

John A. Shanahan, Corresponding Author  
660 Detroit St.; Denver, Colorado 80206  
Tel. 303 399 0393; E-mail: acorncreek2006@gmail.com

February 1, 2010

Dr. John P. Holdren  
Director, Office of Science & Technology Policy, Executive Office of the President  
Washington, D.C. (by e-mail, fax, regular mail)

cc. Dr. Steven Chu, Secretary Department of Energy, (by e-mail, fax, regular mail)  
24 member Committee—National Academies “America’s Energy Future”  
Members of Congress

Dear Dr. Holdren:

Peace on earth and preservation of the marvels of nature will not be achieved without a sound energy policy. This must include well-managed and well-governed thermal- and fast-neutron nuclear power, recycling spent fuels and depleted uranium. This was the goal of the founding scientists in the late 1940s and still is the best way to a reliable and secure energy future.

This letter is about American policy in a world that counts on American leadership. Although that leadership is vital if there is to be an orderly global deployment of nuclear technology, the United States has for a decade and a half left the evolution of nuclear-power technology largely to others, and consequently is being left behind. At present, 58 new nuclear plants (including two fast reactors, one in Russia and one in India) are under construction in 14 countries. Of these, 20 are in China, 9 in Russia, 6 each in India and South Korea. Only one is in North America, and that is resumption of work on a plant that was mothballed in 1988 when it was 80% finished. France has just announced a \$7 billion commitment for a “sustainable development” program that includes promotion of fourth-generation nuclear reactors, three of which are fast-neutron reactors—a technology in which the United States was once the world leader.

America needs to proceed quickly—not twenty or fifty years from now—while the people who pioneered this science and engineering can still provide guidance to a new generation of scientists and engineers. There is no political, economic or technical justification for delaying the benefits that nuclear power will bring to the United States and that U.S. leadership can bring to the world.

We have three urgent recommendations.

*First*, we believe it’s imperative to accelerate the licensing and building of the kind of reactors now in use, commonly called thermal reactors. For the last 40 years the LWRs in the United States and CANDU reactors in Canada have served us well. Nuclear plants also have the unique capability to convert swords into ploughshares. Currently, half of the US nuclear electric power comes from reactor-grade fuel consisting of downblended weapons-grade uranium purchased from Russia under the 1993 US-Russian nonproliferation treaty, under which more than 15,000 Russian nuclear warheads have already been disassembled. This program is scheduled to continue into 2013.

While the performance and safety records of the existing reactors have been excellent, the evolutionary improvements in new thermal-reactor designs will take both safety and efficiency to an even higher level.

*Second*, along with the critical need for nuclear energy is the urgent call for the isotopes of nuclear medicine. Currently there are major shortages, especially in Mo99/Tc99m, which is only produced outside of the United States. This ongoing crisis has hampered diagnostic and therapeutic procedures for all the major diseases (all forms of cancer, heart disease, Alzheimer's, et al.). Thousands of lives are in jeopardy. Initiation of large scale domestic production of the full spectrum of medical and industrial isotopes is overdue and can be done without using highly enriched uranium. Just recently, the NRC announced that they would allow a U.S. nuclear power utility to produce Co-60, heretofore 100% imported.

*Third*, development of fourth-generation nuclear reactors will be needed if nuclear power is to expand significantly beyond its present market penetration—an expansion that is so necessary if our descendants are to have ample energy over the coming millennia. Therefore, we strongly recommend reinstating the development and demonstration of the technology for recycling used fuel—a goal of fast fourth-generation nuclear reactors—as epitomized by the U.S.-developed Integral Fast Reactor (IFR). The IFR transforms used fuel from a “waste” to a major energy resource, and in so doing it happens to resolve a major public concern about nuclear power—the safe use of the long-lived radioactive byproducts. Further, IFRs can utilize excess weapons plutonium effectively and rapidly, while generating revenue instead of costs—a development consistent with Russian recommendations.

Work on the IFR technology was halted just as commercial viability was about to be demonstrated. While the operability of the reactor portion of the IFR has been adequately established, a commercial-scale demonstration is needed to settle details of the fuel-processing phase and to refine cost projections. Russia, China, India, Japan, and South Korea have expressed interest in the technology of metal-fueled fast reactors, and would likely contribute to a demonstration plant in exchange for design and operations information.

The energy in uranium provides 20% of the electricity in the United States today. We must expand that nuclear contribution rapidly if we are to maintain the welfare of our people, protect our environment, and preserve a leading international role in the evolution of nuclear technology.

Respectfully,

John A. Shanahan  
Civil Engineer  
Colorado

Joseph M. Shuster  
Chemical Engineer  
Minnesota

Leonard J. Koch,  
National Academy of Engineering  
Arizona

Theodore Rockwell  
National Academy of Engineering  
Maryland

\* \* \* \*

P.S. Two signatories of this letter, Leonard J. Koch of Arizona, USA, and Dr. Evgeny Velikhov of Russia, are Global Energy Prize laureates—an award that is characterized as the Russian equivalent of the Nobel Prize for outstanding research to solve the world's energy problems.

\* \* \* \*

## SIGNATORIES FROM THE UNITED STATES

### UNITED STATES

#### *Alabama*

**John Birdsong**, COL, MI. Military Intelligence officer, former Battalion Commander in Afghanistan, Strategic Advisor to Saudi Arabian National Guard, specialist in U.S. Grand Strategy, Intelligence Analysis, Tactical and Joint Operations. Harvard Senior Fellow, Post Graduate Intelligence Program, and Air War College.

**Joseph C. Murray**, BA History & Political Science. US Army. Schwitzer Corporation. Holmes Blowers, Ltd. \*

#### *Arizona*

**Edgar Brooks**, BA Education, MBA, LT USN (Ret.) Qualified Submariner and Nuclear Reactor Operator. Senior manager in several corporations providing support services to the civilian nuclear power plants and facilities in the U.S. \*

**Dr. Doug L. Hoffman**, Computer Science. Data Center Architect. Co-author of *The Resilient Earth*, a book about life, science and the planet we live on. \*

**Leonard J. Koch**, National Academy of Engineering, Fellow, American Nuclear Society. Assoc. Proj. Engineer EBR I, the first nuclear power station in the world. Proj. Mgr. EBR II, the first integrated fast neutron reactor power station incorporating fuel recycling. Received the Global Energy International Prize from Russia in recognition of his work in 2004. Member, Science Council for Global Initiatives.

**Dr. Terry J. Lovell**, Business Computer Science. Yavapai College. 3 decades college educating. Nuclear power could be our new SPACE PROGRAM. Start building NP and fleet of electric transport vehicles. Fund new

wave of natural scientists and engineers. An American Renaissance!\*

**Robert M. Morse**, BS Civil Engineering, Member Archemides Circle (Honorary Eng. Fraternity.) Past Member, American Nuclear Society. Responsible for licensing, design and construction of more than 15 nuclear power stations in U.S. and other countries at Bechtel and EBASCO. Presently, Executive Consultant to the U.S. DOE on nuclear waste cleanup.

**Miriam Sacks**, ASRT Career CE, Background in X-Ray radiation science, Supervisor of radiology. Retired. Biographer.

**Dr. William Sacks**, PhD Astronomy; MD, Board Certified Radiology. Professor of Physics. Medical Officer FDA's Office of Device Evaluation. Currently in radiology practice.

**Eugene B. Veek**, BS physics, math, MBA. USN (Ret.) Submariner and former Commanding Officer of a US submarine. Consultant to The Rand Corporation. Elected to New York Academy of Science. \*

#### *California*

**Dr. H. Sterling Bailey**, Nuclear Engineering Consultant, PE. Four plus decades of technical and managerial involvement in LWRs, metal-cooled fast reactors, space power reactors for exploration bases and propulsion.

**Dr. Jay Berry**, Doctor of Optometry. 4 years in USAF. 40 yrs in private practice. \*

**Kim Berry**, Computer Scientist. \*

**Valerie Berry**, BS, Business Administration. Business Development Manager. \*

## SIGNATORIES FROM THE UNITED STATES

**Tom Blees**, Author “Prescription for the Planet - The painless remedy for our energy and environmental crises” President, Science Council for Global Initiatives.

**Charles Boardman**, MS ME. Led GE Advanced Reactors Team. Member of the DOE sponsored GEN IV Advanced Concept Selection Group which spent two years evaluating Advanced Nuclear Reactors of every type. VP Nuclear Services Cameron Consulting. \*

**Daniel S. Boessow**, BEE, MBA. RCA, US Army. Supervisor operational ground communications systems Kennedy Space Center. Manager, ground communications, telemetry ITT Federal Electric Corp. Software & Systems Development Manager for SAIC. \*

**Neil W. Brown**, Engineering Consultant, PE.

**Douglas G. Carroll**, P.E., Engineering Consultant, Director, Science Council for Global Initiatives, more than 40 years design, analysis, and startup of commercial nuclear power plants in 5 countries plus space applications. Design of PRISM reactor.

**Kevin T. Casey**, BS Accounting. CPA Insurance Broker for the Construction Industry. \*

**Dr. Howard T. Coffey**, PhD Physics. He admired the IFR program since 1989, when he joined Argonne National Laboratory to work on Magnetic Levitation for High-Speed ground transportation and superconductivity. Prior to Argonne, he was in R&D and management at SRI and Westinghouse R&D.

**Dr. Alexander DeVolpi**, nuclear physicist, Argonne National Laboratory (retired), Nuclear arms-control and treaty-verification

technology. Author of “Nuclear Insights – The Cold War Legacy” Volumes 1, 2, 3.

**Dr. Jeff Eerkens**, nuclear engineer was in first graduating class of U.C. Berkeley’s Department of Nuclear Engineering. Author of “The Nuclear Imperative - A Critical Look at the Approaching Energy Crisis (More Physics for Presidents)”, Adjunct Research Professor Nuclear Science & Engineering Institute U of Missouri. President, Prodev Consultants. Member, Science Council for Global Initiatives.

**Glen C. Farkas, M.D.**, FABO, FAAO. Ophthalmic Surgical Specialist. Stage IV Cancer Survivor. “Transmutation of the waste into useful isotopes is important. The simple acceptable concepts of recycling all types of waste is considered to be the intelligent thing to do. We have made these types of choices with our garbage, plastics, water. The obvious long term acceptance of our nuclear powered submarines provides national pride and almost no safety concerns regarding core meltdown or proliferation. If it takes military supervision to develop our civilian nuclear program then park the reactors next to the subs.”

**Dr. Timothy Ferris**, Emeritus Professor, Graduate School of Journalism, U. of California, Berkeley. Author of Coming of Age in the Milky Way and The Science of Liberty. Fellow, Guggenheim Foundation and American Association for the Advancement of Science.

**Kenneth D. Flauding, II**, BA Business Administration US Army Sergeant E5 (Ret.). Stanford University as an IT Facilities Engineering Project Manager. \*

**Sarah Foster**, BS anthropology, MA mythology. Writer. Supports nuclear power. \*

**Thomas P. Griffin**, Special Agent FBI (Ret.), 32 years.

## SIGNATORIES FROM THE UNITED STATES

**Ronald Guyer**, BS Finance. Presently serve as President of Alpha Source, Inglewood, CA Former CEO of the International Foundation for Science and the Environment.

**Christopher Horgan**, Executive Director, Stewards of the Sequoia, Conservationist. \*

**Dr. Bryce W. Johnson**, Nuclear Engineering, Professional Nuclear Engineer (retired). Worked actively in nuclear engineering research for over 50 years, spending the last 32 years as a senior staff scientist at Science Applications International Corporation. \*

**Susan Kennedy**, Paralegal, (Ret.). \*

**Joseph G. Kerwin**, PhB, Co-founder of Yoogli, Inc. Seminal patents in Semantic Search Technology. Dedicated to advancing Web-based solutions in semantic search and semantic networking technologies.

**Steve Kirsch**, CEO Kirsch foundation – Member, Science Council for Global Initiatives.

**Richard W. Knudson**, BA/BS Economics; Retired business owner. \*

**George Lyddane**, US Air Force Academy, Engineering. Former Vietnam vet and military and civilian test pilot. Former FAA Chief Scientist and Technical Advisor on Flight Management. Senior Vice President and Director of Airworthiness for AeroNimbus Aircraft Company.

**James Leverentz**, MBA. US Navy and aerospace industry. Have been a Principal Contracting Officer for the US Navy, a contracts manager for Hughes Aircraft Company, the Deputy Director of Contracts for XonTech, Inc. Currently a contracts manager for Northrop Grumman Systems Corp. \*

**Don E. Lutz**, BS ME. PE. Design and procurement for Enrico Fermi Fast Breeder nuclear power plant. Argonne National Lab EBR II, General Electric Nuclear Fast Reactor Program.

**Dr. Carol S. Marcus**, Ph.D., M.D. Prof. of Radiation Oncology and Radiological Sciences, UCLA. Ph.D. in Radiation Biology and medical specialty is Nuclear Medicine. Past advisor/consultant to the FDA and NRC. Former President of the California Chapter of American College of Nuclear Physicians (ACNP), Vice-President of Society of Nuclear Medicine (SNM). Chair of Government Relations for both ACNP and SNM. Twenty million Nuclear Medicine procedures are performed in the United States each year, and most of them use Tc-99m. We need reliable American suppliers.

**Peter McWilliams**, BS math, physics MBA. Offshore marine oil exploration. Petroleum marketing - Shell Canada Limited. Residential real estate development entrepreneur. Thanks for opportunity to assist correcting this glaring inadequacy in our country's power infrastructure. \*

**Dr. Ralph Moir**, retired Lawrence Livermore National Laboratory. Nuclear Engineer. Consultant. PE. Fellow, American Nuclear Society.

**Lawrence M. Murchan**, MS ME, MBA. Reactor safety systems for the Clinch River Fast Breeder Reactor as well as BWRs at General Electric

**Dr. Subir Nag**, Radiation Oncology. MD, FACR, FACRO. Fellowship in Brachytherapy at Memorial Sloan-Kettering Cancer Center. One of world's pioneers in brachytherapy and intraoperative radiation therapy. Fellow of American College of Radiology, Fellow of American College of Radiation Oncology. Named one of the Best

## SIGNATORIES FROM THE UNITED STATES

Doctors in America for Brachytherapy.  
Chair of Nuclear Regulatory Commission's  
Advisory Committee on the Medical Uses of  
Isotopes. "Availability of medical  
radioisotopes is essential to cancer patients."

**Dr. John N. Nishio**, PhD. Director,  
Professional Science Master's Program,  
Environmental Sciences; Biocompatible  
Plant Research Institute, California State  
University, Chico. Experience as US Park  
Service Ranger/Naturalist and  
environmental educator; project manager,  
construction of integrated waste  
management facility in Nigeria; agricultural  
consultant. Research in plant responses to  
environment >25 years.

**James E. Owens**, BS Electrical  
Engineering. Oak Ridge, TN, Y-12  
electromagnetic separation of uranium  
isotopes. Oak Ridge National Laboratory,  
experimental/developmental nuclear reactors  
– Low Intensity Test Reactor (LITR) a  
prototype for first Materials Test Reactor  
(MTR) in Idaho. Control system for Bulk  
Shielding Facility and Homogeneous  
Reactor Experiment. Test program for  
Nautilus, the first nuclear submarine.  
Atomics International, test program for  
Sodium Reactor Experiment and Hallam  
Nuclear Power Facility, a 75 MWE sodium  
cooled, graphite moderated thermal reactor.  
We considered sodium a very useful coolant.  
Melting point near boiling point of water,  
boiling point about 1650F, so there was no  
need to pressurize the system much above  
atmospheric. These characteristics  
eliminated need for heavy pressure vessels.

**Dr. David J. Paul**, Chemical Engineering,  
Meteorology, Management Science. USAFR  
(Ret.). Chairman, The Cameron Group  
enabling companies achieve their nuclear  
power goals, education of legislators and the  
public to the benefits of nuclear power, and  
support and development of small, modular

nuclear reactors. "Energy, Engineering,  
Education, Environment." \*

**Dr. Philip R. Pluta**, Nuclear Engineering.  
32 years nuclear engineering applied to  
systems, design and development of the  
BWR, gas cooled reactors, sodium cooled  
Fast Reactors and space nuclear power  
applications.

**Richard Rhodes**. Writer. Pulitzer Prize in  
Nonfiction for The Making of the Atomic  
Bomb. Author, Nuclear Renewal; Dark Sun:  
The Making of the Hydrogen Bomb;  
Arsenals of Folly; The Twilight of the  
Bombs (9- 2010)

**Edwin Sayre**, Engineer (Ret.) Helped  
design and build nuclear plants around the  
world.

**Scott Schenter**, BA Finance and Marketing.  
Co-author of patent on producing  
radioisotope Actinium-225 that could help in  
cure of cancer and other diseases. Saw the  
dedication and passion of his father, Robert  
Schenter, to just "cure patients" and show  
how nuclear medicine and radioisotopes can  
enhance people's lives.

**Steve Scheye**, BS-Chemical Engineering,  
BS-Pulp and Paper Technology, PE. Design  
Engineer in Petroleum Manufacturing and  
Pulp and Paper. \*

**Dr. Ken Schultz**, PhD, Nuclear Engineering  
Sciences. PE. 40 years of nuclear  
engineering: Nuclear design for High  
Temperature Gas-cooled Reactors, Magnetic  
Fusion nuclear technology, Inertial Fusion  
target technology and engineering of High  
Temperature Gas-cooled Reactors.

## SIGNATORIES FROM THE UNITED STATES

**Marc C. Seward**, BA. ChFC, CLU  
Principal Heritage Wealth Management,  
LLC. Nuclear Power must be used in the  
United States. Principal of one of largest  
independent wealth management firms in  
Southern California. \*

**Robert E. Sims**, News Director 20+ years  
in Los Angeles (Ret.). \*

**Gordon H. Smith**, BS pure mathematics.  
MBS. Rear Admiral, USN (Ret), Naval  
Aviator. Service also included Acting  
Deputy Under Secretary of Defense,  
Research and Advanced Technology, Vice  
Commander, Naval Electronics Systems  
Command. Since Navy retirement has  
served as CEO/President of five high  
technology companies.

**Steve Smith**, BS Business Administration.  
Owner/President of Mission Peak Business  
Products, Inc. \*

**Dr. Michael Spaeth**, Chemical Engineer.  
Career in nuclear waste management and  
nuclear fuel reprocessing covering PWR,  
BWR, HTGR and Breeder Reactor  
technologies. Battelle, Exxon Nuclear, and  
Science Applications International. \*

**George Taylor**, PhD Computer Science.  
Founder, Palmetto Energy Research, a non-  
profit dedicated to educating the public  
about the future of energy

**Robert H. Unger**, BS EE. R& D Engineer,  
Integration testing on F-117 stealth fighter,  
Systems engineer on U-2 defensive system.  
Retired 28 years at Lockheed Martin

**Edward A. Veek**, BA IBM Corp, 30 years,  
engineer.(Ret.) U. S. Navy, Petty officer. \*

**Keith von Borstel**, Horticulturalist. The  
Science Council for Global Initiatives.

**Susan von Borstel**, Artist. The Science  
Council for Global Initiatives.

**Eugene P. Wilkinson**, BA Chemistry. Two  
Years Post-Graduate Chemical Engineering.  
Commanded four submarines: Volador, Sea  
Robin, Wahoo and was initial Commanding  
officer of USS Nautilus, the world's first  
nuclear submarine. On January 17, 1955  
issued the historic message aboard the USS  
Nautilus, "Underway on Nuclear Power,"  
ushering in the nuclear age for the United  
States Navy. Admiral Rickover selected him  
to serve as the first Commanding Officer of  
the USS Long Beach, America's first nuclear  
surface ship. In 1980 he was chosen as the  
first President and CEO of the Institute of  
Nuclear Power Operations (INPO). Vice  
Admiral, US Navy Ret.

**James Wobser**, Physicist, Lawrence  
Livermore National Laboratory (Ret.). \*

### *Colorado*

**Dr. Charles B. Archambeau**, Physicist,  
Geophysicist. MacArthur Fellowship.  
Foreign member of the Russian Academy of  
Sciences. Public Service Award from the  
Federation of American Scientists in  
recognition of his "leadership in applying  
seismology to the banning of nuclear tests."  
President of Technology Research  
Associates Corp. University of Colorado  
Attendant Rank Professor of Physics,  
Theoretical and Applied Geophysics Group.  
Attendant Rank Professor of Geological  
Sciences at the University of Colorado.  
Professor of Geophysics at the California  
Institute of Technology. Member of  
scientific research staff at Cooperative  
Institute for Research in the Environmental  
Sciences (CIRES).

**Joe Blanc**, Associate in Liberal Arts. IT  
technician at a Community College. \*

## SIGNATORIES FROM THE UNITED STATES

**Dr. Lon Brouse**, BA chemistry Physics, Math. 25 years environmental chemist working for: Reynolds Aluminum Company, Colorado Ute Electric Association, Arizona Public Service Company, Calgon Heavy Industrial Water Treatment Services Ecolab Corporation. \*

**David J. Bufalo**, BS CE, PE, Management Consultant. Major, US Army Reserve, Corps of Engineers (Ret.). 40+ years experience in management of design and constructions projects including five years of Arctic construction techniques. \*

**Michael K. Curtis**, BA Economics and Finance VP, The Neenan Company, developer of rural replacement hospitals throughout the western United States. Member, National Rural Health Association, the Colorado Hospital Association, and the Colorado Center for Rural Health.

**John R (Grizz) Deal**, CEO, Hyperion Power. Technology Ventures Corporation for Nuclear Energy Division of the U.S. DOE. Managing director at Purple Mountain Ventures (PMV). Director of U.S. National Lab Seed Fund, a venture capital fund focused on innovations developed by U.S. DOE. Visiting entrepreneur at Los Alamos National Laboratory (LANL). Chief marketing officer for Space Imaging. Founder and former CEO of LizardTech. Consulting scientist at LANL.

**John Dendahl**, BS EE, BS Business. Retired executive with past positions in nuclear technology, banking, education, real estate development and government. Engineer, then CFO, then CEO of Eberline Instrument Corp., a leading designer and manufacturer of radiation monitoring instruments and systems and provider of related analytical and consulting services.

**Raymond D. Dixon**, MS; Physics. Research interests: Condensed Matter and Materials Processing. Member APS and AWS (Fellow AWS). 35 years in Materials Research. Retired Staff Member: Los Alamos National Laboratory

**Craig Green**, PE, BSME, MSCE, hydrologist and water resources consultant. Former U.S. Air Force Officer and Space Systems Analyst. \*

**Dr. Uwe Greife**, Professor of Physics. Interim Academic Program Director Nuclear Engineering. Department of Physics. Colorado School of Mines

**Dr. Howard C. Hayden**, Professor Emeritus of Physics, U Conn. \*

**James L. Jehn**, C.P.G., President, Jehn Water Consultants, Inc. MS degree Wright State University, Ground Water Hydrology. 37 years experience in water resources, water rights water supply consulting in Colorado and surrounding states. Registered Professional Geologist.

**Demetry Koretskiy**, 11<sup>th</sup> grade. Math, science, history, languages (Russian, Hebrew, Spanish, English). Wants to become scientist or engineer.

**Conrad M. Ladd**, BS ME. PE. Life Fellow ASME. Past Chair ASME Energy Committee. Fermi I reactor core design and R&D 1953-56. Conceptual design 300 MWe Liquid Metal Fast Breeder Reactor with closed fuel cycle, 1956-59.

**Dr. Donald A. Ludwig**, PhD, Medical Physics. 30+ year career in medical physics includes diagnostic imaging, nuclear medicine, radioisotope production, conventional radiation therapy, brachytherapy, heavy ion particle therapy.



## SIGNATORIES FROM THE UNITED STATES

**Dale Reaves**, Designer of custom Southwest homes with Native American architectural details. Designer of industrial facilities in United States, Europe and Russia.

**Sandra S. Roark**, Registered Nurse 47 years. Owner of printing company 16 years.

**Dr. John A. Shanahan**, Formerly, nuclear power plant design and licensing USA and Switzerland.

**Dr. Randolph 'Stick' Ware**, Experimental Nuclear Physics, U. of Colorado Cyclotron. Founder, Chief Scientist of Radiometrics Corporation, Visiting Scientist at National Center for Atmospheric Research. Senior Research Associate at the Cooperative Institute for Research in the Environmental Sciences (CIRES). Founder, Director of the University NAVSTAR Consortium, SuomiNet and GPS/MET programs at the University Corporation for Atmospheric Research; Science Fellow at Congressional Office of Technology Assessment. \*

**Dr. Tom M.L. Wigley**, PhD, theoretical physics. Trained as meteorologist in Australia. Director of Climatic Research Unit, University of East Anglia from 1979 to 1993, before moving to NCAR, Boulder, CO as a Senior Scientist. He is one of the world's most highly cited climate scientists.

**Dr. Robert Williams**, PhD Public Policy. Former Chairman and CEO of Policy Studies Inc.

### *Connecticut*

**Maryann Gmelin Collier**, BA Education. Teacher, Volunteer on Army Posts and in White House. \*

**Howard B. Mirkin**, LCDR, USN (ret), "Any American who understands our energy needs should sign this letter to Washington." \*

**Dr. Edmond O'Connell**, Professor of Chemistry, Fairfield and Yale Universities.

### *Delaware*

**Dr. Kenneth W. Skrable**, PhD, Radiological Sciences and Protection. Research and consultant for nuclear power stations in area of monitoring and control of internal radiation exposures; Past Chairman of Health Physics Society Committee on Occupational Radiation Exposure Standards; member National Council on Radiation Protection, American Nuclear Society, and Health Physics Society Fellow.

### *District of Columbia*

**Edward D. Kee**, MBA, Harvard. US Naval Academy. Five years nuclear engineering & construction for nuclear-powered aircraft carrier. Economic and management consultant with focus on electricity and nuclear power industry.

### *Florida*

**Price Baker**, 11<sup>th</sup> grade. Debates on regional and national levels in the National Christian Forensics and Communication Assoc. District 6 winner Voice of Democracy speech contest by Veterans of Foreign Wars. Debates nuclear energy.

**S. Locke Bogart**, Fission and Fusion Energy Systems Analyst and Synthesist.

**Dr. Robert Carretta**, MD FACNM. Nuclear Medicine, Cardiology. Past President, Society of Nuclear Medicine. Past President American College of Nuclear Physician

**Robert S. Margolis**, BS Nuclear Engineering. PE. 23 years nuclear engineering including startup testing for Yonggwang units 3/4 and reactor engineer at Ft St Vrain (HTGR).

## SIGNATORIES FROM THE UNITED STATES

**Martin McClellan**, BS Mathematics, MS Space Systems. Integration Engineer on our Nations Space Shuttle. \*

**Dr. A. David Rossin**, Assistant Secretary of Energy 1986-87. President ANS 1992-93. US fuel cycle policy and nonproliferation.

**Dr. Stanley Satz**, PhD Radiation Physicist. Chairman and Chief Scientific Officer of Bio-Nucleonics, Inc., a life sciences company, specializing in development and commercialization of radiopharmaceuticals for nuclear medicine and molecular imaging and medical devices used in cardiology, oncology and neurology..

### *Georgia*

**Dennis Brannon**, BS Computer Science, MBA. CPA 15 years technician Fortune 200 companies. 15 years CPA. \*

**Lisa Birdsong**, BA. Military spouse, mother, teacher, and small business owner. She owns a small business selling wholesale furniture and tutors students in English, Communications, and Leadership.

**Mary Claire Birdsong**, 10<sup>th</sup> grade. Regionally qualified debate student NCFCA. Recognized for excellence in 2008- 2009 by the Optimists Club, the American Legion, and Toshiba / National Science Teachers Association. Debate team on nuclear energy.

**Warren B. Causey**, Vice President, Sierra Energy Group, A Division of Energy Central. \*

**Dr. Michael L. Ford**, Th.D. Dean, founder of Jonsquill Ministries Buchanan, Georgia, CUA CP.

**Art Gittelman**, Engineer (ret) - Space programs: Redstone, Jupiter, Pioneer, Apollo, Biosatellite, MMIII in

Servomechanism design for Guidance and Control systems, Systems Engineer.

**Dr. Nigel Stevenson**, PhD nuclear physics. Produced radioactive and stable isotopes for academic institutions and commercial companies. Directed isotope production activities at TRIUMF, Theragenics Corporation, Trace Life Sciences and Clear Vascular, Inc. Developing new isotope-based products for medical applications.

### *Hawaii*

**Mark S Blackburn**, MBA, Business Analyst, Bishop Estate. \*

**Randy Weir**, BA Construction Management, MA Economics. Owned and operated RS Weir General Contracting Inc since 1976. We are high end residential contractors. \*

### *Idaho*

**Dr. Jay F. Kunze**, PhD, Physics, licensed Mechanical Engineer. Twenty years in nuclear R&D at the Idaho National Laboratory. Five years as President of Energy Services, a Geothermal Energy Development company. Twenty five years in academia, including 11 years as Dean of Engineering at Idaho State University. Currently professor of nuclear engineering and reactor administrator. Fellow American Nuclear Society and American Society of Mechanical Engineers.

**Dr. Gene Malvino**, PhD International Business Administration Professor (Ret.) International Business and Marketing, Taught in Europe, Latin America, China, Japan and Russia. Careers in higher education, construction, business management. \*

**DeWitt A. Moss**, Chem Engr & Nuclear Engr., Proj. Mgr for BWR and Liquid Metal

## SIGNATORIES FROM THE UNITED STATES

Fast Breed Reactor fuels and materials. DOE Sr. Site Rep at EBR-II, ANL-Idaho.

**David A. Remien**, BA Chemistry. Retired. Idaho National Laboratory. Data engineer at Power Burst Facility; lead software developer (SCADA) for Fluorinel Dissolution Process plant (FAST) at Idaho Chemical Processing Plant. Co-winner of the "George Westinghouse Signature Award of Excellence", 1987

**Edward F. Russell**, BS, MS geology. 30 years, (27 with Conoco), exploration for natural resources - oil and gas, uranium, coal, as well as mineral exploration. Registered professional geologist. \*

**Dr. Allan M Salzberg**, MD PhD. Theoretical Physicist, Rocket Science, Sr Defense Analyst including Nuclear and Intelligence. Career change to Medicine. Naval Flight Surgeon then Chief of Staff of a VA Hospital. Candidate for Congress, District 1 ID. My #1 platform is Energy. The only extant options that can preserve our civilization are 3rd then 4th generation reactors. Website [www.allansalzberg.com](http://www.allansalzberg.com)

**Dr. John E. Tanner, Jr.**, Physical Chemist. Co-development of NMR pulsed field gradient technology and applications. Nuclear criticality safety analyst at the Idaho National Laboratory. President of Coalition 21, a local pro-nuclear advocacy group in Idaho.

**Dr. Charles E. Till**, Member, National Academy of Engineering. Fellow, American Nuclear Society. Walker Cisler Medal of American Nuclear Society. Member, Science Council for Global Initiatives.

**Vern Westgate**, BS EE US Air Force Korean War. Systems Engineer, North American Aviation, Aeronutronics, Philco-Ford, Hughes Aircraft Company, ISC

Systems Corporation, Boeing Commercial Airplane. \*

**Dan Yurman**, BA Economics, MA Urban Planning. Publisher nuclear energy blog 'Idaho Samizdat' with 100,000 readers in 70 countries in 2009. <http://djysrv.blogspot.com> 19 years Idaho National Laboratory technology transfer for nuclear energy programs; 10 years U.S. EPA, hazardous/nuclear waste cleanup program management. Member, ANS

### *Illinois*

**Dr. Theodore Bauer**, Nuclear Engineer. Nuclear Physics. Argonne National Laboratory.

**Dr. Roger N. Blomquist**, Nuclear Engineer.

**Steve Goreham**, BS, MS, MBA Author, speaker, researcher in climate science, electrical engineer, business executive. \*

**Dr. William H. Hannum** (Ret.), DOE reactor physics, reactor safety, high level waste treatment; TVA safety review board; OECD Nuclear Energy Agency, Argonne National Lab. Fellow, American Nuclear Society. Member, Science Council for Global Initiatives.

**Dr. Robert E. Henry**, PhD Mechanical Engineering. Former Associate Division Director of Reactor and Analysis Division at ANL. Co-founder and Senior Vice-President of Fauske and Associates, LLC, a wholly owned subsidiary of Westinghouse Electric Co, LLC. U.S. delegate to the international IAEA Conference following the Chernobyl nuclear plant accident. Author of book on Three Mile Island accident and over 200 technical articles and reports.

**Dr. Jay Lehr**, Science Director. The Heartland Institute.

## SIGNATORIES FROM THE UNITED STATES

**Gerald E. Marsh**, Physicist, Argonne National Laboratory (Ret), Consultant to the Department of Defense during three administrations. Fellow, American Physical Society.

**Mark J. Pruitt**, Director Illinois Power Agency \*

**Dr. George Stanford**, Reactor physicist, retired from Argonne National Laboratory. Member, Science Council for Global Initiatives.

**Dr. Armando Travelli**, Senior Nuclear Engineer and Manager, ANL RERTR Program, 1978-2005 (Ret.).

### *Iowa*

**Dr. Malik E. Juweid, MD**. Professor of Radiology, Medical Director of Nuclear Medicine, University of Iowa. Has been involved in both clinical and research aspects of nuclear medicine since 1986. Has witnessed the huge impact this specialty had on patient management, particularly over the last 10 years. It would be catastrophic if this field is endangered because of lack of isotopes in the US; medical isotopes from local reactors are available daily in many developing countries like Syria and Israel. It is beyond belief that the US cannot guarantee constant availability of medical isotopes for the benefit of US patients!

### *Louisiana*

**Dr. Edward Zganjar**, Ph.D. Experimental Nuclear Physics. 40 years in nuclear structure research, more than 250 publications. LSU Alumni Professor. Research at Oak Ridge National Laboratory, Argonne National Laboratory, Berkeley National Laboratory, Brookhaven National Laboratory, GSI, Darmstadt Germany, and CERN.

### *Maryland*

**Rod Adams**, US Naval Academy, CDR US Navy. Founder, Adams Atomic Engines, Inc. Publisher, Atomic Insights. American Nuclear Society Presidential Citation, MS Systems Technology, US Naval Postgraduate School, Naval War College.

**Dr. Jon Boone**, PhD History. Administrator and professor U. of Maryland. School of Music, College of Arts and Humanities. Active on energy front for last eight years, intervenor in two MDPSC industrial wind hearings and having written and spoken extensively on the limitations of wind technology, both as an energy source and has an environmental nightmare. Website, [www.stopillwind.org](http://www.stopillwind.org)

**Theodore Beresovski**, MS Engineering Physics. Nuclear projects engineer in industry. Joined AEC in 1959. Participated in and directed nuclear reactor design and systems evaluations. From 1979 to 1986 worked at UNESCO, including participation in European Solar and Wind Energy Committees.

**William Biggley**, Retired from Johns Hopkins University. 38 years senior researcher in Biology Dept. coauthoring 32 papers in bioluminescence research, Formerly NRX reactor control technician at Chalk River. Currently, VP of The Maryland Conservation Council, web site <http://www.mdconservationcouncil.org> which supports nuclear power.

**Ronald E. Burdge**, BS, US Naval Academy, MBA. Engineer Officer & Executive Officer, nuclear submarine. Director of Enlisted Training, US Naval Nuclear Power School. Nuclear Training Director, Consolidated Edison of NY (AEC Senior Reactor License), Manager, Reactor Construction and Operation, Atomic Industrial Forum, President and General Manager, NUS Training Corporation.

## SIGNATORIES FROM THE UNITED STATES

**William H. Choquette**, Philanthropist to education and builder of Vietnam War Memorial in Washington, D.C.

**Donald E. Erb**, BES Mechanical Engineering. U.S. AEC, research and development programs for first generation civilian light water reactors, beginning with Yankee-Rowe. Director of the Battelle Memorial Institute Columbus Laboratories Nuclear Utilities Technical Assistance Program. Retired in 1997 from the U.S. Dept. of Energy, where he was Director, Isotope Production and Distribution (1989-1997) for medical, industrial, and research applications. Recipient of American Society of Nuclear Physicians Industrial Committee Achievement Award for his isotope work.

**Ray A. Hunter**, Chemical Engineer, Atomic Energy Commission, Office of Nuclear Energy, Science and Technology (NE). For contributions to Liquid Metal Reactor Technology, awarded Walker L. Cisler Medal from American Nuclear Society. Listed in "Who's Who in Science and Engineering." Member, Science Council for Global Initiatives.

**Steven M Lusinski**, MS CE, MBA Early period as structural engineer designing nuclear power plants. 3 decades growing small/mid sized technology oriented companies. Angel investor

**Dr. Norman D. Meadow**, Principal Research Scientist, retired. Dept. of Biology. The Johns Hopkins University. Understands that nuclear power will be far less damaging to the biological world than renewable energy sources. Involved in supporting nuclear power. The Maryland Conservation Council supports building nuclear plants in MD. \*

**Dr. Theodore Rockwell**, National Academy of Engineering; Manhattan Project; Technical Director Naval Reactors (1949-

64). Listed in "World Who's Who in Science from Antiquity to Present".

**Dr. Thomas Ward**, Senior Consulting Scientific and Technical Advisor. Over 40 years research in basic and applied Nuclear Science in nuclear chemistry, radiochemistry, nuclear physics, atomic physics, particle physics, and cosmology (>200 papers) at BNL, LANL, LBL, TRIUMF, Indiana University and DOE HQ.

### *Massachusetts*

**Rudolph M. Grube**, BS Chemical Engineering. Supported administration of Plutonium Recycle Program for the US Atomic Energy Commission. In charge of fuel design and procurement for New England's "Yankee" plants for 31 years.

**Theodore N Kirchner**, MS ChE, over 30 years experience in safely manufacturing fine chemicals. \*

**Charles F. Reeves**, MS Civil Engineering, Fellow, American Society of Civil Engineers, PE. Directed safety analyses and designs for boiling and pressurized water reactors and high temperature gas-cooled reactor systems. Stone and Webster Engineering Corp. (Ret)

**Dr. Berol Robinson**, PhD Physics. Retired science and science education officer of UNESCO. Member of Association des Ecologistes Pour le Nucléaire (AEPN), president of American affiliate Environmentalists For Nuclear Energy (EFN).

### *Michigan*

**Dr. Dale Brethower**, Professor Emeritus of Psychology. Western Michigan University.\*

## SIGNATORIES FROM THE UNITED STATES

**Mark Forbert**, BS government, world history, US history teacher, L'Anse Creuse HS North, Macomb MI. \*

**Duane Lawton**, BSEE, MBA. 36 years in IT management. (Ret.). \*

**Dr. David Taylor**, President Emeritus, Western Illinois University, retired - former Marine, professor of educational psychology.\*

### *Minnesota*

**John Adams**, (Ret.) Senior Lab Automation Specialist for the Rochester MN IBM Laboratory. \*

**Cory M. Lownsbury**, BS Electrical Engineering, PE. \*

**Joseph M. Shuster**, Chemical Engineer, Author of "Beyond Fossil Fools, The Roadmap to Energy Independence by 2040" Member, Science Council for Global Initiatives.

### *Mississippi*

**John Wheeler**, BS Marine & Nuclear Engineering. 25 years experience operating military & commercial nuclear reactors. Senior Reactor Operator licensed on two US nuclear plants Producer of "This Week in Nuclear"

### *Missouri*

**Robert Herzog**, "I have been a Builder / Developer for 45 years and firmly believe the nuclear option is the correct answer." \*

**Dr. Stanford L. Levin**, Emeritus Professor of Economics, Southern Illinois University Edwardsville. President, The Resource Group, Inc., St. Louis, Missouri providing consulting services in public utility regulatory cases, antitrust, evaluation of economic loss, and general economics.

**Dr. Wayne McDaniel**, PhD Electrical Engineering.

**Dr. Sabiha Naz**, PhD Nuclear Engineering. Working in area of nuclear waste management. "I am highly in favor of peaceful application of nuclear energy specially in the area of radioisotope production."

### *Montana*

**Philip Baker**, Construction worker (Ret.). \*

**Dr. Edwin X Berry**, Atmospheric Physicist. Certified Consulting Meteorologist. Chief scientist and manager of the Desert Research Institute's airborne research facility. National Science Foundation Program Manager for Weather Modification. Focused on the global warming problem. Member, American Meteorological Society. Director Climate Physics, LLC., <[www.climatephysics.com](http://www.climatephysics.com)> \*

**Marvon H. Cargill**, Lewis and Clark College. \*

**Rhoda Cargill**, University of Washington, College of Fisheries. \*

**Aubyn Curtiss**, 24 years in public office. Supports nuclear power. \*

**James Edmiston**, BA. Served in ETO WWII 26th Inf 3rd Army. \*

**George Everett**, BS Business. Montana House of Representatives: 2002-2008 Committees: Natural Resources; Fish Wildlife & Parks; Judiciary. Real Estate-30 yrs. Business Owner- 30 yrs. \*

**Jim Foster**, BS CE 24 year career in military, Lt Col. (Ret.). Chief of Facility Management Glacier National Park. \*

## SIGNATORIES FROM THE UNITED STATES

**Chad Graham**, President, Graham Design and Construction. Kalispell Planning Board/Zoning Commission member. \*

**Doug Hamilton**, Bachelor of Commerce. International banking in four different countries. Supports nuclear power. \*

**Dan Happel**, BS - City Planning. Founder and CEO - Happel & Associates, Founder and COO - Coronado Corporation. \*

**Don F. Hart**, BS ME, MS Materials Engineer. Lt. Col. USAF (Ret) Experience includes weapon system development, space system engineering, development, procurement and operations. Aircraft flight operations and training. \*

**Fred D. Hodgeboom**, BS Forestry, Certified Silviculturist, USFS R-1. 32 years in U.S. Forest Service, (Ret.). \*

**Verdell Jackson**, MBVE. College professor, school superintendent. Montana State Representative and Montana State Senator. A member of the Montana State Energy Committee that is currently writing the Montana State Long Range Energy Plan. \*

**Linda Johnson**, Ret. Advsg. Sales Manager -USA division for 34 nation Computer Publication. \*

**Patricia Kirkland**, Mill worker (Ret.). \*

**David Maurer**, MS CE, MA Business. Graduate of USN Nuclear Power School. Thirty years Corps of Engineers, including program management in US Army Nuclear Power Program. Colonel US Army (Ret.). \*

**John Mauzey**, Engineer (Ret.) Designed and built embedded systems for consumers and engineers. \*

**Thomas McElwain**, BS Business Administration, (Ret.), The Montana Power Company and Stewart Title of Flathead

County; (Ret.) Lt. Col., Montana Army National Guard. \*

**Sean McGrew**, Analytical Chemist. \*

**Tony O'Donnell**. \*

**Dr. Peter O'Reilly**, MD. Board Certified Anesthesiologist (Ret). \*

**Dr. Steven Palmieri**, Chemistry. Post-doctorate German Cancer Research Center Heidelberg Oncogenes & Tumor Viruses. Doctor of Osteopathy. \*

**James F. Rathbun**, BS Forest Management. US Air Force. Thirty-four years US Forest Service. Retired as Forest Supervisor of Kootenai National Forest\*.

**Keith Regier**, Retired elementary teacher. Montana State Representative from HD#5. \*

**Jan Rogers**, (Ret.) Proposal writer for City of San Bernardino, CA Water Dept. \*

**Senator Bruce Tutvedt**, supports nuclear power. \*

**Paul Valley**, US Military Academy at West Point. MG US Army (Ret.) Chairman Stand Up America and Save Our Democracy. Co-authored the book "Endgame—Blueprint for Victory for Winning the War on Terror." \*

**Glenn J. Wehe**, BS,MS Macro Economics & Finance, Educator (K-12). \*

**Julie Wolf**, BA Modern Languages, MS Education. Teacher, (Ret.). \*

### *Nevada*

**Leonard Emery**, USAF TSgt Ret. \*

**Dr. Hugh H. Kieffer**, PhD Planetary Sciences. Geophysicist, U.S. Geological Survey (retired). Fellow, American

## SIGNATORIES FROM THE UNITED STATES

Geophysical Union. Consultant to NASA on instruments and space missions (active).

**James A. Kudrna**, BS Economics and Business. Owner several real estate companies. \*

### *New Hampshire*

**John E. (Jed) Williamson**, M. Ed. Education Administration and Counseling/Psychology. Retired college president and university faculty member. "I believe that we must take advantage of the solid scientific work that has been done by so many credentialed scientists so that we can move forward with the logical choice of nuclear energy."

### *New Jersey*

**Gadi Levin**, BS ME. 30 years managed construction projects mostly in the North East. \*

**Barnes Moore**, BA. Account Executive. \*

**Charlie Opalek**, BSME, PE. President of Opalek Engineering Associates PC. \*

### *New Mexico*

**Dr. D. Richard ("Rip") Anderson**, organic chemist and chemical oceanographer. Expertise in nuclear environmental health and safety and probabilistic risk assessment. Led four major projects at Sandia National Laboratories, including one that made possible the opening of the Waste Isolation Pilot Plant. \*

**Anthony J. Francomano**, Educator 46 years, friend of scientists at Los Alamos and Sandia National Laboratories.

**Dr. Damon Giovanielli**, Retired from Los Alamos National Laboratory, former Physics Division Leader. President of Sumner Associates, Inc, scientific consultants.

**Dr. Leo S. Gomez**, PhD Radiation Biology. 30 years experience in theories, and practices of radiological health and safety in performance evaluation and analysis of radiological health hazards in terrestrial and marine environments. Nuclear waste management from 1977-2000 at Sandia National Laboratories in Albuquerque, NM. Biological research project manager for international ocean disposal projects. Worked in Performance Assessment Department for Waste Isolation Pilot Plant, in NM. Director of Research at TCI Medical in Albuquerque, NM,

**Richard E. Malenfant**, MS Engineering Physics, MBA. 50 years of experience with experimental nuclear reactors and critical experiments including work with U-235, U-233, Pu-239 as solid, liquid, and gas as metals and compounds.

**Mark L. Miller**, M.S. Radiological Health Physics. Radiation Safety, Environmental Radiation Monitoring, Environmental Restoration

**Gary Millhollon**, Sr. VP Bank of Albuquerque. \*

**Marita K. Noon**, Exec. Dir. CARE: Citizens Alliance for Responsible Energy. Presenting the public with a clear view of the complete energy picture.

**Dr. Donald Petersen**, PhD. Retired. Division Leader, Life Sciences Division, Los Alamos National Laboratory. Radiation Dosimetry and Health Effects

**Dr. Harrison H. Schmitt**, Former United States Senator from New Mexico. Geologist as well as a former Apollo Astronaut. He currently is an aerospace and private enterprise consultant and a member of the new Committee of Correspondence. \*



## SIGNATORIES FROM THE UNITED STATES

**Stephen D. Stoddard**, Retired. Los Alamos National Laboratory. Past President, Fellow, American Ceramic Society. Fellow, American Chemical Society

**Dr. William R. Stratton**, PhD Physics. Former Chairman of Advisory Committee on Reactor Safeguards. Former member, investigating team for Three Mile Island accident: explored behavior of core and systems during the accident and documented that there was very little release of iodine-131. Later participated in ANS study of behavior of reactors in severe accidents. Retired from Los Alamos National Laboratory in 1982.

### *New York*

**Dr. Robert C. Block**, PhD Nuclear Physics. Professor Emeritus from Rensselaer Polytechnic Institute (RPI). Have been actively engaged in neutron physics research for over 50 years. Served as Director of the Gaertner LINAC Laboratory at RPI for 30 years. RPI has active program at LINAC Laboratory in producing medical isotopes and encourage the full use of nuclear technology to produce these valuable and life-saving materials

**Gwyneth Cravens**, MA English Literature. Woodrow Wilson Fellow. Editor at The New Yorker, Harper's. Published five novels and non-fiction, "Power to Save the World: The Truth About Nuclear Energy." \*

**John Droz, Jr.**, John Droz, jr: physicist (energy expert) and long time environmental advocate. Author of numerous energy and environmental articles, and EnergyPresentation.Info \*

**Joel E. Gingold**, MS Nuclear Engineering, US Navy Advanced Nuclear Power School. Independent nuclear fuel consultant; retired Vice Present and General Manager, Stoller Nuclear Fuel Division of NAC International, world-wide consulting organization; 45+ years experience in commercial nuclear power.

**James Gmelin**, Lawyer, naturalist (Ret.).

**Jonathan Hirschey**, BA, BS, MBA. Inside Sales Manager at Climax Manufacturing Company. \*

**Samir Nazir**, BS ME. Oilfield service industry. Pursuing MS in Science Technology and Policy. "Investing in existing technology, use of flared off natural gas, is more sensible than carbon capture & storage."

**Alan Raphael**, Civil Engineer, P.E., M. ASCE Brookhaven National Laboratory. Engineering design and safety analysis on BWR, PWR, Fast Neutron and HTRL.

**John F. Sullivan**, MS nuclear physics.

### *North Carolina*

**Larry Bailey**, CAPT (SEAL), USN (Ret.). \*

**Margaret Harding**, BS Nuclear Engineering. Expert in core and fuel design, nuclear quality assurance, regulatory compliance, nuclear business practices.

**Jeffrey C. Long**, BA Geology, former Captain US Army Special Forces and Civil Affairs; Governor's appointee to the North Carolina General Assembly's Public Health Study Commission. \*

**Edward A. Reid**, BS ME, MBS. Entire career in energy industry in RDD&D, Market Development and Marketing. Focus on energy end use efficiency, integrated system efficiency, heat recovery and reuse. Nuclear generation is the only power

## SIGNATORIES FROM THE UNITED STATES

generation technology with the potential to replace coal and natural gas in a real world low carbon future.

**David G. Strawson**+, MS, Nuclear Engineering. With Allis Chalmers in design of Elk River and La Cross BWRs, and for over thirty years with MPR Associates in engineering and licensing of commercial nuclear power plants.

**Christopher Williams**, MS Engineering Management. Naval nuclear power program 15 years. Completed two tours on nuclear powered submarines, serving as the engineering office, LCDR.

### *North Dakota*

**Richard Spaeth**, Geologist. Well site geologist New Mexico, Texas, Oklahoma, Arizona, Montana and North Dakota, (Ret.). \*

### *Ohio*

**Dr. Angelo J. Campanella**, PhD Physics. PE. Fellow, Acoustical Society of America. 55 years experience in nuclear power and instrumentation, military electronics, infrared technology, missile guidance, nuclear power seismic analysis, acoustics. Presently independent consultant in physics and acoustics.

**Jack G. Conner**, BS Metallurgy, MS Business, USAEC, Reactor Development Division. Battelle Memorial Institute, Nuclear Project Manager, Battelle Energy Program. Retired.

**Jack I. Hope**, worked for Director of the Office of Science and Technology during the Nixon administration, 1971-1973, before the word "Policy" was added by President Ford. General Electric, manager of advanced engine programs. North American Aviation, Director of propulsion and thermodynamics.

**Julia F. Johnson**, Retired Senior VP. J. P. Morgan Chase; Managing Partner Johnson Manufacturing and Farming LLC; Former Trustee Kenyon College

**Dr. Joseph P. Martino**, Physics, EE, Mathematics. Fellow, Institute of Electrical & Electronics Engineers. Fellow, American Assoc. for Advancement of Science. Associate Fellow, American Institute of Aeronautics & Astronautics. COL USAF (Ret.). Senior Research Scientist, Univ. of Dayton Research Institute. Faculty, Yorktown University. \*

**Jim McGregor**, Executive Director of the Ohio League of Conservation Voters. This organization as a whole gives their endorsement to this letter regarding nuclear power reactors for our US energy future.

**Thomas F. Stacy, II**, BS Industrial Marketing. Partner in plastics machinery sales firm. Applied mechanics, hydraulics, electronics and thermodynamics, focus on energy efficiency. Member ASME, IEEE, Society Plastics Engineers.

### *Oklahoma*

**Dr. Lewis Norman**, Organic Chemistry. 34 years research in oil and gas well service Halliburton Energy Services. "Wish you the best in your fight to put Nuclear Energy highest on the priority list. The future of our nation, and our children depends on it." \*

### *Oregon*

**Dr. Robert E Schenter**, PhD Nuclear Physics. Responsible for relief of "World Shortage" of Gd-153 using FFTF as production site. Led effort to produce over 80 different medical isotopes in the FFTF. DOE Isotope Program Office Site Manager and Group Leader Westinghouse Hanford Company. Helped to start two medical isotope production companies ISORAY and

## SIGNATORIES FROM THE UNITED STATES

Alpha Particle Systems. Presently - Chief Science Officer (CSO) Advanced Medical Isotope Corporation. Fellow, American Nuclear Society.

### *Pennsylvania*

**John Allmon**, MS Environmental Health & Safety Nuclear Plant Simulation Test Director, 32 years commercial nuclear power as reactor operator and an instructor for SRO/RO requalification programs. U.S. Navy, five years reactor operator on nuclear submarine, instructor Naval Nuclear Propulsion School. \*

**Dr. Bernard L. Cohen**, Professor Emeritus of Physics, University of Pittsburgh.

**Glenn Czulada**, America's population is growing and our energy needs will increase in coming decades. We need safe, relatively inexpensive nuclear power. \*

**Frank D'Ascensio**, BS Chemistry. Worked for two major chemical companies in production management and 27 years at one of the largest Publicly Owned Treatment plants in the country as a dept manager in charge of environmental enforcement.

**Edward Graefe**, BS ME. PE. 20 years nuclear industry at PPL – construction management, reactor core design, marketing. Now, President of S&W Metal Products.

**Thomas Hafera**, two-time licensed Senior Reactor Operator – one on a PWR and one on a BWR. Former NRC employee.

### *South Carolina*

**Dr. Robert Bromm**, PE. Robert Bromm, PE. Director - Nuclear Design, Fluor Enterprises. 30+ years of nuclear/mechanical design experience in nuclear power plants, nuclear waste processing & management facilities, and test

reactor operation. Past chairman of Los Angeles and Eastern Washington local sections of the American Nuclear Society.

### *Tennessee*

**Percy J Brewington Jr**, BS Civil Engineering. Management of major projects. Corps of Engineers: Manager of facilities for Rocket Testing and the Ballistic Missile Defense System. AEC/DOE: Manager of Gas Centrifuge Enrichment Plant at Portsmouth, OH. Director, Strategic Petroleum Reserve. Director Clinch River Breeder Reactor Project. Retired.

**William P. Hargraves, Jr.** Food irradiation processing consultant. CDR (Ret.) -- US Naval Reserve. Agricultural business development consultant in Africa and Iraq. Current project in Kurdistan.

**Kenneth D. Kok**, Nuclear Engineer. 40 years experience, ASME Fellow, Past Chair of the ASME Nuclear Engineering Division, Chair of the ASME Energy Committee,

**Dr. G. Ivan Maldonado**, Associate Professor. Dept. of Nuclear Engineering. U of Tennessee

**Donald R. Riley**, MS; Physics. K-25 (Manhattan Project); Aircraft Nuclear Propulsion; Southeast Fast Oxide Reactor; Fast Flux Test Facility; Clinch River Breeder Reactor. Experience: conceptual design of SEFOR; headed team that evolved the vertical core design for FFTF; DOE Branch Chief, responsible for design, development and construction of the FFTF core design; responsible for oversight of EBR-II reactor core activities; DOE Chief Engineer for design, equipment manufacture, schedule and cost of CRBRP; team leader of fast reactor core design teams visiting - France, England and Japan fast reactor activities; EPRI representative in Japan working with their fast reactor team. Sodium safety was a

## SIGNATORIES FROM THE UNITED STATES

factor in design. This covers all operations and development for SEFOR, EBR-II (during its > 30 years of operations); FFTF (during its > 10 years of operation); and CRBRP during its design, development and component fabrication. Retired.

### *Texas*

**Robert G. Bening**, MS CE, PE Colonel, US Army, Corps Of Engineers, (Ret.) 26 years Environmental Engineering Consulting. \*

**Dr. H. Sterling Burnett**, Ph.D. Senior Fellow National Center for Policy Analysis.

**Clarence (Cal) Creacy**, BS Mechanical Engineering. Oil field logging. Rocket test Titan ICBM engines. Nuclear rocket reactor and hydrogen pump testing. Project manager during startup of Oconee nuclear power plant Units 1,2& 3. Marketing & contract management for steam generator inspection, maintenance & repair. Retired.

**William G. Driscoll, Jr.**, Special Agent in Charge (Ret.) U.S. Secret Service. A Former Supervisory Agent for Henry A. Kissinger, White House.

**Dr. Warren S. Duncan**, BS, MS - Geology, PhD - Geophysics. Career in the oil industry. \*

**John Groth**, Captain US Navy (Ret.) US Naval Academy '60. Nuclear Engineering Command/Design Course. Chief Nuclear Officer CONED of New York, VP Operations South Texas Nuclear Project, VP Analysis Institute of Nuclear Power Operations, CO Nuclear Repair Ship, CO Naval Nuclear Power School, CO Nuclear Submarine, Consultant to IAEA, Examined 70 nuclear units world wide

**Dr. John Hardy**, Ph.D. nuclear physics. Distinguished Professor of Physics at Texas A&M University. Fellow of the Royal

Society of Canada and of the American Physical Society. Over 45 years in nuclear physics research and teaching. Formerly a Division Director at Atomic Energy of Canada Ltd., Chalk River.

**D. John Hott**, BBA, JD, LLM Oil and Gas Professional with over thirty years of experience. \*

**Andy Kienlen**, 12<sup>th</sup> grade. Written two position papers on nuclear power. Career objectives: major in nuclear engineering, minor in accounting or chemical engineering.

**Dr. Patricia A. Lapoint**, Professor of Management, School of Business, McMurry University. \*

**Monte Pendleton**, BS Civil Engineer. \*

**Bill G. L. Stafford**, Explored, evaluated and exploited water world wide. Research of Earth Plate movements, Volcanoes and earthquakes. Disabled veteran of the Korean War. \*

**Keith Thayer**, PE. Member of ASME's Energy Committee and President of ASME 1997-98.

**Dr. Bernard L. Weinstein**, PhD Economics. Currently, Associate Director, Maguire Energy Institute, Cox School of Business, Southern Methodist University. His clients have included AT&T, Texas Instruments, Reliant, Entergy, Devon Energy, the Nuclear Energy Institute, the U.S. Conference of Mayors, the Western and Southern Governors Associations, the Cities of Dallas and San Antonio, and the Joint Economic Committee of the U.S. Congress.

### *Utah*

**Dr. Gary M. Sandquist**, PhD Mechanical and Nuclear Engineering. Four decades in

## SIGNATORIES FROM THE UNITED STATES

nuclear science; mechanical, nuclear and biomedical engineering; university teaching, scientific research. Professor Emeritus University of Utah. Fellow American Nuclear Society. Fellow American Society of Mechanical Engineering.

### *Virginia*

**Dr. Peter J, Dirr**, Educator, Grandfather of 7 who will live in a world that needs to be powered at least in part by nuclear.

**Dr. Richard C. Forrester III**, Chemistry/Chemical Engineering. Staff Research Engineer – Oak Ridge National Lab. Technical Representative – IEA Coal Research Group. Fluor Engineers & Constructors – Synthetic Fuels Group. VP Science Applications International. 2004 – Present Senior VP, VW International \*

**Marjorie Mazel Hecht**, Managing Editor, 21st Century Science & Technology magazine. Writer, editor following nuclear power and science for 35 years. Author, "Save the Fast Flux Test Facility!" and "The Nuclear Power Revolution: Modular High Temperature Reactors."

**Jacob Heinz**, BS EE. U.S. Naval Academy. Master of Business. Executive in Telecommunications Industry.

**Megan Soyster Heinz**, BA – communications, Spanish. Licensed Real Estate Appraiser.

**Dr. W. Reed Johnson**, Professor Emeritus, Nuclear Engineering, University of Virginia. Worked in nuclear submarine program, and design and operation of the Army Package Power Reactor. Associated with the U. of Virginia's Nuclear Engineering Program from its beginning. Served on the Atomic Safety and Licensing Appeal Panel, participating in the resolution of technical and legal issues which arose in licensing of

many of the U.S. nuclear power plants. Fellow of the American Nuclear Society.

**Dr. John W. Landis**, Nuclear Engineer, National Academy of Engineering. President of American Nuclear Society, President of Gulf General Atomic Co., Senior VP Stone & Webster Engineering Corp. (Ret.).

**Dr. S. Fred Singer**, physicist, Professor (em) U of Virginia; former Chief Scientist, DOT; former Consultant to DOE on nuclear fuel disposal.

**Harry (Ed) Soyster**, BS U.S. Military Academy, MS Chemistry, MS Systems Management, National War College. Career Army officer retiring as Director, Defense Intelligence Agency with rank of Lt. Gen.

**Karin Soyster**, BS Education. Non Profit Trade Organization for Baking Industry.

**Steven Unikewicz**, BSME, 28 years, Nuclear power plant designer, engineer, operator, regulator, consultant, member ASME.

**Dr. Leonard Weinstein**, ScD Mechanical Engineering (Fluid Mechanics and Thermal Science). Worked at NASA Langley Research Center 45 years. Presently, Senior Research Fellow at National Institute of Aerospace. Recipient of NASA Exceptional Engineering Achievement Medal, 1999 American Institute of Aeronautics and Astronautics (AIAA) Engineer of the year.

**James M. Williams**, Retired Nuclear/Chemical Engineer. Los Alamos, AEC, ERDA/DOE. Fast reactor technology, nuclear safeguards and nuclear fusion.

### *Washington State*

**Dr. Robert W. Albrecht**, Professor (emeritus) Nuclear Engineering and

## SIGNATORIES FROM THE UNITED STATES

Electrical Engineering, University of Washington.

**Dr. Harry Babad**, Chemistry. 35 year advisory scientist & Manager Nuclear waste management & Disposal. Co-author Nuclear textbooks Nuclear Energy and the Use of Nuclear Materials. Fellow ANS

**Delbert L. Ballard**, PE, BS Civil Engineering. Principal Engineer, Manager, 40 years experience in development, design, and construction of various test reactors and related facilities on the Hanford Nuclear Site, Life Member ASCE

**Lane A. Bray**, BA Chemistry. He is known as a technical expert in separations, recovery, and purification of isotopes and is a noted authority in the use of Cesium and Strontium ion exchange for the Department of Energy's West Valley and Hanford nuclear waste cleanup efforts. He patented the USDOE/PNNL process for purifying medical grade Yttrium-90 that was successfully commercialized in 1999. He invented and patented the proprietary Cs-131 purification process assigned to IsoRay Medical Inc for use in prostate seeds. In 2000, he received the Radiation Science and Technology award from the American Nuclear Society. He retired from the Pacific Northwest National Laboratory and currently is the Chief Chemist for IsoRay Medical Inc. He has been a Washington State Legislator, a Richland City Councilman, and Mayor of Richland.

**Samuel J. Beard**, (Ret.) President, Chairman of the Board and Chief Executive Officer of Exxon Nuclear Company.

**Martin Bensky**, 21 years Rocketdyne, liquid propellant rocket engines. 17 years Hanford, waste management. 4 years alternate public representative Hanford Advisory Board

**David L. Blessing**, 32 years with Naval Reactors evaluating alternative reactor concepts.

**Dr. David Bodansky**, Professor Emeritus of Physics, University of Washington. Author of "Nuclear Energy: Principles, Practices, and Prospects."

**David Boleneus**, MS, MBA, Licensed geologist, geophysicist, mineral examiner, US DOI (ret.) and industry: identify and assess metallic and energy mineral deposits, mine-processing cost-consultant to International Atomic Energy Agency (IAEA) Div. of Nuclear Fuel Cycle.

**Dr. Nancy K Crotty**, MD, Board certified internal medicine. Mother. Two sons serving in U.S. Army in Iraq / Yemen. Retired. 24 years medical practice. Supports nuclear power and its development in the U.S. \*

**Oliver A (Al) Farabee**, BS Nuclear engineering, MS mechanical engineering. Studies on FFTF for medical isotope production as well as interfaced with public organizations (presentations) on medical isotope production, treatment and availability. Member ANS.

**Dr. Michael R. Fox**, Physical Chemistry. 40 years experience in nuclear waste management, plutonium and radiochemistry lab work. Geological repository design work. Professor of Chemistry, Idaho State University. Consultant in nuclear waste processing, WMD detection.

**Dr. Alan R. Fritzberg**, PhD. 30 years radiopharmaceutical development for both diagnosis and targeted radiotherapy in nuclear medicine. University of Colorado Assistant, Associate Professor of Radiology. University of Utah Professor of Radiology. While at University of Utah his group and he developed Technetium-99m MAG3 for

## SIGNATORIES FROM THE UNITED STATES

renal imaging. Radiopharmaceutical development consultant.

**D. Mark Gerboth, P.E.,** MS Chemical Engineering, MBA. Engineer and engineering manager for cesium and strontium encapsulation plant and plutonium recovery and recycling facility. Developed and managed programs for environmental remediation at multiple DoD and DOE sites. Managed design for spent nuclear fuel storage facilities. Currently the Chief Engineer for EnergySolutions.

**Carl Holder,** Fast Flux Test Facility. \*

**Gary F. Howden, Sr.** Principal Engineer, (Ret.), Westinghouse Hanford Company, managed design and development of nuclear fuel fabrication facilities for the Fast Flux Test Facility (FFTF), supervised design and development of hot cell irradiated fuel examination equipment for the Fuels and Materials Examination Facility (FMEF). \*

**Ralph Johnson, PE.** Many years experience in engineering and management of large nuclear engineering projects: design, nuclear safety, testing. Now serve as an independent consultant in energy. During career served in a key advisory position to top management in public affairs.

**Dr. David H. Lester,** Chemical Engineer. 40 years experience in chemical and nuclear engineering including 36 years specializing in hazardous and nuclear waste management. Design, construction, and operation of high-temperature sodium systems for fast flux breeder reactors. \*

**Norman MacLeod,** Consulting in natural resource policy design. \*

**Wesley McCart, BS,** Biomathematics. Farmer. Chair Washington State Farm Bureau Climate Change Committee. Stevens County Farm Bureau – President.

Washington Farm Bureau 2009 meeting language for increased nuclear power and recycling of nuclear fuel. \*

**Karen Murray, BA.** Educator, Homemaker, VP of Spokane College Women's Association. \*

**Claude L. Oliver, BS** Political Science, Business and Economics. 30 Years Public Service. 8 Years Commercial Banker. 2002 Led White House US DOE Fast Flux Test Facility Briefing Team. 1990 Formed Nuclear Communities Working Group (NCWG). 1991 Co-Founder of Energy Communities Alliance, Washington DC

**Marlene Oliver, M.Sc.** Biology. Thirty years experience developing and introducing new technologies to medical profession. American Nuclear Society – EWS. Fighting Children's Cancer Foundation. Washington Department of Health - Washington Cares about Cancer Partnership. Society of Nuclear Medicine - Molecular Imaging Center of Excellence. Nuclear Oncology Council. Radiopharmaceutical Sciences Council. European Association of Nuclear Medicine. Asia-Oceania Federation of Nuclear Medicine and Biology. World Assoc. of Nuclear Medicine and Biology. CEO, Innovative Cures Foundation and Curative Technologies Corporation.

**James N. Paglieri, BS** Engineering Physics. Provided criticality safety reviews, inspections, appraisals for 41 years. Lead reactor safety oversight of a TRIGA reactor for 10 years. Criticality and reactor safety support for ~22 years for the Fast Flux Test Facility (FFTF). Became acutely aware of need for radio-isotopes for applications such as Plutonium-238 for space power.

**Dr. Gregory Schenter, PhD** Applied Physics. Specialty is Chemical Physics. He is interested in fundamental developments in both Chemical and Nuclear processes

## SIGNATORIES FROM THE UNITED STATES

associated with energy policy and medical isotope use. Fellow, American Physical Society.

**Arthur Seddon**, Chief of Fire Direction, U.S. Army Artillery, Korea. Manufacturing Engineer, Aerospace programs. \*

**Bonnie Shannon**, BA, Social Sciences. High School and Grade School teacher 19 years. \*

**Keith Smith**, Labor Union steward, chief steward, president of the Machinists Unions' Desert Lodge at Hanford Nuclear Reservation, retired. Worked 31 years at HNR with reputation for expertise in the field of worker safety and productivity. Chair of the Hanford Advisory Board's Health, Safety and Environmental Protection Committee

**Gary Troyer**, BS Chemistry, MS Computer Science, 40+ years experience in nuclear chemistry and computer science, analytical chemistry automation development, senior lecturer in computer science in Africa, chair of Citizens for Medical Isotopes. Consultant for fast spectrum reactor development. Member IEEE, ANS, HPS, AAAS.

**Dr. Alan E. Waltar**, PhD engineering science. Past President of the American Nuclear Society, Past Professor and Head, Nuclear Engineering Department, Texas A&M University, Thirty years of engineering and management experience with Westinghouse and Battelle (mainly safety and materials analyses for the Fast Flux Test Facility at Hanford), Author of three books (FAST BREEDER REACTORS, AMERICA THE POWERLESS: Facing our Nuclear Energy Dilemma, RADIATION AND MODERN LIFE: Fulfilling Marie Curie's Dream).

**Michael E. Williamson**, Marine Geophysicist, Board of Directors, The Science Council for Global Initiatives.

**Dr. Paul Wilson**, Electrical Engineer. Quality Assurance BWR, PWR, DOE Weapons Facilities. Author, Root Cause Analysis, Performance Based Assessments.

**Gerald Woodcock**, MBA. 30 years managerial and professional positions at Hanford Nuclear Reservation. Presidential Citation from American Nuclear Society.

### *Wyoming*

**David Miller**, Wyoming House of Representatives, House District 55. Registered Professional Geologist CP-363. CEO Strathmore Minerals Corp. 34 Years of Energy exploration - production experience.

**Robert D Odell**, BS Geology. Uranium Geologist. Energy exploration - production experience. Rocky Mountain Uranium Scout, Consultant. Member Wyoming Citizens for Uranium Resource.

**Dr. John Wirth**, Engineering. President, Founder and Owner Woodworker's Supply, Inc. \*

\* - Indicates ClimatePhysics.com and StandUpAmerica.



## SIGNATORIES FROM AROUND THE WORLD

### AUSTRALIA

**Peter Lang**, MSc Engineering Rock Mechanics. CPEng, MIEAustralia. 40 years experience on energy projects, site investigations of Wolsung 1 nuclear power station, South Korea. Research and management at the Canadian Underground Research Laboratory, a component of the Canadian Nuclear Fuel Waste Management Program.

### AUSTRIA

**Ed Bradley**, BS ME. Twenty years of international nuclear power and research facility engineering and operations support experience. Nuclear Engineer.

**Dr. Gerhart Schueller**, Ph.D. CE, Structural Engineering, Stanford Univ. Dr.-Ing. E.h. Ruhr Univ., Bochum, Germany. Senior Lecturer, Tech. Univ. Munich, Chair Prof. Univ. Innsbruck, (1981 - date). Member of CERRAM Consulting Group.

### BELGIUM

**Alain Michel**, ingénieur civil mécanicien-électricien. Thermohydraulics of nuclear reactors and solar plants. Strategy and communication in energy field. Belgo-nucléaire, sodium cooled fast reactors. Almeria solar plants and recycling of excess weapons grade plutonium.

**Servais Pilate**, Civil Engineer. BELGONUCLEAIRE over 40 years, coordinating fast reactor projects, contributed to European Commission's program on nuclear weapons elimination. (Ret.).

### CANADA

#### *Alberta*

**Laurence G. Hoye**, Professor Emeritus, University of Lethbridge. Founded Dept. of

Mathematics and Computer Science 1967. Member Canadian Nuclear Society.

**Dr. Duane Pendergast**, PE, Mechanical Engineer. Retired from CANDU engineering at Atomic Energy of Canada Limited. Website ([www.computare.org](http://www.computare.org)) on energy and management of greenhouse gases. Chairman, Alberta Branch, Canadian Nuclear Society.

#### *British Columbia*

**Dr. John D'Auria**, Professor Emeritus of Chemistry, Simon Fraser University (Canada) Over 50 years teaching and research in Basic and Applied Nuclear Science (~200 papers) Nuclear chemistry, Radiochemistry, Nuclear Astrophysics at TRIUMF & CERN/ISOLDE.

**Dr. Barry Davids**, PhD Experimental nuclear physics. Research Scientist TRIUMF, Canada's National Laboratory for Particle and Nuclear Physics. Adjunct Professor of Physics, Simon Fraser University

**Dr. Krzysztof Starosta**, Nuclear Physics. Associate Professor, Department of Chemistry, Simon Fraser University, previously Michigan State University and State University of New York at Stony Brook.

**Brian Hall**, Political analyst. \*

#### *Manitoba*

**Dr. Len Simpson**, Physics, Metallurgy. AECL, Fracture Mechanics, Materials Science, Division Director, Reactor Safety Research, AECL. Canadian Nuclear Society. Mayor, Pinawa, Manitoba, Extensive lobbying with federal ministers on decommissioning, Manitoba government on nuclear plants.

## SIGNATORIES FROM AROUND THE WORLD

### *New Brunswick*

**Dr. W. Eugene Goodrich**, Professor Emeritus (History) Mount Allison University. Canadian who very passionately supports nuclear power as the only sane way to generate the amount of electricity the world needs without damaging the environment. \*

### *Ontario*

**Dr. Paul Adamthwaite**, Doctorat ès Sciences Philosophiques in mathematics. Oceanography, marine and environmental engineering, and youth development programs in these fields.

**Tony Clark**, Supervisory Nuclear Operator Bruce Nuclear Power Development (Ret.) \*

**Dr. Jerry M. Cuttler**, D. Sc. Nuclear Sciences. Nuclear Engineering. PE. 45 years experience in nuclear science; 30 years of nuclear design and support of CANDU reactors in Canada (22), Argentina (1) and Romania (2).

**Dr. Dan Meneley**, Chief Engineer Emeritus, Atomic Energy of Canada Ltd. (Ret.) Member, Science Council for Global Initiatives.

**Dr. Peter Ottensmeyer**, PhD FRSC, Senior Scientist (Ret.) Ontario Cancer Institute Professor Emeritus, University of Toronto.

**Prof. J.T. Rogers**, Professor Emeritus, Mechanical Engineering, Carleton University, Ottawa. Nuclear Engineering Consultant. Member, R&D Advisory Panel to Board of Directors of Atomic Energy of Canada Ltd.

### *Quebec*

**H. Douglas Lightfoot**, Mechanical Engineer (Ret.), MBA Member of Global Environmental and Climate Centre (GEC3), McGill University. Author of Nobody's Fuel DVD.

### FRANCE

**Dr. Bruno Comby**, Physicist. President of Environmentalists For Nuclear Energy, an international non-governmental organization based in France, created in 1996, now gathering over 10 000 members and supporters in 60 countries, author of book "Environmentalists For Nuclear Energy" translated and published in 15 languages.

**Michel Rozenholc**, Leader in design and engineering of nuclear technologies. Leader in developing and implementing advanced management techniques. Formerly: French Commissariat a l'Energie Atomique, President of GAAA. President of Novatome; Design and engineering of the FBR Superphenix. Vice President of Business Development and Strategy at Framatome. Since 1987, CEO of his own consulting firm. Director, Energy Strategists Consultancy Limited.

### GERMANY

**Dr. William Grossman**, Partner, Transformation Consulting International GMBH - Energy Sector Consulting. Adjunct Professor, Virginia Polytechnic Institute and State University.

**Dr. Wilfried B. Kraetzig**, Prof. Dr.-Ing. habil. Dr.-Ing. E.h., Institut fuer Statik und Dynamik, Ruhr-Universitaet Bochum. Member of ASCE, IABSE, IASS. Analysis, design and safety assessment of world's largest natural draft cooling towers and other power components.

## SIGNATORIES FROM AROUND THE WORLD

**Dr. Udo Wehmann**, Physicist. 30 years experience in core and safety design of fast reactors. IAEA and NEA consultant.

### INDIA

**Dr. Baldev Raj**, director of the Indira Gandhi Centre For Atomic Research in Kalpakkam, India, is a member of the elite (INEA). The 150 member INEA is a body of scientists and policy makers engaged in development and utilisation of peaceful applications of nuclear energy throughout the world.

### IRELAND

**James Hogan**, Masters degree, electrical & electronic engineering. Design and development of digital instrumentation & control systems. Consulting on scientific real-time computers. Now full-time writer on scientific and technological subjects.

**Patrick L. O'Brien**, M.Sc (NUI) FCIWEM (UK) CEnv (UK) CSci (UK) MICHemE (UK) MCIWM (UK). Lead EHS Engineer PM Group. Senior Environmental Consultant with over 40 years experience both in Ireland - UK - Central & Eastern Europe - North Africa and the Middle East.

### JAPAN

**Masao Hori**, Master of Engineering, Chemical Engineering. Editor, International Nuclear Societies Council's books, "Vision for Second Fifty Years of Nuclear Energy" (1996), "Nuclear Production of Hydrogen: Technologies and Perspectives for Global Deployment" (2004), both published by American Nuclear Society. Member, Nuclear Hydrogen Society.

**Kiyoshi Yazawa**, Science journalist/editor for 30 years. Author of "Nuclear Renaissance" in Japanese. Director of Yazawa Science Office.

### MALAYSIA

**Mohd Peter Davis**, MS Biotechnology. With cheap and abundant nuclear desalinated water from sea water, the Deep Tropical agricultural system developed in Malaysia can green the deserts and supply a Western high protein quality diet for the undernourished billions in developing countries.

**Dr Abdul Aziz Mohamed**. PhD. High temperature creep in weldment - nuclear applications. Career in nuclear science & technology – materials. Malaysian Nuclear Society, Institute of Materials Malaysia /Malaysian Welding & Joining Society.

### MEXICO

**Dr. Juan Luis Francois**, Reactor Physics. Professor of Nuclear Engineering at the National University of Mexico. Member of the: International Nuclear Energy Academy, Academy of Engineering of Mexico, Mexican Academy of Sciences. Vice president / President elect of the Pacific Nuclear Council.

**Cesar F. García Martínez**, Engineer's Degree in Nuclear Engineering. He was Engineering Manager of the Laguna Verde Nuclear Project in México, with 2 units operating successfully during 20 years

**Dr. Cecilia Martín-del-Campo Márquez**. PhD in Reactor Physics. Nuclear Engineer. Professor and Researcher at the College of Engineering, National Autonomous University of Mexico. President of the Mexican Nuclear Society. Member of WIN – Women In Nuclear, LAS/ANS, and the Academy of Engineering of Mexico.

**Dr. Carlos Chavez Mercado**, PhD Nuclear Engineering. Professor and researcher in Human Factors and Nuclear Safety. Nuclear Reactor Engineering Analysis Laboratory

## SIGNATORIES FROM AROUND THE WORLD

Engineering School. Universidad Nacional Autónoma de México

**Dr. Carlos Velez**, PhD, Nuclear Engineering. Honor Member, Mexican Academy of Engineering. Fellow, American Nuclear Society. Former Deputy Director General, International Atomic Energy Agency.

### THE NETHERLANDS

**Captain Vyron Lymberopoulos**, Pilot training, 20 years with airline, 13,000 flight hours, 7 years as instructor.

### NEW ZEALAND

**Bryan Leyland**, MS. FIEE, FIMechE, FIPENZ. Consulting engineer in power generation, transmission and distribution. Experienced in hydropower, combined cycle generation, steam power generation, wind power, wave power and tidal power. Expert Advisory Group for Kalpasar 5800 MW tidal power scheme in India.

### POLAND

**Dr. Andrzej Czachor**, Solid state physics, neutron scattering theory. Author of 70 publications. Organization of the Neutron Radiography Station. Organization of several International Schools of Physics, Deputy Chairman of the Scientific Council of the Institute of Atomic Energy.

**Dr. Zbigniew Jaworowski**, MD, PhD, DSc, Professor, Central Laboratory for Radiological Protection, Warsaw, Poland. Member of the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR). President, Polish Society of Environmentalist for Nuclear Energy.

**Dr Andrzej Strupczewski**, Nuclear Engineering. Head of Nuclear Safety Commission at Institute of Atomic Energy, Expert for nuclear safety of the International Atomic Energy Agency (6 years leading IAEA expert. 35 missions to 20 countries) and expert for European Commission (4 years nuclear safety issues). Environmentalists for Nuclear Power - Deputy Chairman of the Polish chapter.

### RUSSIA

**Dr. Semen (Sam) Dukarevich**, Cryogenics Technology. Former Chief of Ground Freezing Department in Lenmetrogiprotrans Institute, St. Petersburg, Russia, The Council of Ministers USSR Prize Laureate, Co-technical leaders with Dr. Evgeny Velikhov in building ice shield beneath the Chernobyl catastrophe in 1986. Retired to Colorado, USA, American Citizen.

**Dr. Evgeny Velikhov**, Director of Russia's Kurchatov Institute. A Russian Who's Who did a special article called Man of the Century, not about Gorbachev or Lenin but about Dr. Velikhov. Find his mini-bio on [the SCGI site](#). Like Len Koch, he was a winner of the Global Energy Prize. Member, Science Council for Global Initiatives.

### SOUTH AFRICA

**Lesley Turner**, BS Geology, Chemistry. Geologist of 40 years experience. "SA is currently involved in development of the Pebble Bed Modular Reactor technology for nuclear power generation. SA has one successful nuclear power station, Koeberg, and others are planned. Rational energy conservation must be practiced and appropriate use made of sustainable localized solar, geothermal, hydroelectric and wind energy technologies to avoid the huge transmission grid losses." \*

## SIGNATORIES FROM AROUND THE WORLD

### SWITZERLAND

**Hans Achermann**, Electrical engineer Swiss Federal Institute of Technology. Former Member of the Executive Board of EGL AG Laufenburg with management responsibilities for the Leibstadt NPP, several hydroelectric companies and the operation of the Swiss high voltage grid.

**Peter U. Fischer**, Mechanical and nuclear engineering degrees. Chairman of the European Nuclear Council. Chairman of the Uranium Institute, General Atomic in San Diego, California, he directed the nuclear design efforts of the first High Temperature Gas Reactor (HTGR) power plant at Peach Bottom, Pennsylvania. Specific management responsibilities in Switzerland: - Internat. electricity trading and generation; - Construction and operation of hydro-electric facilities; - Construction and operation of high voltage power lines. In charge of Swiss nuclear power plant, Kernkraftwerk Leibstadt, KKL, during construction. Currently, Director ESCL in VA.

**Theo Schaub**, Vice Director Nuclear Power Plant Leibstadt. (Ret.) "I remember with gratitude, that President Eisenhower installed an International School for Nuclear Science and Engineering (ISNSE), where I profited from post-graduate study in 1956 and training in reactor safety in 1959/60. Though I see clearly the limited potential of the known alternative energy sources, I think it is useful and justified to explore all possibilities."

**Theo Schotten**, Consulting engineer, 35+ years experience with PWRs and BWRs.

**Dr. Antonio Tiberini**, Energy expert, PhD Swiss Federal Institute of Technology, CEO of Newheat LLC, previously Co-CEO of Electric Utility Company, Energy

Consultant, Nuclear Safety in Leibstadt Nuclear Power Plant. In 1987, Visiting Prof. for Reactor Engineering at Texas A&M University.

**Dr. M. van den Engh**, Polymer Scientist.

### UNITED KINGDOM

**The Viscount Monckton of Brenchley**, Monckton Enterprises Ltd., consultants in public administration; former Special Advisor to Margaret Thatcher as UK Prime Minister

**John Ritch**, MA, U.S. Military Academy; MS, Oxford University. President, World Nuclear University; former U.S. Ambassador to the International Atomic Energy Agency. Director General, World Nuclear Association;

### VIETNAM

**Martin Dockery**, Lawyer. Career advocating and defending nuclear power in the United States. Living in Vietnam, teaching English and History. Author of "Lost in Translation," a personal account of a Combat Advisor in Vietnam in the early 1960s.

---

## ALPHABETICAL LIST OF SIGNATORIES

Hans Achermann, Switzerland  
John Adams, Minnesota  
Rod Adams, Maryland  
Dr. Paul Adamthwaite, Canada  
Dr. Robert W. Albrecht, Washington  
John Allmon, Pennsylvania  
Dr. D. Richard Anderson, New Mexico  
Dr. Charles B. Archambeau, Colorado  
Dr. Harry Babad, Washington  
Larry Bailey, North Carolina  
Dr. H. Sterling Bailey, California  
Philip Baker, Montana  
Price Baker, Florida  
Delbert L. Ballard, Washington  
Dr. Theodore Bauer, Illinois  
Lane A. Bray, Washington  
Samuel J. Beard, Washington  
Robert G. Bening, Texas  
Martin Bensky, Washington  
Theodore Beresovski, Maryland  
Dr. Jay Berry, California  
Kim Berry, California  
Dr. Edwin X Berry, Montana  
Valerie Berry, California  
William Biggley, Maryland  
John Birdsong, Alabama  
Lisa Birdsong, Georgia  
Mary Claire Birdsong, Georgia  
Mark S Blackburn, Hawaii  
Joe Blanc, Colorado  
Tom Blees, California  
David L. Blessing, Washington  
Dr. Robert C. Block, New York  
Dr. Roger N. Blomquist, Illinois  
Charles Boardman, California  
Dr. David Bodansky, Washington  
Daniel S. Boessow, California  
S. Locke Bogart, Florida  
David Boleneus, Washington  
Dr. Jon Boone, Maryland  
Ed Bradley, Austria  
Dennis Brannon, Georgia  
Dr. Dale Brethower, Michigan  
Percy J Brewington Jr, Tennessee  
Dr. Robert Bromm, South Carolina  
Edgar Brooks, Arizona  
Dr. Lon Brouse, Colorado  
Neil W. Brown, California  
David J. Bufalo, Colorado  
Ronald E. Burdge, Maryland  
Dr. H. Sterling Burnett, Texas  
Dr. Angelo J. Campanella, Ohio  
Marvon H. Cargill, Montana  
Rhoda Cargill, Montana  
Dr. Robert Carretta, Florida  
Douglas G. Carroll, California  
Kevin T. Casey, California  
Warren B. Causey, Georgia  
Dr. Carlos Chavez Mercado, Mexico  
William H. Choquette, Maryland  
Tony Clark, Canada  
Dr. Howard T. Coffey, California  
Dr. Bernard L. Cohen, Pennsylvania  
Maryann Gmelin Collier, Connecticut  
Dr. Bruno Comby, France  
Jack G. Conner, Ohio  
Gwyneth Cravens, New York  
Clarence (Cal) Creacy, Texas  
Dr. Nancy K Crotty, Washington  
Michael K. Curtis, Colorado  
Aubyn Curtiss, Montana  
Dr. Jerry Cuttler, Canada  
Dr. Andrzej Czachor, Poland  
Glenn Czulada, Pennsylvania  
Frank D'Ascensio, Pennsylvania  
Dr. John D'Auria, Canada  
Dr. Barry Davids, Canada  
Mohd Peter Davis, Malaysia  
John R (Grizz) Deal, Colorado  
John Dendahl, Colorado  
Dr. Peter J, Dirr, Virginia  
Raymond D. Dixon, Colorado  
Martin Dockery, Vietnam  
William G. Driscoll, Jr, Texas  
John Droz, Jr., New York  
Dr. Alexander DeVolpi, California  
Dr. Semen (Sam) Dukarevich, Russia  
Dr. Warren S. Duncan, Texas

## ALPHABETICAL LIST OF SIGNATORIES

James Edmiston, Montana  
Leonard Emery, Nevada  
Donald E. Erb, Maryland  
George Everett, Montana  
Dr. Jeff Eerkens, California  
Oliver A (Al) Farabee, Washington  
Dr. Glen Farkas, California  
Timothy Ferris, California  
Peter U. Fischer, Switzerland  
Kenneth D. Flauding, II, California  
Mark Forbert, Michigan  
Dr. Michael L. Ford, Georgia  
Dr. Richard C. Forrester III, Virginia  
Jim Foster, Montana  
Sarah Foster, California  
Dr. Michael R. Fox, Washington  
Dr. Juan Luis Francois, Mexico  
Anthony J. Francomano, New Mexico  
Dr. Alan R. Fritzberg, Washington  
Cesar García, Mexico  
D. Mark Gerboth, Washington  
Joel E. Gingold, New York  
Dr. Damon Giovanielli, New Mexico  
Art Gittelman, Georgia  
James Gmelin, New York  
Dr. Leo S. Gomez, New Mexico  
Dr. W. Eugene Goodrich, Canada  
Steve Goreham, Illinois  
Edward Graefe, Pennsylvania  
Chad Graham, Montana  
Craig Green, Colorado  
Dr. Uwe Greife, Colorado  
Thomas P. Griffin, California  
Dr. William Grossman, Germany  
John Groth, Texas  
Rudolph M. Grube, Massachusetts  
Thomas Hafera, Pennsylvania  
Brian Hall, Canada  
Doug Hamilton, Montana  
Dr. William H. Hannum, Illinois  
Dan Happel, Montana  
Margaret Harding, North Carolina  
John Hardy, Texas  
William P. Hargraves, Jr., Tennessee  
Don Hart, Montana  
Dr. Howard C. Hayden, Colorado  
Marjorie Mazel Hecht, Virginia  
Jacob Heinz, Virginia  
Megan Soyster Heinz, Virginia  
Dr. Robert E. Henry, Illinois  
Robert Herzog, Missouri  
Jonathan Hirschey, New York  
Fred D. Hodgeboom, Montana  
Dr. Doug L. Hoffman, Arizona  
James Hogan, Ireland  
Carl Holder, Washington  
Jack I. Hope, Ohio  
Christopher Horgan, California  
Masao Hori, Japan  
D. John Hott, Texas  
Gary F. Howden, Washington  
Laurence G. Hoye, Canada  
Ray A. Hunter, Maryland  
Verdell Jackson, Montana  
Dr. Zbigniew Jaworowski, Poland  
James Jehn, Colorado  
Dr. Bryce W. Johnson, California  
Julia F. Johnson, Ohio  
Linda Johnson, Montana  
Ralph Johnson, Washington  
Dr. W. Reed Johnson, Virginia  
Dr. Malik E. Juweid, MD, Iowa  
Edward D. Kee, District of Columbia  
Susan Kennedy, California  
Joseph G. Kerwin, California  
Dr. Hugh H. Kieffer, Nevada  
Andy Kienlen, Texas  
Patricia Kirkland, Montana  
Steve Kirsch, California  
Theodore N Kirchner, Massachusetts  
Richard W. Knudson, California  
Leonard J. Koch, Arizona  
Kenneth D. Kok, Tennessee  
Demetry Koretskiy, Colorado  
Dr. Wilfried B. Kraetzig, Germany  
James A. Kudrna, Nevada  
Dr. Jay F. Kunze, Idaho  
Conrad Ladd, Colorado  
Dr. John W. Landis, Virginia  
Peter Lang, Australia  
Dr. Patricia A. Lapoint, Texas  
Duane Lawton, Michigan

## ALPHABETICAL LIST OF SIGNATORIES

Dr. Jay Lehr, Illinois  
Dr. David H. Lester, Washington  
James Leverentz, California  
Gadi Levin, New Jersey  
Dr. Stanford L. Levin, Missouri  
Bryan Leyland, New Zealand  
H. Douglas Lightfoot, Canada  
Jeffrey C. Long, North Carolina  
Dr. Terry J. Lovell, Arizona  
Cory M. Lownsbury, Minnesota  
Dr. Donald A. Ludwig, Colorado  
Steven Luscinski, Maryland  
Don Lutz, California  
George Lyddane, California  
Vyron Lymberopoulos, Netherlands  
Norman MacLeod, Washington  
Dr. G. Ivan Maldonado, TN  
Richard E. Malenfant, New Mexico  
Dr. Gene Malvino, Idaho  
Dr. Carol S. Marcus, California  
Robert S. Margolis, Florida  
Gerald E. Marsh, Illinois  
Dr. Cecilia Martin-del-Campo, Mexico  
Dr. Joseph P. Martino, Ohio  
David Maurer, Montana  
John Mauzey, Montana  
Wesley McCart, Washington  
Martin McClellan, Florida  
Thomas McElwain, Montana  
Jim McGregor, Ohio  
Sean McGrew, Montana  
Peter McWilliams, California  
Dr. Norman D. Meadow, Maryland  
Dr. Dan Meneley, Canada  
Alain Michel, Belgium  
David Miller, Wyoming  
Mark L. Miller, New Mexico  
Gary Millhollon, New Mexico  
Howard B. Mirkin, Connecticut  
Dr. Abdul Aziz Mohamed, Malaysia  
Ralph Moir, California  
Viscount Monckton of Brenchley,  
Scotland, United Kingdom  
Barnes Moore, New Jersey  
Robert M. Morse, Arizona  
DeWitt A. Moss, Idaho  
Lawrence M. Murchan, California  
Joseph C. Murray, Alabama  
Karen Murray, Washington  
Subir Nag, California  
Dr. Sabiha Naz, Missouri  
Samir Nazir, New York  
Dr. John N. Nishio, California  
Marita K. Noon, New Mexico  
Dr. Lewis Norman, Oklahoma  
Patrick L. O'Brien, Ireland  
Dr. Edmond O'Connell, Connecticut  
Robert D Odell, Wyoming  
Tony O'Donnell, Montana  
Claude L. Oliver, Washington  
Marlene Oliver, Washington  
Charlie Opalek, New Jersey  
Dr. Peter J. O'Reilly, Montana  
Dr. Peter Ottensmeyer, Canada  
James E. Owens, California  
James N. Paglieri, Washington  
Dr. Steven Palmieri, Montana  
Dr. David J. Paul, California  
Dr. Duane Pendergast, Canada  
Monte Pendleton, Texas  
Dr. Donald Petersen, New Mexico  
Servais Pilate, Belgium  
Dr. Philip R. Pluta, California  
Mark J. Pruitt, Illinois  
Dr. Baldev Raj, India  
Alan Raphael, New York  
James F. Rathbun, Montana  
Dale Reaves, Colorado  
Charles F. Reeves, Massachusetts  
Keith Regier, Montana  
Edward A. Reid, Jr. North Carolina  
David A. Remien, Idaho  
Richard Rhodes, California  
Donald R. Riley, Tennessee  
John Ritch, United Kingdom  
Sandra S. Roark, Colorado  
Dr. Berol Robinson, Massachusetts  
Dr. Theodore Rockwell, Maryland  
Prof. J.T. Rogers, Canada  
Jan Rogers, Montana  
Dr. A. David Rossin, Florida  
Michel Rozenholc, France



## ALPHABETICAL LIST OF SIGNATORIES

Edward F. Russell, Idaho  
Miriam Sacks, Arizona  
Dr. William Sacks, Arizona  
Dr. Allan M Salzberg, Idaho  
Dr. Gary M. Sandquist, Utah  
Dr. Stanley Satz, Florida  
Edwin Sayre, California  
Theo Schaub, Switzerland  
Dr. Gregory Schenter, Washington  
Dr. Robert E Schenter, Oregon  
Scott Schenter, California  
Steve Scheye, California  
Harrison H. Schmitt, New Mexico  
Theo Schotten, Switzerland  
Dr. Gerhart Schueller, Austria  
Dr. Ken Schultz, California  
Arthur Seddon, Washington  
Marc C. Seward, California  
Dr. John A. Shanahan, Colorado  
Bonnie Shannon, Washington  
Joseph M. Shuster, Minnesota  
Dr. Len Simpson, Canada  
Robert E. Sims, California  
Dr. S. Fred Singer, Virginia  
Dr. Kenneth W. Skrable, Delaware  
Gordon Smith, California  
Keith Smith, Washington  
Steve Smith, California  
Harry (Ed) Soyster, Virginia  
Karin Soyster, Virginia  
Dr. Michael Spaeth, California  
Richard Spaeth, North Dakota  
Thomas F. Stacy, II, Ohio  
Bill G. L. Stafford, Texas  
Dr. George Stanford, Illinois  
Dr. Krzysztof Starosta, Canada  
Dr. Nigel R. Stevenson, Georgia  
Stephen Stoddard, New Mexico  
Dr. William R. Stratton, New Mexico  
David G. Strawson+, North Carolina  
Dr Andrzej Strupczewski, Poland  
John F. Sullivan, New York  
Dr. John E. Tanner, Jr., Idaho  
Dr. David Taylor, Michigan  
Dr. George Taylor, California  
Keith Thayer, Texas  
Dr. Antonio Tiberini, Switzerland  
Dr. Charles E. Till, Idaho  
Dr. Armando Travelli, Illinois  
Gary Troyer, Washington  
Lesley Turner, South Africa  
Senator Bruce Tutvedt, Montana  
Robert E. Unger, California  
Steven Unikewicz, Virginia  
Paul Vallely, Montana  
Dr. M. van den Engh, Switzerland  
Edward A. Veek, California  
Eugene B. Veek, Arizona  
Dr. Carlos Velez, Mexico  
Dr. Evgeny Velikhov, Russia  
Keith von Borstel, California  
Susan von Borstel, California  
Dr. Alan E. Waltar, Washington  
Dr. Thomas E. Ward, Maryland  
Dr. Randolph 'Stick' Ware, Colorado  
Glenn J. Wehe, Montana  
Dr. Udo Wehmann, Germany  
Dr. Bernard L. Weinstein, Texas  
Dr. Leonard Weinstein, Virginia  
Randy Weir, Hawaii  
Vern Westgate, Idaho  
John Wheeler, Mississippi  
Dr. Tom M.L. Wigley, Colorado  
Eugene P. Wilkinson, California  
Christopher Williams, North Carolina  
James M. Williams, Virginia  
Dr. Robert Williams, Colorado  
John E. (Jed) Williamson, NH  
Michael E. Williamson, Washington  
Dr. Paul Wilson, Washington  
Dr. John Wirth, Washington  
James Wobser, California  
Julie Wolf, Montana  
Gerald Woodcock, Washington  
Kiyoshi Yazawa, Japan  
Dan Yurman, Idaho  
Dr. Edward Zganjar, Louisiana

## COUNTRIES, PROVINCES, STATES

**Australia**

**Austria**

**Belgium**

**Canada**

Alberta

British Columbia

Manitoba

New Brunswick

Ontario

Quebec

**France**

**Germany**

**India**

**Ireland**

**Japan**

**Malaysia**

**Mexico**

**The Netherlands**

**New Zealand**

**Poland**

**Russia**

**South Africa**

**Switzerland**

**United Kingdom**

**United States**

Alabama

Arizona

California

Colorado

Connecticut

Delaware

District of Columbia

Florida

Georgia

Hawaii

Idaho

Illinois

Iowa

Louisiana

Maryland

Massachusetts

Michigan

Minnesota

Mississippi

Missouri

Montana

Nevada

New Hampshire

New Jersey

New Mexico

New York

North Carolina

North Dakota

Ohio

Oklahoma

Oregon

Pennsylvania

South Carolina

Tennessee

Texas

Utah

Virginia

Washington State

Wyoming

**Vietnam**