421	10/25/199	10/25/200	Secondary DOE		240	Primary DOE	Energy Efficiency and Renewable Energy	Annex 4 - Renewable Energy Business Development <b>Title:</b> <i>Renewable Energy Business Development ANNEX IV Cooperative Activities between the Department of Energy of the United States of America and the State Economic and Trade Commission of the People's Republic of China</i> <b>Comment:</b> Remains in force for five years or until termination of the Protocol, whichever occurs first
302	414	11/18/199	11/18/200	Secondary DOE		240	Primary DOE	Energy Efficiency and Renewable Energy	Annex 5 - Electric Vehicle Development <b>Title:</b> <i>The Department of Energy of the United States of America and the Ministry of Science and Technology of the People's Republic of China for Cooperation in the Field of Energy Efficiency and Renewable Energy Technology Development and Utilization Annex V Electric Vehicle and Hybrid-Electric Vehicle Development</i> <b>Comment:</b> Remains in force for five years or until termination of the Protocol, whichever occurs first.



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303	415	11/18/199	11/18/200	Secondary DOE		240	Primary DOE	Energy Efficiency and Renewable Energy	Annex 6 - Geothermal Production and Use <b>Title:</b> <i>Geothermal Production and Use Cooperative Activities between the Department of Energy of the United States of America and the Ministry of Science and Technology of the People's Republic of China Annex VI under The Protocol for cooperation in the Field of Energy Efficiency and renewable Energy Technology Development and Utilization between the Department of Energy of the United States of America and the State Science and Technology Commission of the People's Republic of China</i> <b>Comment:</b> Remains in force for five years or until termination of the Protocol, whichever occurs first.
490	443	7/9/1998		Secondary DOE		240	Primary DOE	Energy Efficiency and Renewable Energy	Design Criteria for Energy Efficient Building <b>Title:</b> <i>Statement of Work between the Department of Energy of the United States of America and the Ministry of Science and Technology of the People's Republic of China</i> <b>Comment:</b>
563	486	5/11/2000	5/11/2005	Secondary DOE		240	Primary DOE	Energy Efficiency and Renewable Energy	Annex 7 - Renewable Energy Policy and Planning <b>Title:</b> <i>Renewable Energy Policy and Planning Annex VII Cooperative Activities between Department of Energy of the United States of America and the State Development Planning Commission of the People's Republic of China</i> <b>Comment:</b> Remains in force for five years or until termination of the Protocol, whichever occurs first.
616	511	7/18/2001		Secondary DOE		240	Primary DOE	Energy Efficiency and Renewable Energy	Design Criteria for Energy Efficient Building <b>Title:</b> <i>Amendment to The Statement of Work of July 9, 1998 between The Department of Energy of the United States of America and The Ministry of Science and Technology of the People's Republic of</i> <b>Comment:</b>
621	516	2/12/2002	2/12/2007	Secondary DOE		240	Primary DOE	Energy Efficiency and Renewable Energy	Annex II - The State Power Corporation of China <b>Title:</b> <i>Agreement to Extend Annex II to the Protocol for Cooperation in the Fields of Energy Efficiency and Renewable Energy Technology Development and Utilization for Cooperative Activities in Wind Development in China between the Department of Energy of the United States of America and the State Power Corporation of China</i> <b>Comment:</b>
622	517	2/12/2002	2/12/2007	Secondary DOE		240	Primary DOE	Energy Efficiency and Renewable Energy	Annex III - State Planning Commission <b>Title:</b> <i>Agreement to Extend and Amend Annex III to the Protocol for Cooperation in the Fields of Energy Efficiency and Renewable Energy Technology Development and Utilization for Cooperative Activities in Energy Efficiency between The Department of Energy of the United States of America and the State Planning Commission of the People's Republic of China</i> <b>Comment:</b>
623	518	2/12/2002	2/12/2007	Secondary DOE		240	Primary DOE	Energy Efficiency and Renewable Energy	Annex IV - State Economic and Trade Commission <b>Title:</b> <i>Agreement to Extend and Amend Annex IV to the Protocol for Cooperation in the Fields of Energy Efficiency and Renewable Energy Technology Development and Utilization for Cooperative Activities in Renewable Energy Business Development between the Department of Energy of the United States of America and the State Economic and Trade Commission of the People's Republic of</i> <b>Comment:</b>
241	38	1/31/1979	4/30/2001	Primary DOE		1	Intergovernmental	High Energy Physics	High Energy Physics <b>Title:</b> <i>Implementing Accord between the U.S. Department of Energy and the State Scientific and Technological Commission of the People's Republic of China on Cooperation in the Field of High Energy Physics.</i> <b>Comment:</b> Co-Terminates with the S&T Agreement

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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
242	311	11/4/1992	11/4/2002	Primary DOE		1	Intergovernmental	High Energy Physics	Superconducting Super Collider <b>Title: <i>Implementing Accord between the U.S. Department of Energy and the Chinese Academy of Sciences for a Program of Collaboration on the Superconducting Super Collider</i></b> <b>Comment:</b>
522	467	1/12/2000	1/12/2005	Primary DOE		1	Intergovernmental	Information and/or Personnel Exchange	Exchange of Energy Information <b>Title: <i>Protocol for Cooperation Concerning the Exchange of Energy Information between the Department of Energy of the United States of America and the National Bureau of Statistics of the People's Republic of China</i></b> <b>Comment:</b>
531	476	4/20/2000	4/30/2001	Primary DOE		1	Intergovernmental	Fossil Energy	Fossil Energy Protocol <b>Title: <i>Protocol for Cooperation in the Field of Fossil Energy Technology Development and Utilization between the Department of Energy of the United States of America and the Ministry of Science and Technology of the People's Republic of China</i></b> <b>Comment:</b> Remains in force for 5 years from date of signature or as long as the Umbrella Agreement (US-China S&T) remains in force, whichever is shorter.
649	544	11/19/200	11/19/200	Secondary DOE		531	Primary DOE	Fossil Energy	Annex II - Cooperation in the area of Clean Fuels <b>Title: <i>Annex II to the Protocol on Cooperation in the Field of Fossil Energy Technology Development and Utilization between The Department of Energy of the United States of America and The Ministry of Science and Technology of the People's Republic of China for Cooperation in the Area of Clean Fuels</i></b> <b>Comment:</b>
3	410	10/29/199		Intergovernmental			None	*Other - Energy and Environment	Energy and Environment Cooperation Initiative <b>Title: <i>United States of American and People's Republic of China Energy and Environment Cooperation Initiative</i></b> <b>Comment:</b>
31	347	2/23/1995		Statement of Intent			None	Nuclear Energy	Research Reactor Fuel <b>Title: <i>Statement of Intent between the Department of Energy of the United States of America and the China Atomic Energy Authority of the People's Republic of China on Research Reactor Fuel</i></b> <b>Comment:</b> Exchange information and views on opportunities for the conversion of research reactors to the use of low enriched uranium.
493	445	6/29/1998	6/29/2003	Primary DOE			None	Nuclear Energy	Nuclear Technologies Agreement <b>Title: <i>Agreement between the Department of Energy of the United States of America and the State Development Planning Commission of the People's Republic of China on Cooperation Concerning Peaceful Uses of Nuclear Technologies</i></b> <b>Comment:</b> Subject to the Gov't to Gov't Peaceful Uses of Nuclear Energy Agreement signed July 23, 1985.
494	445	6/29/1998	6/29/2003	Secondary DOE		493	Primary DOE	Nuclear Energy	Annex 1 - IPR <b>Title: <i>Annex I- Intellectual Property</i></b> <b>Comment:</b> Attached to original agreement.

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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
620	515	5/11/2000	5/11/2005	Secondary DOE		493	Primary DOE	Energy Efficiency and Renewable Energy	Annex VII <i>Title: Renewable Energy Policy and Planning Annex VII Cooperative Activities Between the Department of Energy of the United States of America and the State Development Planning Commission of the People's Republic of China</i> <b>Comment:</b>
554	483	3/29/1999		Statement of Intent			None	*Other - Energy and Environment	MOU on Clean Energy Projects and Technologies <i>Title: Memorandum of Understanding Among The State Development Planning Commission of the People's Republic of China, China Development Bank, The United States Department of Energy, and Export Import Bank of the United States Regarding Cooperation on Clean Energy Projects and Technologies</i> <b>Comment:</b>
642	537	9/10/2002		Statement of Intent			None	Science and Technology	SOI - Clean Energy Technologies <i>Title: Statement of Intent between the Department of Energy of the United States of America and the Municipality of Beijing of the People's Republic of China Concerning Clean Energy Technologies</i> <b>Comment:</b>
84	345	2/23/1995		Primary DOE			None	*Other - Bilateral Energy Consultations	Bilateral Energy Consultations <i>Title: Memorandum of Understanding between the Department of Energy of the United States of America and the State Planning Commission of the People's Republic of China on Bilateral Energy Consultations</i> <b>Comment:</b> Desire to conduct bilateral energy consultations by forming a Chinese-American Ministerial Working Group to enhance the understanding of energy issues and promote the exchange of information on energy policies, programs and technologies.

## Country: Costa Rica

36	401	5/9/1997	5/9/2002	Statement of Intent			None	Energy Efficiency and Renewable Energy	Electric Transport <i>Title: Statement of Intent by the Ministry of Environment and Energy of Costa Rica and the Department of Energy of the United States of America for Cooperation in the Field of Electric Transport</i> <b>Comment:</b>
504	451	11/17/199	11/17/200	Primary DOE			None	Arms Control and Nonproliferation	Sister Lab Arrangement <i>Title: Arrangement for information Exchange and Cooperation in the Area of Peaceful Uses of Nuclear Energy between Argonne National Laboratory and Atomic Energy Commission of Costa Rica</i> <b>Comment:</b> ACDA led sister lab.

## Country: Czech Republic

4	300	10/22/199	10/22/200	Intergovernmental			None	Science and Technology	Science & Technology <i>Title: Agreement between the Government of the Czech and Slovak Federal Republic and the Government of the United States of America for Scientific and Technological Cooperation</i> <b>Comment:</b> Develop, support and facilitate S&T cooperation between cooperating organizations between the two countries in the areas of basic science, environmental protection, medical sciences and health, agriculture, engineering research, energy, natural resources and their useful utilization, standardization, S&T policy and management.
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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
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### Country: Egypt

517	463	7/1/1999	7/1/2004	Primary DOE			None	Energy Research and Development	Energy Technology Agreement
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**Title:** *Implementing Arrangement between the Department of Energy of the United States of America and the Ministry of Electricity and Energy of the Arab Republic of Egypt for Cooperation in Energy Technology*

**Comment:**

527	472	2/23/2000	2/23/2005	Secondary DOE		517	Primary DOE	Energy Efficiency and Renewable Energy	Annex 1 - Renewable Energy
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**Title:** *Annex I to the Implementing Arrangement between the Department of Energy of the United States of America and the Ministry of Electricity and Energy of the Arab Republic of Egypt in the Field of Renewable Energy*

**Comment:**

528	473	2/23/2000	2/23/2005	Secondary DOE		517	Primary DOE	Energy Efficiency and Renewable Energy	Annex 2 - Fuel Cells
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**Title:** *Annex II to the Implementing Arrangement between the Department of Energy of the United States of America and the Ministry of Electricity and Energy of the Arab Republic of Egypt for Cooperation in Energy Technology in the Field of Fuel Cells*

**Comment:**

### Country: Estonia

526	471	2/4/2000	2/4/2003	Primary DOE			None	Fossil Energy	Oil Shale Research and Utilization
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**Title:** *Agreement between the Department of Energy of the United States of America and the Ministry of Economic Affairs of the Republic of Estonia for Scientific and Technology Cooperation on Oil Shale Research and Utilization*

**Comment:** Establishes a Joint Coordinating Committee to manage cooperative work under the agreement.

99	353	3/13/1995	3/13/2000	Primary DOE			None	Environmental Restoration and Waste Management	Technical Cooperation in Clean-up Paldiski Site
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**Title:** *Memorandum of Understanding between the Department of Energy of the United States and the Ministry of Economy of Estonia for Technical Cooperation in the Clean-up of the Paldiski Nuclear Training Site*

**Comment:** Cooperate and share interests and objectives in environmental restoration and in the safe and effective management of hazardous wastes and the clean-up of the environment at and around the nuclear training site at Paldiski, Estonia.

### Country: European Atomic Energy Community (EURATOM)

568	490	1/6/1995	1/6/2005	Primary DOE			None	International Safeguards	EURATOM Safeguards
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**Title:** *Agreement between the European Atomic Energy Community Represented by the Commission of the European Communities and the United States Department of Energy in the field of Nuclear Materials Safeguards Research and Development*

**Comment:** Auto renewal for five years periods.

## All In Force Bilateral Agreements

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
576	490	2/18/1999	2/18/2001	Secondary DOE		568	Primary DOE	International Safeguards	Action Sheet 10 - Tank Analysis <i>Title: Action Sheet 10 - The United States Department of Energy (DOE) and The European Atomic Energy Community represented by The Commission of European Communities (EURATOM) for Computer Code Development for Automated Acquisition and Real-Time Analysis of Volume Measurement Data</i> <b>Comment:</b>
612	507	5/14/2001	5/14/2006	Primary DOE			None	Fusion Energy	Fusion Agreement between EURATOM and DOE <i>Title: Agreement for Cooperation between the European Atomic Energy Community Represented by the Commission of the European Communities and the Department of Energy of the United States of America in the Field of Fusion Energy Research and Development</i> <b>Comment:</b>

### Country: European Union

648	543	5/14/2001	5/14/2006	Primary DOE			None	Science and Technology	Non-Nuclear Energy S&T Agreement <i>Title: Implementing Agreement between the Department of Energy of the United States of America and the European Commission for Non-Nuclear Energy Scientific and Technological Co-operation</i> <b>Comment:</b>
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### Country: Finland

116	393	1/17/1997	1/17/2001	Primary DOE			None	Energy Research and Development	Energy R&D <i>Title: Implementing Arrangement between the Department of Energy of the United States of America and the Ministry of Trade and Industry of Finland for Cooperation in Energy Research and</i> <b>Comment:</b> Auto renewal for 5 years
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### Country: France

39	132	10/27/198		Secondary DOE		121	Primary DOE	Environmental Restoration and Waste Management	Radioactive Waste Management--West Valley <i>Title: Statement of Intent between the United States Department of Energy and the French Commissariat a l'Energie Atomique on the West Valley Demonstration Project</i> <b>Comment:</b> Cooperate in the areas of treatment of radioactive waste and decontamination and decommissioning activities throughout the course of the DOE Demonstration Project at the Western New York Nuclear Service Center located at West Valley, New York.
40	185	6/20/1986		Secondary DOE		121	Primary DOE	Civilian Radioactive Waste Management	Low-Level Radioactive Waste <i>Title: Statement of Intent between the United States Department of Energy and the French Commissariat a l'Energie Atomique in the Field of Low-Level Radioactive Waste</i> <b>Comment:</b> Confirm intent to expand radioactive waste management cooperation in the area of surface and subsurface disposal and storage of low-level radioactive waste, as well as defined activities.

## All In Force Bilateral Agreements

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
128	416	12/29/1999	12/29/2000	Primary DOE			None	Arms Control and Nonproliferation	Material Control and Accounting
<p><b>Title:</b> <i>Agreement between the Department of Energy of the United States and the Commissariat a l'Energie Atomique of France Concerning Research and Development in the Field of Nuclear Material Control and Accounting Measures</i></p> <p><b>Comment:</b> Cooperate on research, development, testing and evaluation in the area of nuclear material control and accounting measures.</p>									
577	416	1/20/2000	1/20/2001	Secondary DOE		128	Primary DOE	Arms Control and Nonproliferation	Action Sheet 2 - Isotopic Analysis Evaluation Using the PC/FRAM Physics Isotopics Software
<p><b>Title:</b> <i>Action Sheet No. 2 The United States Department of Energy (DOE) and The Commissariat a l'Energie Atomique (CNEA) of France for Isotopic Analysis Evaluation Using the PC/FRAM Physics Isotopics Software</i></p> <p><b>Comment:</b></p>									
129	417	12/29/1999	12/29/2000	Primary DOE			None	Arms Control and Nonproliferation	Physical Protection of Nuclear Materials
<p><b>Title:</b> <i>Agreement between the Department of Energy of the United States and the Commissariat a l'Energie Atomique of France Concerning Research and Development in the Field of Physical Protection of Nuclear Materials and Facilities</i></p> <p><b>Comment:</b> Improve the US &amp; France nuclear materials and facilities physical protection procedures</p>									
567	417	3/14/2000	3/14/2002	Secondary DOE		129	Primary DOE	International Safeguards	Action Sheet 3 - Nuclear Materials Transportation Security
<p><b>Title:</b> <i>Action Sheet No. 3 The United States Department of Energy (DOE) and the Commissariat a l'Energie Atomique of France (CEA) for Nuclear Transportation Security</i></p> <p><b>Comment:</b></p>									
130	357	4/26/1995	4/26/2005	Primary DOE			None	High Energy Physics	Accelerator Driven Technology
<p><b>Title:</b> <i>Agreement between the Department of Energy and the Commissariat a l'Energie Atomique for Cooperation in Research Development and Application for Accelerators driven Technology</i></p> <p><b>Comment:</b> Conduct cooperative program of scientific and technical engineering in research, development and application for accelerator driven technology</p>									
131	377	9/20/1995	9/20/2000	Primary DOE			None	Civilian Radioactive Waste Management	Radioactive Waste Management
<p><b>Title:</b> <i>Agreement between the United States Department of Energy and the French Commissariat a l'Energie Atomique in the field of Radioactive Waste Management</i></p> <p><b>Comment:</b> Cooperation in the management of radioactive wastes for the purpose of minimizing the consequences of radioactive contamination on health and environment and promoting the safe and economic application of nuclear energy. Cooperation includes: characterization of geologic formations; field/laboratory testing; preparation/packaging of radioactive wastes; disposal in geologic formations; environmental and safety issues, etc.</p>									
132	379	10/8/1995	10/8/2000	Primary DOE			None	Civilian Radioactive Waste Management	Radioactive Waste Management
<p><b>Title:</b> <i>Agreement between the United States Department of Energy and the National Radioactive Waste Management Agency of France in the Field of Radioactive Waste Management</i></p> <p><b>Comment:</b> Cooperate for purposes of minimizing consequences of radioactive contamination on health and environment and promoting safe and economic application of nuclear energy.</p>									

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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
564	487	5/9/2000	5/9/2005	Primary DOE			None	Defense Programs	DOE/DGA Emerging Technologies
<p><b>Title:</b> <i>Technical Arrangement between the Department of Energy of the United States of America and the Minister of Defense of the French Republic Concerning Cooperation in the Application of Emerging Technologies</i></p> <p><b>Comment:</b> Auto Renewal for 5 year periods.</p>									
582	257	8/9/1994	8/9/2004	Primary DOE			None	Defense Programs	1994- High Energy Lasers
<p><b>Title:</b> <i>Agreement between the Department of Energy of the United States of America and the Commissariat a l'Energie Atomique of France of Cooperation in Research, Development and Applications of High Energy Lasers and high Energy Laser-Mater Interaction Physics</i></p> <p><b>Comment:</b></p>									
316	342	11/19/199		Secondary DOE		582	Primary DOE	Defense Programs	Megajoule-Class Solid State Lasers - IA #1
<p><b>Title:</b> <i>Implementing Arrangement 1 between the United States Department of Energy and the French Atomic Energy Commission concerning Sharing of Science and Technology Information Related to Megajoule-class Solid State Lasers</i></p> <p><b>Comment:</b> Sharing of specific S&amp;T information related to megajoule-class solid state lasers.</p>									
317	343	11/19/199	8/9/2004	Secondary DOE		582	Primary DOE	Defense Programs	Megajoule-Class Solid State Laser Technology - IA
<p><b>Title:</b> <i>Implementing Arrangement #2 between the United States Department of Energy and the French Commissariat a l'Energie Atomique on Cooperation in Megajoule-Class Solid State Laser Technology</i></p> <p><b>Comment:</b> Implement cooperative activities in research and development in megajoule-class solid state laser technology (high-power, high-energy solid state lasers and target experimental chambers and support</p>									
601	496	9/18/2000	9/18/2005	Primary DOE			None	Nuclear Energy	Advanced Nuclear Reactor
<p><b>Title:</b> <i>Agreement between The Department of Energy of the United States of America and The Commissariat A L'Energie Atomique of France for Cooperation in Advanced Nuclear Reactor Science and Technology</i></p> <p><b>Comment:</b></p>									
635	530	7/9/2001	7/9/2006	Secondary DOE		601	Primary DOE	Nuclear Energy	Advanced Nuclear Reactor Science and Technology (1-NERI)
<p><b>Title:</b> <i>Implementing Arrangement No. 1 under the Agreement between the Department of Energy of the United States of America and Commissariat A L'Energie Atomique of France for Cooperation in Advanced Nuclear Reactor Science and Technology</i></p> <p><b>Comment:</b> International Nuclear Energy Research Initiative</p>									
629	524	1/2/2002	1/2/2007	Statement of Intent			None	Exchange of Information on Research in Life Sciences	SOI between DOE and France
<p><b>Title:</b> <i>Statement of Intent Between the Department of Energy of the United States of America and the Commissariat A' L'Energie Atomique of France Concerning Exchange of Information on Research in Life Sciences</i></p> <p><b>Comment:</b></p>									
630	525	3/13/2002	3/12/2007	Primary DOE			None	Computer Sciences	Computer Sciences
<p><b>Title:</b> <i>Agreement between the Department of Energy of the United States of America and the Commissariat A' L'E'nergie Atomique of France Concerning Cooperation in Computer Sciences</i></p> <p><b>Comment:</b></p>									

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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
631	526	3/13/2002	3/13/2007	Primary DOE			None	Fundamental Science	Fundamental Science on Stockpile Stewardship <i>Title: Agreement between the Department of Energy of the United States of America and the Commissariat A' L'E'nergie Atomique of France Concerning Cooperation in Fundamental Science Supporting Stockpile Stewardship</i> <b>Comment:</b>
650	545	5/23/2002	5/23/2007	Primary DOE			None	Civilian Radioactive Waste Management	Radioactive Waste Management Agreement <i>Title: Agreement between the Department of Energy of the United States of America and the Commissariat A L'Energie Atomique of France in the field of Radioactive Waste Management</i> <b>Comment:</b>
<b>Country: <u>Germany</u></b>									
613	508	7/24/2001	7/24/2006	Primary DOE			None	Science and Technology	Agreement between DOE and Germany on Dense Plasma Physics <i>Title: Implementing Agreement between the Federal Ministry of Education and Research of the Federal Republic of Germany and the Department of Energy of the United States of America on Collaboration in the Field of Dense Plasma Physics</i> <b>Comment:</b>
88	419	2/20/1998	2/20/2003	Primary DOE			None	Energy Research and Development	Energy Research <i>Title: Agreement Between the Department of Energy of the United States of America and the Federal Ministry of Education, Science, Research and Technology of the Federal Republic of Germany on Cooperation in Energy Research, Science and Technology, and Development</i> <b>Comment:</b> Auto renewal for 5 year periods. Broad-based umbrella agreement to allow formal cooperation in various program areas
480	434	5/12/1998	5/12/2001	Secondary DOE		88	Primary DOE	Environmental Restoration and Waste Management	Project: Transportation of Rad Waste <i>Title: Project Agreement between the Department of Energy of the United States of America and the Federal Institute for Material Research and Testing of the Federal Republic of Germany: Technical Exchange and Cooperation on Transportation Requirements in the Field of Management of Radioactive Waste</i> <b>Comment:</b>
93	31	9/27/1977		Primary DOE			None	Arms Control and Nonproliferation	Nuclear Materials Safeguards/Physical Security <i>Title: Agreement between the United States Department of Energy and the Federal Minister for Research and Technology of Germany Cooperate in the field of Nuclear Material Safeguards and Physical Security Research and Development</i> <b>Comment:</b> Open-end expiration date

**Country: Ghana**

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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
149	392	10/1/1996	10/1/2001	Primary DOE			None	Energy Research and Development	Energy Policy, S&T and Development
<p><b>Title:</b> <i>Memorandum of Understanding between the Department of Energy of the United States of America and the Ministry of Mines and Energy of the Republic of Ghana on Cooperation in Energy Policy, Science and Technology, and, Development</i></p> <p><b>Comment:</b> Facilitate and establish cooperative activities in such areas as: energy efficiency and renewable energy; fossil energy, including natural gas, liquefied petroleum gas, and clean coal technologies; environmental management, including utilization of energy technologies, particularly cost-effective technologies aimed at reducing emissions of greenhouse gases and minimizing environmental impacts; independent power project development, etc.</p>									
330	399	2/27/1997	2/27/2001	Secondary DOE		149	Primary DOE	Energy Efficiency and Renewable Energy	Industrial Assessment Center
<p><b>Title:</b> <i>Implementing Arrangement Between the Department of Energy of the United States of America and the Ministry of Mines and Energy of the Republic of Ghana: Exchange of Information, Technical Assistance and Collaboration for the Establishment of the Industrial Assessment Center at the University of Science and Technology in Kumasi, Ghana</i></p> <p><b>Comment:</b></p>									
43	378	9/29/1995		Statement of Intent			None	Energy Efficiency and Renewable Energy	Energy Efficiency and Renewable Energy
<p><b>Title:</b> <i>Statement of Intent between the Department of Energy of the United States and the Ministry of Mines and Energy of the Republic of Ghana to Cooperate in the Fields of Energy Efficiency and Renewable Energy</i></p> <p><b>Comment:</b> Exchanging experience and views on opportunities for the utilization of energy efficiency and renewable energy technologies.</p>									
44	380	10/30/199		Primary DOE			None	Nuclear Energy	Peaceful Uses of Nuclear Energy
<p><b>Title:</b> <i>Memorandum of Understanding for the Exchange of Technical Information and for Cooperation in the Field of Peaceful Uses of Nuclear Energy between the Ghana Atomic Energy Commission and Argonne National Laboratory</i></p> <p><b>Comment:</b> Establish the basis for a cooperative institutional relationship for the exchange of S&amp;T information regarding the peaceful uses of atomic energy. This is between Ghana Atomic Energy Commission and ARGONNE NATIONAL LAB)</p>									

### Country: India

615	510	9/13/2000	9/13/2005	Primary DOE			None	Energy Efficiency and Renewable Energy	MOU between DOE and India concerning Energy Consultations
<p><b>Title:</b> <i>Memorandum of Understanding between the Ministry of Power of the Republic of India and the Department of Energy of the United States of America Concerning Energy Consultations</i></p> <p><b>Comment:</b></p>									

### Country: Israel

156	384	2/1/1996	2/1/2001	Primary DOE			None	Energy Efficiency and Renewable Energy	Energy Cooperation
<p><b>Title:</b> <i>Agreement between the Department of Energy of the United States of America and the Ministry of Energy and Infrastructure of Israel Concerning Energy Cooperation</i></p> <p><b>Comment:</b> Establish a framework for collaboration in energy R&amp;D activities including: solar energy; biomass; energy efficiency; wind energy; fossil energy, including oil, gas and coal; electric power production and transmission. Annex I on Intellectual Property and Annex II on Security Obligations are attached. Discussion underway in clean coal technology and electric vehicles.</p>									

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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
530	475	2/22/2000		Statement of Intent			None	Arms Control and Nonproliferation	SOI on Nonproliferation, Arms Control and Regional Security
<p><b>Title:</b> <i>Letter of Intent between the Department of Energy of the United States of America and the Atomic Energy Commission of Israel on cooperation in the Fields of Non-Proliferation, Arms Control, and Regional Security</i></p> <p><b>Comment:</b></p>									
617	512	10/23/200	10/23/200	Primary DOE			None	Energy Efficiency and Renewable Energy	Cooperation in the Field of High Temperature Superconductivity
<p><b>Title:</b> <i>Implementation Agreement 3 between the Department of Energy of the United States of America and the Ministry of National Infrastructure of the State of Israel for Cooperation in the Field of High Temperature Superconductivity</i></p> <p><b>Comment:</b></p>									

**Country: Italy**

160	358	5/26/1995	5/26/2000	Primary DOE			None	Energy Research and Development	Energy R&D
<p><b>Title:</b> <i>Agreement between the Department of Energy of the United States of America and the Ministry of Industry, Commerce and Handicraft of the Italian Republic in the Field of Energy Research and Development</i></p> <p><b>Comment:</b> continues 1985 MOU in Energy R&amp;D</p>									
344	358	5/7/1997		Secondary DOE		160	Primary DOE	Fossil Energy	Annex 3 - Fossil Energy
<p><b>Title:</b> <i>Annex III to the Agreement between the Department of Energy of the United States of America and the Ministry of Industry, Commerce and Handicraft of the Republic of Italy to Cooperate in the Field of Fossil Energy</i></p> <p><b>Comment:</b> Two additional areas were added in March 1998; fuel cells for power applications and externally fired combined cycle systems</p>									
345	358	3/24/1998	3/24/2003	Secondary DOE		160	Primary DOE	Energy Efficiency and Renewable Energy	Annex 4 - Advanced Geothermal Technology
<p><b>Title:</b> <i>Annex IV to the Agreement between the Department of Energy of the United States of America and the Ministry of Industry, Commerce and Handicraft of the Republic of Italy in the Field of Energy Research and Development for Cooperation on Advanced Geothermal Technology</i></p> <p><b>Comment:</b> Provides for collaboration between Ladrello and the Geyser Geothermal Facilities</p>									
346	358	3/24/1998	3/24/2008	Secondary DOE		160	Primary DOE	Energy Efficiency and Renewable Energy	Annex 5 - Biomass Energy
<p><b>Title:</b> <i>Annex V to the Agreement between the Department of Energy of the United States of America and the Ministry of Industry, Commerce and Handicraft of the Republic of Italy in the Field of Energy Research and Development for Cooperation in the Field of Biomass Energy</i></p> <p><b>Comment:</b> Information Exchange on biomass systems. Task sharing on hot gas clean-up for medium-scale gasifiers.</p>									
347	358	3/24/1998	3/24/2008	Secondary DOE		160	Primary DOE	Energy Efficiency and Renewable Energy	Annex 6 - Photovoltaic Technology
<p><b>Title:</b> <i>Annex VI to the Agreement between the Department of Energy of the United States of America and the Ministry of Industry, Commerce and Handicraft of the Republic of Italy in the Field of Energy Research and Development for Cooperation in the Field of Photovoltaic Technology</i></p> <p><b>Comment:</b> Info exchange on reducing manufacturing costs of PV cells. Cooperation on guidelines for building integrated PV systems.</p>									



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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
492	444	7/10/1998	7/10/2003	Secondary DOE		160	Primary DOE	Energy Research and Development	Annex 7 - Electric and Hybrid Vehicles
<b>Title:</b> <i>Annex VII to the Agreement between the Department of Energy of the United States of America and the Ministry of Industry, Commerce and Handicraft of the Republic of Italy in the Field of Energy Research and Development for Cooperation in the Field of Electric and Hybrid Vehicles</i>									
<b>Comment:</b> Remains in force for 5 years or until the Agreement expires, whichever is sooner.									
7	323	10/4/1993	10/4/2003	Intergovernmental			None	Science and Technology	Gov't to Gov't S & T
<b>Title:</b> <i>Agreement between the Government of the United States of America and the Government of the Italian Republic for Scientific and Technological Cooperation</i>									
<b>Comment:</b> Science and Technology agreement between the United States and the Government of Italy which allows U.S. Government agencies to undertake cooperation in their respective areas of responsibility. Renewed last in 1998.									
46	323	10/31/198		Statement of Intent		7	Intergovernmental	Information and/or Personnel Exchange	Synchrotron Light Source
<b>Title:</b> <i>Protocol of Intent of Intent between the Department of Energy of the United States of America and the Ministry of the University and of Scientific and Technological Research of the Republic of Italy</i>									
<b>Comment:</b>									

## Country: Japan

251	385	5/3/1996	5/3/2001	Primary DOE		10	Intergovernmental	Science and Technology	DOE/STA Basic Science & Technology
<b>Title:</b> <i>Implementing Arrangement between the Department of Energy of the United States of America and the Science and Technology Agency of Japan in the Field of Basic Science and Technology</i>									
<b>Comment:</b> Determine cooperation on joint projects in the field of basic S&T which may include nuclear physics; synchrotron radiation; medical application of the radiation produced by accelerators; spin physics program at the Relativistic Heavy Ion Collider and biologic effects of radiation.									
166	195	12/3/1986	12/2/2001	Primary DOE			None	Nuclear Energy	Radioactive Waste Management
<b>Title:</b> <i>Agreement between the United State Department of Energy and the Power Reactor and Nuclear Fuel Development Corp of Japan in the Area of Radioactive Waste Management</i>									
<b>Comment:</b> Study topics and develop cooperatively and jointly technology and techniques necessary for the safe management of radioactive wastes.									
511	195	7/17/1998	7/17/2000	Secondary DOE		166	Primary DOE	Civilian Radioactive Waste Management	Project Annex on Engineered Barriers
<b>Title:</b> <i>Project Annex for Cooperation in Near-Field Performance and Analyses on the Long-Term Behavior of the Engineered Barriers under the Agreement between the Department of Energy of the United States of America and the Power Reactor and Nuclear Fuel Development Corporation Japan in the Area of Radioactive Waste Management</i>									
<b>Comment:</b>									
395	365	2/19/1997	5/19/2000	Secondary DOE		171	Primary DOE	Arms Control and Nonproliferation	Action Sheet 30 - Randomized Inspection (PNC)
<b>Title:</b> <i>Action Sheet PNC 30 The United States Department of Energy (DOE) and The Power Reactor and Nuclear Fuel Development Corporation of Japan (PNC) for Joint Study of Improved Safeguards Methodology Using Non-Notice Randomized Inspection</i>									
<b>Comment:</b>									



## All In Force Bilateral Agreements

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
545	365	12/18/1999	12/18/2000	Secondary DOE		171	Primary DOE	Arms Control and Nonproliferation	Action Sheet 37 - A-MAGB at Plutonium Fuel Production Facility  <b>Title:</b> <i>Action Sheet 37 between the United States Department of Energy (DOE) and the Japan Nuclear Cycle Development Institute (JNC) for Development of Plutonium Isotopic Systems for Measuring Containers in the Advanced Material Accountancy Glove Box at PFPF</i> <b>Comment:</b>
546	365	12/18/1999	12/18/2000	Secondary DOE		171	Primary DOE	Arms Control and Nonproliferation	Action Sheet 38 - Remote Monitoring for Tokai  <b>Title:</b> <i>Action Sheet 38 between the United States Department of Energy (DOE) and the Japan Nuclear Cycle Development Institute (JNC) for Development of Remote Monitoring for Tokai Vitrification Facility Safeguards System</i> <b>Comment:</b>
547	365	3/12/1999	3/12/2002	Secondary DOE		171	Primary DOE	Arms Control and Nonproliferation	Action Sheet 39 - Radiation Sensor Monitors at  <b>Title:</b> <i>Action Sheet 39 between The United States Department of Energy (DOE) and The Japan Nuclear Cycle Development Institute (JNC) for Development of Radiation Sensor Monitors to Improve Dual C/S at Monju Reactor Core</i> <b>Comment:</b>
548	365	3/22/1999	3/22/2002	Secondary DOE		171	Primary DOE	Arms Control and Nonproliferation	Action Sheet 40 - Isotope Dilution Gamma-Ray Spectrometry  <b>Title:</b> <i>Action Sheet (40) between The United States Department of Energy (DOE) and The Japan Nuclear Cycle Development Institute (JNC) for Joint Research and Development Study of the Metrology of the Isotope Dilution Gamma-Ray Spectrometry (IDGS)</i> <b>Comment:</b>
549	365	3/24/1999	9/24/2000	Secondary DOE		171	Primary DOE	Arms Control and Nonproliferation	Action Sheet 41 Conceptual Design for RETF Safeguards System Phase 2.  <b>Title:</b> <i>Action Sheet 41 between The Japan Nuclear Cycle Development Institute (JNC) And The United States Department of Energy (DOE) For Joint Study on the Conceptual Design for the RETF Safeguards System (Phase-2)</i> <b>Comment:</b>
173	356	4/11/1995	4/11/2005	Primary DOE			None	Nuclear Energy	Nuclear Reactor Technologies R&D  <b>Title:</b> <i>Memorandum of Understanding between the United States Research and Development Organizations and the Japanese Research Organizations for Cooperation in Nuclear Reactor Technologies Research and Development</i> <b>Comment:</b> Provide a vehicle for cooperation between DOE and its national laboratories, EPRI and the Advanced Reactor Corporation, and the Japanese R&D Organizations, including PNC, JAPC, JAERI and CRJEPI to cooperate in nuclear reactor technologies R&D.
174	362	7/17/1995	7/17/2005	Primary DOE			None	Nuclear Energy	Nuclear Research and Development - JAERI  <b>Title:</b> <i>Agreement between the Department of Energy of the United States of America and the Japan Atomic Energy Research Institute in the Field of Nuclear Research and Development</i> <b>Comment:</b> Cooperation to conduct programs associated with nuclear R&D in such areas as basic nuclear S&T, nuclear safety, and advanced nuclear technologies.

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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
397	428	4/23/1998	4/23/2001	Secondary DOE		174	Primary DOE	High Energy Physics	Collaborative program for target development for high power spallation neutron sources
<p><b>Title:</b> <i>Specific Memorandum of Agreement between the Japan Atomic Energy Research Institute and the Department of Energy of the United States of America for Collaborative Program of Target Development for High Power Spallation Neutron Sources</i></p> <p><b>Comment:</b> Work will be performed at the Alternating Gradient Synchrotron facility at Brookhaven National Laboratory</p>									
481	435	6/9/1997	6/9/2007	Secondary DOE		174	Primary DOE	Arms Control and Nonproliferation	SMA - Safeguards
<p><b>Title:</b> <i>Specific Memorandum of Agreement between the Japan Atomic Energy Research Institute and the Department of Energy of the United States of America Concerning Research and Development in Nuclear Material Control, Accountancy, Verification and Physical Protection</i></p> <p><b>Comment:</b></p>									
523	468	1/27/2000	1/27/2005	Primary DOE			None	Arms Control and Nonproliferation	DOE/JNC Safeguards Agreement
<p><b>Title:</b> <i>Agreement between the Department of Energy of the United States of America and the Japan Nuclear Cycle Development Institute For Cooperation in Research and Development (R&amp;D) Concerning Nuclear Material Control and Accounting Measures for Safeguards and Nonproliferation</i></p> <p><b>Comment:</b> Improving the efficiency and effectiveness of equipment and techniques for safeguards and nonproliferation to implement policies and procedures pursuant to the non-proliferation treaty.</p>									
550	482	1/27/2000	7/27/2001	Secondary DOE		523	Primary DOE	Arms Control and Nonproliferation	Action Sheet 42 Measurement Methods for Scrap Materials
<p><b>Title:</b> <i>Action Sheet 42 between The Japan Nuclear Cycle Development Institute (JNC) and The United States Department of Energy (DOE) For Investigation of Measurements Methods for Scrap Materials with High Impurities</i></p> <p><b>Comment:</b></p>									
551	482	1/27/2000	1/27/2003	Secondary DOE		523	Primary DOE	Arms Control and Nonproliferation	Action Sheet 43 NDA Techniques at Ningyo
<p><b>Title:</b> <i>Action Sheet 43 between The United States Department of Energy (DOE) and The Japan Nuclear Cycle Development Institute (JNC) for Design Studies and Development of NDA Techniques for In-Process and Waste Invention at the Ningyo Enrichment Plant</i></p> <p><b>Comment:</b></p>									
552	482	1/27/2000	1/27/2002	Secondary DOE		523	Primary DOE	Arms Control and Nonproliferation	Action Sheet 44 - Dry Reprocessing Methods
<p><b>Title:</b> <i>Action Sheet 44 between The Japan Nuclear Cycle Development Institute (JN) and The United States Department of Energy (DOE) for A Joint Study of Safeguards Systems for Dry Reprocessing</i></p> <p><b>Comment:</b></p>									
553	482	1/27/2000	1/27/2003	Secondary DOE		523	Primary DOE	Arms Control and Nonproliferation	Action Sheet 45 Remote Monitoring System at PFPF
<p><b>Title:</b> <i>Action Sheet 45 between The United States Department of Energy (DOE) and The Japan Nuclear Cycle Development Institute (JNC) for Development of the Integrated Remote Monitoring System at the Plutonium Fuel Production Facility in Japan</i></p> <p><b>Comment:</b></p>									

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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
597	492	8/22/2000	8/22/2005	Primary DOE			None	Nuclear Energy	Agreement for Nuclear Technologies <i>Title: Agreement Between The Department of Energy of the United States of America and The Japan Nuclear Cycle Developments Institute in the Field of Nuclear Technologies.</i> <b>Comment:</b>
640	535	7/10/2002	7/10/2005	Primary DOE			None	Civilian Radioactive Waste Management	Nuclear Waste Management Organization Agreement (NUMO) <i>Title: Agreement between the Department of Energy of the United States of America and the Nuclear Waste Management Organization of Japan in the Field of Radioactive Waste Management</i> <b>Comment:</b>
643	538	9/2/2002	9/2/2005	Primary DOE			None		Agreement bet. DOE and the Japan Atomic Energy Research Institute <i>Title: Specific Memorandum of Agreement between the Department of Energy of the United States of America and the Japan Atomic Energy Research Institute on Cooperation in the Field of Synchrotron Radiation Research</i> <b>Comment:</b>
653	548	3/19/2003	3/19/2008	Primary DOE			None	Civilian Radioactive Waste Management	Radioactive Waste Management <i>Title: Agreement between the Department of Energy of the United States of America and the Japan Nuclear Cycle Development Institute in the Field of Radioactive Waste Management</i> <b>Comment:</b>
657	552	8/18/2000	8/18/2005	Amendment		263	None	Fusion Energy	Amendment V <i>Title: Amendment V to the Agreement between the Japan Atomic Energy Research Institute and the United States Department of Energy on Cooperation in Doublet III Project</i> <b>Comment:</b>
8	42	5/2/1979	5/1/2005	Intergovernmental			None	Energy Research and Development	US/Japan Energy and Related Fields Agreement <i>Title: Agreement between the Government of the United States of America and the Government of Japan on Cooperation in Research and Development in Energy and Related Fields</i> <b>Comment:</b> Maintaining and intensifying cooperation in research and development in energy and related fields.
22	114	1/24/1983	5/1/2005	Broad		8	Intergovernmental	Fusion Energy	Fusion Energy <i>Title: Exchange of Notes establishing the Cooperation in Fusion Research and Development</i> <b>Comment:</b> A cooperative program for the exchange of information, personnel and equipment, and special activities as may be mutually agreed, in various technical areas of fusion energy between DOE and the Ministry of Education, the STA, MONBUSHO, and the MITI, as established by an exchange of diplomatic notes and separate agreements within each organization. Remains in force as long as the Agreement between US-Japan on Cooperation in Research and Development in Energy and Related Fields remains in force.
255	116	1/25/1983	5/1/2005	Primary DOE		22	Broad	Fusion Energy	Fusion Energy - MITI <i>Title: Exchange of Letters establishing the MITI-DOE Cooperation in Fusion Research and Development</i> <b>Comment:</b> Remains in effect as long as the Exchange of Notes between USA-Japan on Cooperation in Fusion Research and Development

## All In Force Bilateral Agreements

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
256	117	1/25/1983	5/1/2005	Primary DOE		22	Broad	Fusion Energy	Fusion Energy - STA - Primary DOE agreement
<b>Title:</b> <i>Exchange of Letters establishing the STA-DOE Cooperation in Fusion Research and Development</i>									
<b>Comment:</b> Remains in effect as long as the Exchange of Notes between USA-Japan on Cooperation in Fusion Research and Development									
417	134	11/8/1983	5/1/2005	Secondary DOE		256	Primary DOE	Fusion Energy	Fusion Research and Development - JAERI
<b>Title:</b> <i>Implementing Arrangement between the Japan Atomic Energy Research Institute and the United States Department of Energy on Cooperation in Fusion Research and Development</i>									
<b>Comment:</b> Appoint coordinators to report to Fusion Committee and to cooperate in such areas as plasma-containment devices, such as tokomaks; joint research related to plasma physics; magnetic fusion concepts; magnetic systems for fusion devices; plasma engineering; fusion-reactor materials; fusion-systems engineering; environmental and safety aspects of fusion energy; plasma diagnostics and vacuum technology; and applications of fusion energy.									
463	133	11/8/1983	3/31/2004	Tertiary DOE		417	Secondary DOE	Fusion Energy	Annex 1 - First Wall and Blanket Structural
<b>Title:</b> <i>Annex I to Implementing Arrangement between Japan Atomic Energy Research Institute and U.S. Department of Energy on Cooperation in Fusion Research and Development U.S.-Japan Collaborative Testing of First Wall and Blanket Structural Materials with Mixed Spectrum Fission Reactors</i>									
<b>Comment:</b> JOINT IRRADIATION EXPERIMENTS AND EVALUATION OF RESULTS.									
466	210	6/11/1987	6/11/2001	Tertiary DOE		417	Secondary DOE	Fusion Energy	Annex 4 - Fusion - Fuel Processing
<b>Title:</b> <i>Annex IV to the Implementing Arrangement between the Japan Atomic Energy Research Institute and the United States Department of Energy on Cooperation in Fusion Research and Development for the DOE-JAERI Collaborative Program Technology for Fusion-Fuel Processing</i>									
<b>Comment:</b> Define, conduct, evaluate the joint operation/experiments on fusion fuel technology with TSTA at LANL for the purposes of developing and demonstrating fuel process technology for fusion power systems; developing/testing environmental/personnel protective systems for tritium handling; developing/testing/qualifying equipment and material for tritium services in the fusion energy program,									
471	270	1/11/1990	1/11/2005	Tertiary DOE		417	Secondary DOE	Fusion Energy	Annex 9 - Data Link
<b>Title:</b> <i>Annex IX to the Implementing Arrangement between the Japan Atomic Energy Research Institute and United States Department of Energy on Cooperation in Fusion Research and Development for the DOE-JAERI Collaboration on the Data Link</i>									
<b>Comment:</b> Establish the Data Link to facilitate rapid information exchanges between fusion researchers of the Parties through (1) code development and/or usage; (2) data analysis and/or theory/experiment comparison; (3) access to computers in home countries by visiting scientists for computations related to purpose of visit; (4) administration of the Data Link. VISITS: Yes DURATION: To Be Determined DOE/HQ CONTACT: Arthur Katz, ER-523, (301) 903-4932; FTS: 233-4932									
257	115	1/29/1983	5/1/2005	Primary DOE		22	Broad	Fusion Energy	Fusion Energy - Monbusho - Primary DOE
<b>Title:</b> <i>Exchange of Letters establishing the Monbusho-DOE Cooperation in Fusion Research and Development</i>									
<b>Comment:</b> Remains in effect as long as the Exchange of Notes between USA-Japan on Cooperation in Fusion Research and Development									
419	214	7/17/1987	7/19/2001	Secondary DOE		257	Primary DOE	Fusion Energy	Annex 1 - Irradiation Effects Utilizing Fission
<b>Title:</b> <i>Annex 1 to 01/25/83 exchange of letters between Japan Ministry of Education (Monbusho) and USDOE on cooperation in fusion R&amp;D for collaboration in fundamental studies of irradiation effects in fusion materials utilizing fission</i>									
<b>Comment:</b> JOINT IRRADIATION AND EVALUATION EXPERIMENTS ON MATERIALS									

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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
420	258	12/12/198	12/21/200	Secondary DOE		257	Primary DOE	Fusion Energy	Annex 2 - Data Link & Data Link Projects for <i>Title: Annex II to the January 25, 1983 Exchange of Letters between Monbusho of Japan and the Department of Energy of the United States on Cooperation in Fusion Research and Development</i> <i>Monbusho-DOE Collaboration on a data Link and Data Link Projects for Fusion</i> <b>Comment:</b> STEERING COMMITTEE MEETING
602	497	1/17/2001	7/19/2007	Secondary DOE		257	Primary DOE	Fusion Energy	Amendment 4 - Annex 1 Fusion Research and Development <i>Title: Amendment 4 of Annex I to the DOE - Monbusho Exchange of Letters on Cooperation in Fusion Research and Development</i> <b>Comment:</b>
259	228	10/16/198	5/1/2005	Primary DOE		8	Intergovernmental	Fossil Energy	Coal R&D - AIST and ANRE <i>Title: Implementing Arrangement between the Agency of Industrial Science and Technology and the Agency of Natural Resources and Energy of Japan and the United States Department of Energy in Coal Research and Development</i> <b>Comment:</b> Establish comprehensive cooperation in the area of coal energy R&D in order to accelerate development of coal R&D efforts, i.e., coal liquefaction, coal gasification; materials and components for coal conversion and utilization; pollution control technology related to coal conversion and utilization.
262	48	8/24/1979	5/1/2005	Primary DOE		8	Intergovernmental	Fusion Energy	Fusion Energy/Coordinating Committee <i>Title: Exchange of Letters Establishing a Coordinating Committee on Fusion Energy</i> <b>Comment:</b> Establish a Coordinating Committee on Fusion Energy to facilitate the coordination and implementation of cooperative activities in the area of fusion as well as to assure proper balance and to ensure the overall planning and oversight of such cooperative activities.
263	50	8/28/1979	8/28/2000	Primary DOE		8	Intergovernmental	Fusion Energy	Fusion Energy/Doublet III <i>Title: Agreement between the United States Department of Energy and the Japan Atomic Energy Research Institute on Cooperation in Doublet III Project</i> <b>Comment:</b> Undertake experimental research on tokamak plasmas with doublet and dee-shaped cross-sections in the Doublet III, a tokamak facility, located in LaJolla, California.
264	58	11/11/197	5/1/2005	Primary DOE		8	Intergovernmental	High Energy Physics	High Energy Physics <i>Title: Implementing Arrangement between the Department of Energy of the United States of America and the Ministry of Education, Science and Culture of Japan on Cooperation in Field of High Energy Physics</i> <b>Comment:</b> Establish a framework for cooperation in the field of high energy physics including research; accelerator and detector instrumentation R&D; the fabrication and subsequent use of new experimental devices and facilities. Remains in forces for the duration of the U.S.-Japan R&D in Energy and Related Fields Agreement signed on May 2, 1979

## Country: Kazakhstan

186	402	7/12/1996		Primary DOE			None	Science and Technology	Energy R&D and Tech exchange <i>Title: Agreement between the Department of Energy of the United States of America and the Ministry of Science-Academy of Sciences of the Republic of Kazakhstan on Scientific Research and Development and Technology Exchange Programs</i> <b>Comment:</b>
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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
428	402	5/13/1997		Secondary DOE		186	Primary DOE	*Other - Remote Sensing	Remote Sensing Mission
<b>Title:</b> <i>Annex 1 - For the Conduct of the Remote Sensing Mission (AMPS) in the Republic of Kazakhstan</i>									
<b>Comment:</b>									
529	474	12/19/200		Primary DOE			None	Arms Control and Nonproliferation	Decommissioning of the BN-350 Reactor
<b>Title:</b> <i>Implementing Arrangement between the Department of Energy of the United States of America and the Ministry of Energy, Industry and Trade of the Republic of Kazakhstan Concerning Decommissioning of the BN-350 Reactor</i>									
<b>Comment:</b>									
<b>Country:</b> <u><i>Korea, Republic of</i></u>									
180	389	6/14/1996	6/14/2001	Primary DOE		11	Intergovernmental	Fusion Energy	Fusion Energy Research and Related Fields
<b>Title:</b> <i>Implementing Arrangement between the Department of Energy of the United States of America and the Ministry of Science and Technology of the Republic of Korea for Cooperation in the Area of Fusion Energy Research and Related Fields</i>									
<b>Comment:</b> Promote S&T cooperation in fusion energy research and related fields in order to enhance contributions. Remains in force for 5 years or until termination of the S&T Agreement, whichever occurs first.									
626	521	6/14/2001	6/14/2006	Secondary DOE		180	Primary DOE	Fusion Energy	Extension on the Implementing Arrangement between DOE and Korea
<b>Title:</b> <i>Agreement to Extend the Implementing Arrangement between the Department of Energy of the United States of America and the Ministry of Science and Technology of the Republic of Korea for Cooperation in the Area of Fusion Energy Research and Related Fields</i>									
<b>Comment:</b>									
179	388	6/14/1996	6/14/2001	Primary DOE			None	Nuclear Energy	Cooperative Laboratory Relationship
<b>Title:</b> <i>Memorandum of Understanding between the Department of Energy of the United States of America and the Ministry of Science and Technology of the Republic of Korea for a Cooperative Laboratory Relationship</i>									
<b>Comment:</b> Cooperate in the field of peaceful uses of nuclear energy including such areas as: nuclear waste management; nuclear safety and environment; nuclear safeguards technology; basic sciences; education; health physics; environmental research related to nuclear technology, etc									
595	388	6/29/2000	6/29/2005	Secondary DOE		179	Primary DOE	Nuclear Energy	Annex 4 - Cintichem Process Technology (first project annex)
<b>Title:</b> <i>Annex 4 Joint Project on Cintichem Technology between the Department of Energy of the United States of America and the Korea Atomic Energy Research Institute under the Memorandum of Understanding between the Department of Energy of the United States of America and the Ministry of Science and Technology of the Republic of Korea for a Cooperative Laboratory Relationship</i>									
<b>Comment:</b>									

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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
608	503	5/16/2001	5/16/2006	Secondary DOE		179	Primary DOE	Nuclear Energy	Annex V - MOU between DOE and Ministry of Science and Technology of the Republic of Korea on I-NERI  <b>Title:</b> <i>Annex V to the Memorandum of Understanding between the Department of Energy of the United States of America and the Ministry of Science and Technology of the Republic of Korea for a Cooperative Laboratory Relationship on a Collaboration Project Supporting the International Nuclear Energy Research Initiative (INERI)</i> <b>Comment:</b>
609	504	5/16/2001	6/14/2001	Secondary DOE		179	Primary DOE	Nuclear Energy	Amendment C to Annex III Participating Institutions to the MOU between DOE and Ministry Science and Technology  <b>Title:</b> <i>Amendment C to Annex III - Participating Institutions to the Memorandum of Understanding between the Department of Energy of the United States of America and the Ministry of Science and Technology of the Republic of Korea for a Cooperative Laboratory Relationship</i> <b>Comment:</b>
644	539	6/14/2001	6/14/2006	Secondary DOE		179	Primary DOE	Science and Technology	Extend and Amend MOU bet. DOE and MOST  <b>Title:</b> <i>Agreement to Extend and Amend the Memorandum of Understanding between the Department of Energy of the United States of America and the Ministry of Science and Technology of the Republic of Korea for a Cooperative Laboratory Relationship</i> <b>Comment:</b>
639	534	9/17/2002	9/17/2007	Primary DOE			None	Science and Technology	Safeguards Agreement  <b>Title:</b> <i>Arrangement between the Department of Energy of the United States of America and the Ministry of Science and Technology of the Republic of Korea Concerning Research and Development in Nuclear Material Control, Accountancy, Verification, Physical Protection, and Advanced Containment and Surveillance Technologies for International Safeguards Applications</i> <b>Comment:</b>

## Country: Mexico

12	41	6/15/1972		Intergovernmental			None	Science and Technology	Science & Technology  <b>Title:</b> <i>Agreement Between the United States of America and Mexico for Scientific and Technical Cooperation</i> <b>Comment:</b> Effected by Exchange of Notes Signed at Washington June 15, 1972
270	386	5/7/1996	5/7/2001	Primary DOE		12	Intergovernmental	Energy Research and Development	Energy Cooperation  <b>Title:</b> <i>Agreement between the Department of Energy of the United States of America and the Secretariat of Energy of the United Mexican States for Energy Cooperation</i> <b>Comment:</b> Develop a framework for cooperation to facilitate establishment of cooperative activities in research, development and commercialization to promote improved use of renewable energy and energy efficiency and fossil energy technologies, giving due consideration to environmental concerns, as well as to exchange, develop, and analyze energy strategies and regulatory criteria and to encourage the promotion of energy trade opportunities.

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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
483	437	6/10/1998	6/10/2001	Secondary DOE		270	Primary DOE	Energy Efficiency and Renewable Energy	Annex 1 - Renewable Energy
<b>Title:</b> <i>Project Annex 1 Cooperation in the Field of Renewable Energy</i>									
<b>Comment:</b> Project areas under discussion by SNL and CNEA (Mexico National Commission for Energy Savings)									
484	438	6/10/1998	6/10/2001	Secondary DOE		270	Primary DOE	Energy Efficiency and Renewable Energy	Annex 2 - Energy Efficiency
<b>Title:</b> <i>Project Annex 2 Cooperation in the Field of Energy Efficiency</i>									
<b>Comment:</b> Project areas under discussion.									
498	447	10/21/199	10/21/200	Secondary DOE		270	Primary DOE	Environmental Restoration and Waste Management	Annex 3 - Enviro Cooperation in hydrocarbons
<b>Title:</b> <i>Project Annex 3 - Environmental Cooperation in the Field of Hydrocarbons</i>									
<b>Comment:</b> Facilitating work between Mexico Institute of Petroleum and ORNL.									
519	465	12/7/1999	5/7/2001	Secondary DOE		270	Primary DOE	Fossil Energy	Annex 4- Clean Fossil Energy Technologies
<b>Title:</b> <i>Project Annex 4 Cooperation in the field of Clean Fossil Energy Technologies</i>									
<b>Comment:</b> Annex is in force as long as the Agreement is in force.									
610	505	5/7/2001	5/7/2006	Secondary DOE		270	Primary DOE	Science and Technology	
<b>Title:</b> <i>Extension of the Agreement for Energy Cooperation between the Department of Energy of the United States of America and the Secretariat of Energy of the United Mexican States, and its Four</i>									
<b>Comment:</b>									
188	405	3/25/1985	3/25/2005	Primary DOE			None	Arms Control and Nonproliferation	Sister Lab Arrangement
<b>Title:</b> <i>Memorandum of Understanding (MOU) for the Exchange of Technical Information and for Cooperation in the Field of Peaceful Uses of Nuclear Energy between the National Institute of Nuclear Research of Mexico and the Los Alamos National laboratory of the United States of America</i>									
<b>Comment:</b> Sister lab arrangement supporting Article IV of the NPT.									
604	499	3/9/2001		Broad			None	Fifth Hemispheric Energy Ministers Meeting	Mexico Declaration
<b>Title:</b> <i>Fifth Hemispheric Energy Ministers Meeting Mexico City, Mexico - March 9, 2001. Mexico Declaration - Energy: A Crucial Factor for Integration and Sustainable Development in the Hemisphere</i>									
<b>Comment:</b>									

## Country: Morocco

599	494	10/16/200	10/16/200	Primary DOE			None	Energy Efficiency and Renewable Energy	Agreement on Concerning Cooperation in Energy Efficiency and Renewable Energy
<b>Title:</b> <i>Agreement Between The Department of Energy of the United States of America and The Ministry of Industry, Commerce, Energy and Mines of the Kingdom of Morocco Concerning Cooperation in Energy Efficiency and Renewable Energy</i>									
<b>Comment:</b>									



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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
627	522	10/16/200	10/16/200	Secondary DOE		599	Primary DOE	Energy Efficiency and Renewable Energy	Project Annex 1 - EERE
<p><b>Title:</b> <i>Project Annex 1 to the Agreement between the Department of Energy of the United States of America and the Ministry of Industry, Commerce, Energy and Mines of the Kingdom of Morocco Concerning Cooperation in Energy Efficiency and Renewable Energy</i></p> <p><b>Comment:</b></p>									
647	542	6/3/2002	6/3/2007	Secondary DOE		599	Primary DOE	Energy Efficiency and Renewable Energy	Project Annex 2 - Clean Energy Technologies
<p><b>Title:</b> <i>Project Annex 2 to the Agreement between the Department of Energy of the United States of America and the Ministry of Industry, Commerce, Energy and Mines of the Kingdom of Morocco Concerning Cooperation in Clean Energy Technologies</i></p> <p><b>Comment:</b></p>									

## Country: Nigeria

48	76	7/23/1980		Statement of Intent			None	Energy Research and Development	Energy R&D
<p><b>Title:</b> <i>Memorandum of Intent Concerning Energy Cooperation between the Government of the United States of America and the Government of the Federal Republic of Nigeria</i></p> <p><b>Comment:</b> Exploit and use conventional sources of energy, develop effective machinery to monitor environmental effects of energy, develop and demonstrate technologies to utilize new and renewable energy sources, training in energy planning and technology and strengthen bilateral relations through increased official cooperation. Formal cooperation never establish</p>									
520	466	8/14/1999		Primary DOE			None	*Other - Energy Policy	MOU on Energy Policy
<p><b>Title:</b> <i>Memorandum of Understanding between the Department of Energy of the United States of America and the Federal Ministry of Power and Steel of the Federal Republic of Nigeria on Energy Policy</i></p> <p><b>Comment:</b></p>									

## Country: Pakistan

49	339	9/24/1994		Statement of Intent			None	*Other - Climate Change	Climate Change
<p><b>Title:</b> <i>Joint Statement of Intent between the Department of Energy of the United States of America and the Environment and Urban Affairs Division of the Islamic Republic of Pakistan</i></p> <p><b>Comment:</b> Enhancing mutual environmental protection, in particular, controlling greenhouse gas emissions to limit potential adverse climate change impacts (Environment and Urban Affairs Division).</p>									
50	338	9/24/1994		Statement of Intent			None	Fossil Energy	Statement of Intent w/ Ministry of Petroleum and Natural Resources
<p><b>Title:</b> <i>Statement of Intent between the Department of Energy of the United States of America and the Ministry of Petroleum and Natural Resources, Government of the Islamic Republic of Pakistan</i></p> <p><b>Comment:</b> Promoting trade, investment and cooperation between U.S. &amp; Pakistan (Min of Petroleum and Natural Resources) public and private-sector entities in the fields of fossil fuels (petroleum and minerals, including coal) and new and renewable energy resources, related infrastructure development, and in the exchange of experience and views on opportunities in these sectors.</p>									

**All In Force Bilateral Agreements**

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
51	340	9/24/1994		Statement of Intent			None	Energy Efficiency and Renewable Energy	Statement of Intent w/ Ministry of Water and Power
<p><b>Title:</b> <i>Statement of Intent between the Department of Energy of the United States of America and the Ministry of Water and Power of the Islamic Republic of Pakistan</i></p> <p><b>Comment:</b> Promoting trade, investment and cooperation between the U.S. and Pakistan (Ministry of Water and Power) private and public sector entities in the fields of fossil and renewable energy, and in the exchange of experience and views on opportunities for improving energy efficiency and enhancing electricity policy.</p>									

**Country: Palestinian Authority**

535	479	2/22/2000		Statement of Intent			None	Energy Research and Development	Energy Planning SOI
<p><b>Title:</b> <i>Joint Statement of Intent between the Department of Energy of the United States of America and the Palestinian Energy Authority on Cooperation in the Field of Energy</i></p> <p><b>Comment:</b></p>									

**Country: Peru**

512	458	6/17/1991	6/16/2001	Primary DOE			None	Arms Control and Nonproliferation	Sister Lab Arrangement
<p><b>Title:</b> <i>Arrangement for the Exchange of Technical Information and for Cooperation in the Field of Peaceful Uses of Nuclear Energy between the Peruvian Institute of Nuclear Energy and the Los Alamos National Laboratory</i></p> <p><b>Comment:</b></p>									
603	498	3/8/2001		Statement of Intent			None	Cooperation in the Field of Energy	Cooperation in the Field of Energy
<p><b>Title:</b> <i>Joint Statement of Intent between the Department of Energy of the United States of America and The Ministry of Energy and Mines of the Republic of Peru on Cooperation in the Field of Energy</i></p> <p><b>Comment:</b></p>									
645	540	8/14/2001	8/14/2006	Primary DOE			None	Science and Technology	MOU - Cooperation in the Field of Energy
<p><b>Title:</b> <i>Memorandum of Understanding between the Department of Energy of the United States of America and the Ministry of Energy and Mines of the Republic of Peru on Cooperation in the Field of</i></p> <p><b>Comment:</b></p>									

**Country: Philippines**

195	403	6/19/1997	6/19/2002	Primary DOE			None	Information and/or Personnel Exchange	Info Exchange
<p><b>Title:</b> <i>Memorandum of Agreement between the Department of Energy of the United States of America and the Department of Energy of the Republic of the Philippines for the Exchange of Energy</i></p> <p><b>Comment:</b></p>									

**Country: Poland**

## All In Force Bilateral Agreements

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
13	224	9/28/1987	9/28/2002	Intergovernmental			None	Science and Technology	Science & Technology
<b>Title:</b> <i>Agreement between the Government of the United States of America and the Government of the Polish People's Republic on Cooperation in Science and Technology and its Funding</i>									
<b>Comment:</b> Develop, support and facilitate S&T cooperation on the basis of the principles of equality, reciprocity, and mutual benefit. Joint projects of mutual interest are funded by a fund contributed to by the two governments. Renewed last in 1997.									
198	367	8/21/1995	8/21/2000	Primary DOE			None	Environmental Restoration and Waste Management	Environmental Restoration Hazardous Waste Mgmt
<b>Title:</b> <i>Agreement for Technical Exchange and Cooperating between the Department of Energy of the United States of America and the Institute for Ecology of Industrial Areas of the Republic of Poland in the Area of Environmental Restoration and Hazardous Waste Management</i>									
<b>Comment:</b> Study topics associated with the safe management of hazardous wastes, e.g., risks associated with human exposure to environmental contamination from chemical and heavy metals in soils; demonstration of technologies or methodologies for soil cleaning; and other areas determined by both parties.									

## Country: Romania

513	459	3/29/1999	3/26/2004	Primary DOE			None	Arms Control and Nonproliferation	Sister Lab Arrangement
<b>Title:</b> <i>Arrangement for Information Exchange and Cooperation in Area of Peaceful Uses of Atomic Energy between United States Department of Energy (DOE) and the Ministry of Industry and Commerce (MIC) - Romania</i>									
<b>Comment:</b> Establishes the basis for a cooperative institutional relationship between the participants for the exchange of scientific and technological and other information regarding the peaceful uses of atomic									

## Country: Russian Federation

203	395	9/16/1996	9/16/2001	Primary DOE		14	Intergovernmental	Environmental Restoration and Waste Management	Environmental Restoration and Waste Management
<b>Title:</b> <i>Memorandum of Cooperation between the Department of Energy of United States of America and the Ministry of the Russian Federation on Atomic Energy in the Fields of Environmental Restoration and Waste Management</i>									
<b>Comment:</b>									
211	396	9/16/1996	9/16/2001	Primary DOE		14	Intergovernmental	Nuclear Energy	Nuclear Reactor Safety
<b>Title:</b> <i>Memorandum of Cooperation between the United States of America and the Russian Federation in the Field of Civilian Nuclear Reactor Safety</i>									
<b>Comment:</b> replaces MOU in Civilian Nuclear Reactor Safety signed 26 April, 1988									
213	397	9/16/1996	9/16/2001	Primary DOE		14	Intergovernmental	Fusion Energy	Magnetic Confinement Fusion
<b>Title:</b> <i>Memorandum of Cooperation between the Department of Energy of the United States of America and the Ministry of the Russian Federation on Atomic Energy in the Field of Magnetic Confinement Fusion</i>									
<b>Comment:</b> Focus on Fusion science research and development									

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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
436	397	9/16/1996	9/16/2001	Secondary DOE		213	Primary DOE	Nuclear Energy	Annex 1
<p><b>Title:</b> <i>Annex 1 - List of Organizations that could participate</i></p> <p><b>Comment:</b></p>									
214	398	2/17/1997	2/17/2002	Primary DOE		14	Intergovernmental	*Other - High Energy and Nuclear Physics	Fundamental Properties of Matter
<p><b>Title:</b> <i>Memorandum of Cooperation in the Field of Research on Fundamental Properties of Matter between the Department of Energy of the United States of America and the Ministry of Atomic Energy and the State Committee for Science &amp; Technologies of the Russian Federation</i></p> <p><b>Comment:</b> activities coordinated by the Joint Coordinating Committee for Research in the Fundamental Properties of Matter (FCC-FPM)</p>									
15	315	2/18/1993		Intergovernmental			None	Nuclear Energy	Disposition HEU Extracted From Nuclear Weapons
<p><b>Title:</b> <i>Agreement between the Government of the United States of America and the Government of the Russian Federation Concerning the Disposition of Highly Enriched Uranium Extracted from Nuclear Weapons</i></p> <p><b>Comment:</b> Conversion of HEU extracted from nuclear weapons resulting from the reduction of nuclear weapons; the establishment of appropriate measures to fulfill the nonproliferation, physical protection, nuclear material accounting and control, and environmental requirements with respect to HEU and LEU.</p>									
202	394	9/16/1996	9/16/2001	Primary DOE			None	*Other - Fuel Cell Technology	RAFCO
<p><b>Title:</b> <i>Agreement between the Department of Energy of the United States of America and the Ministry of the Russian Federation on Atomic Energy Regarding a Russian-American Fuel Cell Consortium</i></p> <p><b>Comment:</b> Joint R&amp;D work in fuel cell technology development</p>									
208	324	1/14/1994	1/14/2004	Intergovernmental			None	Environmental Safety Health	Radioactive Contamination Health & Environment
<p><b>Title:</b> <i>Agreement between the Government of the United States of America and the Government of the Russian Federation on Cooperation in Research on Radiation Effects for the Purpose of Minimizing the Consequences of Radioactive Contamination on Health and the Environment</i></p> <p><b>Comment:</b> Establish a framework for cooperation in research on radiation effects for the purpose of minimization of the consequences of radioactive contamination on health and the environment. DOE is the Executive Agent and is responsible for coordination of activities to implement the agreement.</p>									
210	360	6/16/1995		Primary DOE			None	Arms Control and Nonproliferation	Nonproliferation of Weapons/Weapons Expertise
<p><b>Title:</b> <i>Memorandum of Agreement between the Department of Energy of the United States of America and the International Science and Technology Center in the Russian Federation for Cooperation in Approved Projects to Facilitate the Nonproliferation of Weapons and Weapons Expertise</i></p> <p><b>Comment:</b> Facilitate cooperation under the ISTC agreement including the efforts to reduce or eliminate weapons of mass destruction in a safe and secure manner.</p>									
209	359	6/15/1995		Secondary DOE		210	Primary DOE	Fusion Energy	Annex 1 Weapons Expertise for the Globus-M
<p><b>Title:</b> <i>Annex I to the Memorandum of Agreement between the Department of Energy of the United States of America and the International Science and Technology Center in the Russian Federation Concerning Cooperation in Approved Projects to Facilitate the Nonproliferation Weapons and Weapons Expertise for the Globus-M Project</i></p> <p><b>Comment:</b> Cooperate to support the A.F. IOFFE Physics-Technical Institute in the completion of the GLOBUS-M project by participating in the modification (or reconstruction) of the experimental hall of the Institute in order to accommodate the new GLOBUS-M spherical tokamak device and the near-by supporting equipment, the buildings that house all the other device supporting systems, and the connections/conduits between the experimental hall and those buildings needed by the GLOBUS-M project.</p>									

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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
536	480	6/22/1999	6/22/2001	Secondary DOE		210	Primary DOE	Fusion Energy	ISTC Annex III -Advanced Diagnostics equipment for Spherical Tokamak Globus-M  <b>Title:</b> <i>Annex III to the Memorandum of Agreement between the Department of Energy of the United States of America and the International Science and Technology Center in the Russian Federation Concerning Cooperation in Approved Projects to Facilitate the Nonproliferation of Weapons and Weapons Expertise for Advanced Diagnostics Equipment for Spherical Tokamak Globus-M (ISTC Project No. 1126)</i> <b>Comment:</b>
435	328	3/16/1994		Primary DOE			None	Nuclear Energy	Replacement of Russian Pu Production Reactors  <b>Title:</b> <i>Protocol of Meeting between the United States and the Russian Federation on the Replacement of Russian Plutonium Production Reactors</i> <b>Comment:</b> Plan for replacement of plutonium production reactors with alternate energy sources.
515	461	9/22/1998	9/22/2003	Intergovernmental			None	Arms Control and Nonproliferation	Nuclear Cities Initiative  <b>Title:</b> <i>Agreement between the Government of the United States of America and the Government of the Russian Federation on the Nuclear Cities Initiative</i> <b>Comment:</b> DOE is the US Executive Agent for the carrying out provisions of the agreement. Ministry of the Russian Federation for Atomic Energy is the Executive agent for Russia
518	464	3/24/1999	3/24/2004	Primary DOE			None	Science and Technology	MOU w/ Russian Academy of Sciences  <b>Title:</b> <i>Memorandum of Understanding between the Department of Energy of the United States of America and the Russian Academy of Sciences on Cooperation in Science and Technology</i> <b>Comment:</b>
565	488	5/15/2000	3/24/2004	Secondary DOE		518	Primary DOE	Environmental Restoration and Waste Management	DOE/RAS Implementing Arrangement 1  <b>Title:</b> <i>Implementing Arrangement #1 Under the Memorandum of Understanding between the United States Department of Energy and the Russian Academy of Sciences on Cooperation in Science and Technology - Geologic Analogues, Migration and Accumulation of Radionuclides in Geologic Media</i> <b>Comment:</b>
590	488	5/16/2000	9/20/2002	Tertiary DOE		565	Secondary DOE	Environmental Restoration and Waste Management	Appendix D - Uranium Mass Transport Phenomena  <b>Title:</b> <i>Appendix D Implementing Arrangement #1 of the U.S. Department of Energy/Russian Academy of Sciences Memorandum of Understanding Uranium Mass Transport Phenomena in Fractured Welded Tuffs</i> <b>Comment:</b>
593	488	5/18/2000	9/30/2003	Tertiary DOE		565	Secondary DOE	Civilian Radioactive Waste Management	Appendix G - Interaction of Actinides and Fission Products  <b>Title:</b> <i>Appendix G Implementing Arrangement #1 of the U.S. Department of Energy/Russian Academy of Science Memorandum of Understanding The Interaction of Actinides and Fission Products with Environmental Matrices</i> <b>Comment:</b>

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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
594	488	5/18/2000	9/30/2003	Tertiary DOE		565	Secondary DOE	Civilian Radioactive Waste Management	Appendix H - Actinide Speciation <i>Title: Appendix H Implementing Arrangement #1 of the U.S. Department of Energy/Russian Academy of sciences Memorandum of Understanding Actinide Speciation in the Environment to Support Safety Assessment of Geologic Repositories and for the Remediation of Contaminated Sites</i> Comment:
566	489	5/15/2000	3/24/2004	Secondary DOE		518	Primary DOE	Environmental Restoration and Waste Management	DOE/RAS Implementing Arrangement 2 <i>Title: Implementing Arrangement #2 Under the Memorandum of Understanding between the United States Department of Energy and the Russian Academy of Sciences on Cooperation in Science and Technology - Risk Assessment and Advanced Modeling Regarding Geologic Disposal</i> Comment:
589	489	6/2/2000	9/30/2003	Tertiary DOE		566	Secondary DOE	Civilian Radioactive Waste Management	Appendix C - Contaminant Transport Processes in Unsaturated Rocks <i>Title: Appendix C Implementing Arrangement #2 of the U.S. Department of Energy/Russian Academy of Sciences Memorandum of Understanding Interdisciplinary Fundamental Research to Further Develop the Methods of Describing and Modeling Contaminant Transport Process in Unsaturated Rocks</i> Comment:
591	489	5/31/2000	9/30/2002	Tertiary DOE		566	Secondary DOE	Environmental Restoration and Waste Management	Appendix D- Annex A - Chara. Of Contaminated Territories <i>Title: Annex A of Appendix D Implementing Arrangement #2 of the U.S. Department of Energy/Russian Academy of Sciences Memorandum of Understanding Characterization of Contaminated Territories, Monitoring Network Optimization, and Cost Minimization</i> Comment:
592	489	5/31/2000	9/30/2002	Tertiary DOE		566	Secondary DOE	Environmental Restoration and Waste Management	Appendix D - Annex B - Uncertainty Assessment <i>Title: Annex B of Appendix D Implementing Arrangement #2 under the DOE-RAS Memorandum of Understanding Uncertainty Assessment Through Incorporation of Mathematical Geology in Development of Inverse Flow and Transport Models</i> Comment:
605	500	4/25/2001	4/25/2004	Secondary DOE		518	Primary DOE	Science and Technology	Appendix K w/ the Russian Academy of Sciences <i>Title: Appendix K Under Implementing Arrangement #1 of the Memorandum of Understanding Between the U.S. Department of Energy and Russian Academy of Sciences on Cooperation in Science and Technology</i> Comment:
606	501	10/1/2000	10/1/2002	Secondary DOE		518	Primary DOE	Uranium Mass Transport Phenomena in Fractured Welded Tuffs	Appendix D of Implementing Arrangement #1 w/ Russian Academy of Sciences MOU <i>Title: Appendix D Implementing Arrangement #1 of The U.S. Department of Energy/Russian Academy of Sciences Memorandum of Understanding Uranium Mass Transport Phenomena in Fractured Welded Tuffs</i> Comment:

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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
52	302	3/18/1992		Statement of Intent			None	Information and/or Personnel Exchange	Electric Power Technologies
<b>Title:</b> <i>U.S.-Russia Task Force on Cooperation in Electric Power Technologies Joint Statement of Intent</i>									
<b>Comment:</b> Exchange information on developments in the electric power industries and encourage more extensive contacts among experts in this field in both countries.									
537	481	7/24/1998	7/24/2003	Intergovernmental			None	Arms Control and Nonproliferation	Plutonium Management
<b>Title:</b> <i>Agreement between the Government of the United States of America and the Government of the Russian Federation on Scientific and Technical Cooperation in the Management of Plutonium that has been withdrawn from Nuclear Military Programs</i>									
<b>Comment:</b> DOE is the Executive Agent for the US. The agreement establishes the U.S.-Russian Joint Steering Committee on Plutonium Management									
619	514	6/30/2000	6/30/2005	Secondary DOE		607	Primary DOE	Civilian Radioactive Waste Management	Protocol extending the agreement between DOE and Russia
<b>Title:</b> <i>Protocol Extending the Agreement between the Department of Energy of the United States of America and the Federal Nuclear, and Radiation Safety Authority of Russia for Cooperation on Enhancing the Safety of Russian Nuclear Fuel Cycle Facilities and Research Reactors</i>									
<b>Comment:</b> Extending the agreement mention above for five years until June 30, 2005.									
641	536	6/26/200	6/30/2005	Secondary DOE		607	Primary DOE	Arms Control and Nonproliferation	Extension bet. DOE federal Nuclear and Radiation Safety Authority of Russia
<b>Title:</b> <i>Protocol Extending the Agreement between the Department of Energy of the United States of America and the Federal Nuclear and Radiation Safety Authority of Russia to Cooperate on National Protection, Control and Accounting of Nuclear Materials</i>									
<b>Comment:</b>									
636	531	4/23/2002		Statement of Intent			None	Science and Technology	Joint Statement of Intent between DOE and Dubna
<b>Title:</b> <i>Joint Statement of Intent between the Department of Energy of the United States of America and the Joint Institute for Nuclear Research at Dubna</i>									
<b>Comment:</b>									
658	553	5/8/2002		Primary DOE			None	*Other - Purchases of Pu-238 for Peaceful Purposes	Purchases of Pu-238 for Peaceful Purposes
<b>Title:</b> <i>Joint Announcement by the United States Department of Energy and the Russian Federation Ministry for Atomic Energy Concerning Continued Purchases of Pu-238 for Peaceful Purposes</i>									
<b>Comment:</b>									
659	554	7/16/2001	7/16/2006	Secondary DOE		210	Primary DOE	Civilian Radioactive Waste Management	Annex VI
<b>Title:</b> <i>Annex VI to the Memorandum of Agreement between the Department of the United States of America and the International Science and Technology Center in the Russian Federation Concerning Implementation of Projects of the Office of Civilian Radioactive Waste Management</i>									
<b>Comment:</b>									



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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
<b>Country: <u>Senegal</u></b>									
479	433	4/2/1998		Statement of Intent			None	Energy Research and Development	SOI - Energy R&D
<b>Title: <i>Memorandum of Understanding between the Republic of Senegal and the United States of America for Cooperation on Energy Policy, Science and Technology, and Research and Development</i></b>									
<b>Comment:</b>									
516	462	3/19/1999	3/19/2004	Primary DOE			None	Energy Research and Development	Energy Policy, S and T, and R and D
<b>Title: <i>Agreement between the Department of Energy and the Ministry of Energy, Mines and Industry of the Republic of Senegal on Cooperation in Energy Policy, Science and Technology, Research and Development</i></b>									
<b>Comment:</b> The objective of this Agreement is to facilitate and establish cooperative activities by the Parties.									
<b>Country: <u>South Africa</u></b>									
20	368	12/4/1997	12/4/2022	Intergovernmental			None	Nuclear Energy	Peaceful Uses of Nuclear Energy
<b>Title: <i>Agreement for Cooperation between the United States of America and the Republic of South Africa Concerning Peaceful Uses of Nuclear Energy</i></b>									
<b>Comment:</b> Cooperate in the development, use and control of peaceful uses of nuclear energy which must be undertaken with a view to protecting the international environment from radioactive, chemical and thermal contamination. Agreement was signed on 8/25/95 ratified by exchange of diplomatic notes on 12/4/97.									
230	369	8/25/1995		Primary DOE			None	Energy Research and Development	Sustainable Energy Development Committee
<b>Title: <i>Terms of Reference on the Sustainable Energy Development Committee of the U.S. - South Africa Binational Commission</i></b>									
<b>Comment:</b>									
231	371	8/25/1995		Primary DOE			None	Energy Research and Development	Sustainable Development Resource Center
<b>Title: <i>Memorandum of Understanding between the World Wildlife Fund-South Africa, EarthKind International, U.S. Department of Energy and U.S. Agency for International Development on Creating the Sustainable Development Resource Center</i></b>									
<b>Comment:</b> Cooperate on the creation of the Sustainable Development Resource enter to advance policies and programs on the use of renewable energy and energy efficiency technologies and participation by nongovernmental organization in the decision making process. Other signatories are EarthKind Intl (Jan Hartke) and USAID (Larry Byrne)									
232	372	8/25/1995		Primary DOE			None	Energy Efficiency and Renewable Energy	Renewable and Energy Efficiency Technologies
<b>Title: <i>Memorandum of Understanding</i></b>									
<b>Comment:</b> Promotion of renewable energy and energy efficient technologies as a cost-effective means of increasing access to energy of the majority of South Africa disadvantaged population (w/USAID as a partner).									
233	374	8/25/1995		Primary DOE			None	Energy Efficiency and Renewable Energy	Electrification of Rural Clinics (Cape Town)
<b>Title: <i>Memorandum of Understanding between Sandia National Laboratories of Albuquerque New Mexico, USA and the Independent Development Trust Cape Town, Republic of South Africa</i></b>									
<b>Comment:</b> Sandia National Lab, as signatory of this MOU, has agreed to co-fund the Independent Development Trust model clinic electrification program and to provide other technical assistance as agreed by mutual consent.									



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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
234	381	12/5/1995	12/5/2000	Primary DOE			None	Energy Research and Development	Energy Policy, S&T and Development
<p><b>Title:</b> <i>Implementing Agreement between the United States Department of Energy and the Department of Mineral and Energy Affairs of South Africa on Collaboration on Energy, Policy, Science, Technology and Development</i></p> <p><b>Comment:</b> Facilitate and establish cooperative activities in energy policy, science, technology, development and commercialization activities in such areas as: fossil energy, including clean coal; energy planning, efficiency, renewable energy; environmental management; environment enhancing energy technologies; and private power project development</p>									
55	423	8/25/1995		Statement of Intent			None	Information and/or Personnel Exchange	Energy Information Exchange
<p><b>Title:</b> <i>Joint Statement of Intent between the Department of Energy of the United States of American and the Department of Mineral and Energy Affairs of the Republic of South Africa on an Energy Information Exchange</i></p> <p><b>Comment:</b></p>									
56	370	8/25/1995		Statement of Intent			None	Energy Research and Development	Energy Policy, S&T and Development
<p><b>Title:</b> <i>Joint Statement of Intent between the Department of Energy of the United States of American and the Department of Mineral and Energy Affairs of the Republic of South Africa on Energy Policy, Science and Technology, and Development</i></p> <p><b>Comment:</b> Facilitate joint activities related to energy policy, S&amp;T, development and commercialization in an environmentally and economically sound manner.</p>									
57	373	8/25/1995		Statement of Intent			None	Energy Efficiency and Renewable Energy	Renewable Energy (Guguletu Township)
<p><b>Title:</b> <i>Joint Statement of Intent for Integrated Industrial/Educational Development in Guguletu Township between the United States Department of Energy, United States Department of Energy National Laboratories, and the Guguletu RDP Forum</i></p> <p><b>Comment:</b> Establishment of a light industrial part in Guguletu Township.</p>									
58	375	8/25/1995		Statement of Intent			None	Energy Efficiency and Renewable Energy	Renewable Energy (The Csir, South Africa)
<p><b>Title:</b> <i>Statement of Intent on Renewable Energy Technologies between the National Renewable Energy Laboratory, U.S.A. and Sandia national Laboratories, U.S.A. and the CSIR (Council for Scientific and Industrial Research), Republic of South Africa</i></p> <p><b>Comment:</b> NREL and Sandia, by being signatories of this Statement, have agreed to exchange experience and views on opportunities for the appropriate utilization of renewable energy technologies with The Csir, Republic of South Africa. Witnessed by Secretary O'Leary.</p>									
59	383	12/5/1995		Statement of Intent			None	Fossil Energy	Mitigation of Greenhouse Gases
<p><b>Title:</b> <i>Statement of Intent concerning Cooperation in Sustainable Energy Development and the Mitigation of Greenhouse gases between the Republic of South Africa and the United States of America</i></p> <p><b>Comment:</b> Investigate pilot studies the feasibility of the development of projects which could achieve additional mitigation of climate change by addressing anthropogenic emissions by sources and removal by sinks in an environmentally sound and socially and economically equitable fashion through deployment of greenhouse gas mitigation technologies; education/training programs; diversification of energy sources; conservation, restoration and enhancement of natural carbon sinks, etc.</p>									
60	382	12/5/1995		Statement of Intent			None	Energy Research and Development	South Africa/Provincial Gov'ts Cooperation Agreement - Statement of Intent
<p><b>Title:</b> <i>Cooperative Agreement between Provincial Governments of the Republic of South Africa on Regional Cooperation in Energy</i></p> <p><b>Comment:</b> Intention to cooperate in a manner which will facilitate joint activities related to energy development in an environmentally and economically sound way with the following provincial governments of South Africa: Province of the Free State; Northern Cape Province; Eastern Cape Province</p>									

## All In Force Bilateral Agreements

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
<b>Country: <u>Spain</u></b>									
100	404	9/15/1997	9/15/2007	Primary DOE			None	Environmental Safety Health	Research on Radiological Evaluations
<b>Title:</b> <i>Implementing Arrangement between the Department of Energy of the United States of America and the Ministry of Industry and Energy of the Kingdom of Spain on Cooperation in Research on Radiological Evaluations</i> <b>Comment:</b>									
307	404	9/15/1997	9/15/2007	Secondary DOE		100	Primary DOE	Environmental Safety Health	Annex 1
<b>Title:</b> <i>Project Annex 1 - cooperation on research in radiological evaluations</i> <b>Comment:</b> Related to radioactive waste management.									
5	171	12/12/198		Primary DOE			None	Science and Technology	Science & Technology
<b>Title:</b> <i>Agreement between the United States Department of Energy and the United States-Spain Joint Committee for Scientific and Technological Cooperation</i> <b>Comment:</b> Establish responsibilities, guidelines and procedures for evaluating, funding and coordinating research proposals, projects and related activities in the field of energy selected and funded by the US-Spain Joint Committee for S&T Cooperation.									
596	491	7/15/2000	7/15/2006	Primary DOE			None	Energy Research and Development	MOU for Energy Cooperation
<b>Title:</b> <i>Memorandum of Understanding Between The Ministry of Science and Technology of the Kingdom of Spain and The Department of Energy of the United States of America Concerning Cooperation in Energy</i> <b>Comment:</b>									
<b>Country: <u>Sweden</u></b>									
218	235	2/11/1988		Primary DOE			None	*Other - Classified	Subject and Umbrella contents are classified
<b>Title:</b> <i>Subject and Umbrella contents are classified</i> <b>Comment:</b> Description not available in History									
580	442	10/23/199	10/23/200	Primary DOE			None	Civilian Radioactive Waste Management	Radioactive Waste Management
<b>Title:</b> <i>Agreement between the United States Department of Energy and the Swedish Nuclear Fuel and Waste Management Company Concerning a Cooperative Program in the Field of Radioactive waste Management</i> <b>Comment:</b>									
<b>Country: <u>Switzerland</u></b>									

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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
225	418	12/23/199	12/23/200	Primary DOE			None	Civilian Radioactive Waste Management	Radioactive Waste Management
<p><b>Title:</b> <i>Agreement between the Department of Energy of the United States of America and the National Cooperative for the Disposal of Radioactive Waste in Switzerland in the Field of Radioactive Waste Management</i></p> <p><b>Comment:</b> Auto extension for 5 yr. Periods.</p>									
<b>Country:</b> <u>Thailand</u>									
227	400	3/20/1997		Primary DOE			None	Arms Control and Nonproliferation	Lab-to-Lab arrangement
<p><b>Title:</b> <i>Arrangement for the Exchange of Technical Information and for Cooperation in the Field of Peaceful Uses of Nuclear Energy between the Office of Atomic Energy for Peace of Thailand and the United States Department of Energy</i></p> <p><b>Comment:</b> Open ended.</p>									
538	400	3/6/2000		Secondary DOE		227	Primary DOE	Arms Control and Nonproliferation	Action Sheet 1 - Preliminary Safety Analysis Report
<p><b>Title:</b> <i>Action Sheet 1 between the Office of Atomic Energy for Peace of Thailand and the United States Department of Energy for Preliminary Safety Analysis Report Review</i></p> <p><b>Comment:</b></p>									

## Country: Turkey

624	519	3/20/2002	3/20/2007	Primary DOE			None	Science and Technology	Cooperation in Energy Technology
<p><b>Title:</b> <i>Implementing Arrangement between the Department of Energy of the United States of America and the Ministry of Energy and Natural Resources of the Republic of Turkey for Cooperation in Energy Technology</i></p> <p><b>Comment:</b></p>									
625	520	3/20/2002	3/20/2002	Secondary DOE		624	Primary DOE	Science and Technology	Annex 2 - Cooperation in the Field of Coal and Power Systems
<p><b>Title:</b> <i>Annex 2 to the Implementing Arrangement between the Department of Energy of the United States of America and the Ministry of Energy and Natural Resources of the Republic of Turkey for Cooperation in the Field of Coal and Power Systems</i></p> <p><b>Comment:</b></p>									

## Country: Ukraine

507	454	4/26/1996		Intergovernmental			None	*Other - Radioactive Waste	Chernobyl Center
<p><b>Title:</b> <i>Memorandum of Understanding on Participation In and Support of the Activities of the International Chernobyl Center on Nuclear Safety, Radioactive Waste and Radioecology</i></p> <p><b>Comment:</b></p>									

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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
508	455	7/22/1998	7/22/2003	Intergovernmental			None	*Other - Radioactive Waste	Int'l Radioecology Lab
<p><b>Title:</b> <i>Agreement between the Government of the United States of America and the Government of Ukraine Concerning the International Radioecology Laboratory of the International Chernobyl Center on Nuclear Safety, Radioactive Waste and Radioecology</i></p> <p><b>Comment:</b> Department of Energy is the Executive Agent</p>									
510	457	5/6/1998	5/4/2028	Intergovernmental			None	Nuclear Energy	US-Ukraine PNC
<p><b>Title:</b> <i>Agreement for Cooperation between the United States of America and Ukraine Concerning Peaceful Uses of Nuclear Energy</i></p> <p><b>Comment:</b></p>									
54	330	4/8/1994		Statement of Intent			None	Nuclear Energy	Shutdown Chernobyl Nuclear Power Plant
<p><b>Title:</b> <i>Joint Statement About Paths to the Soonest Possible Shutdown of the Chernobyl Nuclear Power Plant</i></p> <p><b>Comment:</b> Undertake near-term joint analysis of options for earliest possible closure of the Chernobyl power plant.</p>									

## Country: United Kingdom

41	364	7/25/1995		Statement of Intent			None	Environmental Restoration and Waste Management	Nuclear Clean-Up
<p><b>Title:</b> <i>Heads of Agreement for Cooperation Between the United States Department of Energy and the United Kingdom Department of Trade and Industry on their Perspective Program for Nuclear Clean-up</i></p> <p><b>Comment:</b> Cooperate, through sharing of information, on similar issues associated with nuclear decommissioning and clean-up</p>									
42	390	9/5/1996		Statement of Intent			None	Environmental Restoration and Waste Management	Environmental Restoration and Waste Management
<p><b>Title:</b> <i>Statement of Intent between the United States Department of Energy and the United Kingdom Department of Trade and Industry</i></p> <p><b>Comment:</b> Establish framework for cooperation in R&amp;D of technologies for the treatment, packaging, disposal of aluminum-based spent nuclear fuel.</p>									
598	493	11/6/2000	11/6/2010	Primary DOE			None	Energy Research and Development	MOU on Energy Research and Development
<p><b>Title:</b> <i>Memorandum of Understanding Between The Department of Energy of the United States of America and The Department of Trade and Industry of the United Kingdom of Great Britain and Northern Ireland on Collaboration in Energy Research and Development</i></p> <p><b>Comment:</b> Provides for cooperation in Fossil Energy, Energy Efficiency, Renewable Energy and the waste-related management and the environment.</p>									
634	529	11/17/200	11/17/200	Secondary DOE		598	Primary DOE	Environmental Management	AEA Technology plc
<p><b>Title:</b> <i>Implementing Arrangement between the Department of Energy of the United States of America and AEA Technology plc Under the Memorandum of Understanding on Energy R&amp;D between the Department of Energy of the United States of America and the Department of Trade and Industry of the United Kingdom of Great Britain and Northern Ireland</i></p> <p><b>Comment:</b></p>									

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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
611	506	9/17/2001	9/17/2006	Primary DOE			None	Nuclear Verification Technologies	MOU between DOE and the Department of Trade and Industry of the United Kingdom
<p><b>Title:</b> <i>Memorandum of Understanding between the Department of Energy of the United States of America and the Department of Trade and Industry of the United Kingdom of Great Britain and Northern Ireland Concerning the Development and Implementation of Nuclear Verification Technologies</i></p> <p><b>Comment:</b></p>									
637	532	7/25/2002	7/25/2007	Primary DOE			None	Science and Technology	Implementing Agreement between DOE and Great Britain
<p><b>Title:</b> <i>Implementing Arrangement between the Department of Energy of the United States of America and the Secretary of State for Defense of the United Kingdom of Great Britain and Northern Ireland for Cooperation in Research and Development of Chemical and Biological Weapons Detection and Protection-Related Technologies</i></p> <p><b>Comment:</b></p>									
638	533	7/3/2002	7/3/2007	Primary DOE			None	Science and Technology	Gov't to Gov't agreement between US and Great Britain
<p><b>Title:</b> <i>Agreement between the Government of the United States of America and the Government of the United Kingdom of Great Britain and Northern Ireland for Cooperation in Research and Development of Weapons Detection and Protection-Related Technologies</i></p> <p><b>Comment:</b></p>									
652	547	3/10/2003	3/10/2008	Primary DOE			None	Fossil Energy	Cooperation in the Field of Fossil Energy
<p><b>Title:</b> <i>Implementing Arrangement between the Department of Energy of the United States of America and the Department of Trade and Industry of the United Kingdom of Great Britain and Northern Ireland to Cooperate in the Field of Fossil Energy Technology</i></p> <p><b>Comment:</b></p>									
143	278	6/11/1990	6/11/2000	Primary DOE			None	Energy Research and Development	Energy R&D
<p><b>Title:</b> <i>Memorandum of understanding between the U.S. Department of Energy and the Department of energy of the United Kingdom of Great Britain and Northern Ireland on collaboration in energy research and development</i></p> <p><b>Comment:</b> To continue and maximize cooperation in energy research and development.</p>									

**Country: Uzbekistan**

628	523	3/12/2002		Primary DOE			None	Arms Control and Nonproliferation	Proliferation of Nuclear Materials and Technologies
<p><b>Title:</b> <i>Agreement between the Department of Energy of the United States of America and the Ministry of Foreign Affairs of the Republic of Uzbekistan Concerning Cooperation in the area of Prevention of Proliferation of Nuclear Materials and Technologies</i></p> <p><b>Comment:</b></p>									

**Country: Venezuela**

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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
228	408	10/13/199	10/13/200	Primary DOE			None	Energy Research and Development	Energy Cooperation
<p><b>Title:</b> <i>Agreement for Energy Cooperation between the Department of Energy of the United States of America and the Ministry of Energy and Mines of the Republic of Venezuela</i></p> <p><b>Comment:</b> Supersedes the March 6, 1980 Energy R&amp;D agreement</p>									
443	73	7/10/1980	10/13/200	Secondary DOE		228	Primary DOE	Fossil Energy	Project Annex 1 - Crude Characterization
<p><b>Title:</b> <i>Project Annex I between the Department of Energy of the United States of America and the Ministry of Energy and Mines of Venezuela for the Joint Characterization of Heavy Crude Oils</i></p> <p><b>Comment:</b> Exchange published technical information and jointly modify or develop new techniques for the characterization of heavy crude oil and heavy ends.</p>									
444	82	9/29/1980	10/13/200	Secondary DOE		228	Primary DOE	Fossil Energy	Project Annex 4 - Enhanced Oil Recovery Thermal Processes
<p><b>Title:</b> <i>Project Annex IV between the Department of Energy of the United States of America and the Ministry of Energy and Mines of the Republic of Venezuela in the Area of Enhanced Oil Recovery Thermal Process</i></p> <p><b>Comment:</b> Cooperate in the application of additives to steam injection for the recovery of heavy oil thereby further efforts on the understanding of the thermal processes and the reservoir and its fluids where these processes are conducted.</p>									
445	137	3/14/1984	10/13/200	Secondary DOE		228	Primary DOE	Fossil Energy	Project Annex 10 - Training of Petroleum Engineers
<p><b>Title:</b> <i>Project Annex X between the Department of Energy of the United States of America and the Ministry of Energy and Mines of the Republic of Venezuela for On-Site Training of Petroleum Engineers</i></p> <p><b>Comment:</b> Training of Venezuelan petroleum engineers at Elks Hills Naval Petroleum Facility.</p>									
446	264	2/16/1989	10/13/200	Secondary DOE		228	Primary DOE	Fossil Energy	Project Annex 14 - Exchange of Energy-Related Personnel
<p><b>Title:</b> <i>Project Annex XIV between the Department of Energy of the United States of America and the Ministry of Energy and Mines of the Republic of Venezuela for the Exchange of Energy-Related</i></p> <p><b>Comment:</b> DOE and MEMV shall cooperate in using their good offices and taking all reasonable steps to facilitate the exchange of energy-related personnel between Venezuela and the U.S. in the areas of fossil</p>									
447	333	4/26/1994	10/13/200	Secondary DOE		228	Primary DOE	Fossil Energy	Project Annex 15 - Oil Recovery Information and Tech. Transfer
<p><b>Title:</b> <i>Implementing Agreement XV to the Memorandum of Understanding between the Department of Energy of the United States of America and the Ministry of Energy and Mines of the Republic of Venezuela in the Area of "Oil Recovery Information and Technology Transfer"</i></p> <p><b>Comment:</b> Evaluate past and ongoing improved oil recovery projects in US and Venezuela; Data base compilation and exchange</p>									
499	448	8/15/1995	10/13/200	Secondary DOE		228	Primary DOE	Fossil Energy	Annex 16 - Oil and Petrochemical Ecology and Environmental Research
<p><b>Title:</b> <i>Implementing Agreement XVI to the Memorandum of Understanding between the Department of Energy of the United States of America and the Ministry of Energy and Mines of the Republic of Venezuela in the Area of Oil and Petrochemistry Ecology and Environmental Research</i></p> <p><b>Comment:</b> Information exchange, biotechnology update and analysis of industrial and environmental trends.</p>									

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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
500	449	9/7/1995	10/13/200	Secondary DOE		228	Primary DOE	Fossil Energy	Annex 17 - Drilling Technology
<p><b>Title:</b> <i>Implementing Agreement XVII to the Memorandum of Understanding between the Department of Energy of the United States of America and the Ministry of Energy and Mines of the Republic of Venezuela in the Area of Drilling Technology</i></p> <p><b>Comment:</b> Exchange information and training of personnel on drilling technologies for more efficient and cost-effective methods drilling.</p>									
633	528	8/9/2001	8/9/2006	Secondary DOE		228	Primary DOE	Fossil Energy	Project Annex No. XVIII - Natural Gas Technologies
<p><b>Title:</b> <i>Project Annex No. XVIII to the Agreement for Energy Cooperation between the Department of Energy of the United States of America and the Ministry of Energy and Mines of the Bolivarian Republic of Venezuela in the area of Natural Gas Technologies</i></p> <p><b>Comment:</b></p>									