

*“International law, or the law that governs between states, has at times, like the common law within states, a twilight existence during which it is hardly distinguishable from morality or justice, till at length the imprimatur of a court attests its jural quality. The gradual consolidation of opinions and habits has been doing its quiet work.” (Judge Benjamin Cardozo, *New Jersey v. Delaware* 291 U.S. 361, 384 (1934) citations omitted)*

Nuclear Disarmament by Popular Demand: The roles of customary law and evidence.

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Introduction

The draft Nuclear Disarmament Resolution I have presented for your consideration first states the facts and law applied to nuclear weapons. By adopting it we will assume our responsibility as lawyers and citizens to ensure that States fulfill our common “obligation to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament in all its aspects under strict and effective international control.”

It is fundamentally important that we act. As Judge Weeramantry put it, “[T]he taint of invalidity affects not merely the particular rule [which justifies any or some potential uses of nuclear weapons]. The legal system which accommodates that rule, itself collapses upon its foundations, for legal systems are postulated upon the continued existence of society.” (cited in “From the ICJ to the IJC,” A. Dwyer, MIL Fall 2009)

This task is ripe and urgent. Good faith in legal terms is well established. It means those elements listed in the resolution. We assume that we operate as lawyers (and citizens) in good-faith as a matter of standard interaction and practice. In this case good-faith means that we move forthrightly toward complete nuclear disarmament and refrain from inconsistent acts (c.f., “Good Faith Negotiations Leading to the Total Elimination of Nuclear Weapons,” IALANA & IHR Clinic Harvard Law School, 2009).

Abstract

This paper looks at the meanings of “nuclear disarmament in all its aspects” and “under strict and effective international control” in the context of customary rules derived

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from accumulated evidence. The process of treaty-making and treaty-modification involves the “gradual consolidation of opinions and habits.”

We are doing what lawyers do; define mistakes and right wrongs. Our mistake was to apotheosize and thereby excuse our use of nuclear weapons and the theoretical insights that led to the technical ability to produce nuclear fission and fusion reactions. We are in the process of accepting human responsibility not only for the uncontrollable heat, blast and radiation of nuclear weapons but also for the dangers and harms of the nuclear system.

1. The role of Evidence.

Consolidation of evidence all too slowly led to the “habit” or customary rule which prohibits nuclear explosions for any purpose. In light of the evidence available and the wide understanding of the effects of nuclear explosions well before 1970, the most curious part of the NPT is Article V, which grants to Non-Nuclear Weapons States (NNWS), through International Atomic Energy Agency (IAEA) supervision, the “potential benefits of peaceful nuclear explosions.”

I will not go into detail concerning the accumulation of evidence of the effects of nuclear explosions from Hiroshima and Nagasaki through the nuclear tests but it has been painful and often intentionally suppressed. It wasn’t until the 1995 that the Main Committee III of NPT Review and Extension Conference stated:

“The Conference records that the potential benefits of the peaceful applications of nuclear explosions envisaged in Article V of the Treaty have not materialized. In this context the Conference notes that the potential benefits of the peaceful applications of nuclear explosions have not been demonstrated and that serious concerns have been expressed as to the environmental consequences that could result from the release of radioactivity from such applications and on the risk of possible proliferation of nuclear weapons.” (2000 NPT Review Conference, “Activities of the IAEA Relevant to Article V of the NPT” Background Paper, Secretariat of IAEA, Feb 2000)

Thus, the CTBT will implement what had already ripened into a customary prohibition against any nuclear test explosion or any other nuclear explosion. In addition it requires ratification of all states with nuclear reactors before entry into force as we have recognized that all such countries possess the materials and technology for producing nuclear explosions.

2. What do we mean by “nuclear disarmament in all its aspects?”

Nuclear disarmament in all its aspects applies to nuclear warheads, fissile materials, delivery systems and nuclear materials and technology in general. The bargain of the NPT has been described as the nuclear weapons states' (NWS) Article VI commitment to disarmament in exchange for the Non-Nuclear Weapons States' (NNWS) right to acquire benefits of nuclear energy. In relation to Articles I, II and IV of the NPT, the bargain of the NPT was agreement by NNWS to not acquire "nuclear weapons or other explosive nuclear devices" in exchange for "participation in the fullest possible exchange of equipment, materials and scientific and technological information for the peaceful uses of nuclear energy" ("The Riddle of 'Inalienable Right' in Article IV of the Treaty on the Non-Proliferation of Nuclear Weapons: Intentional Ambiguity," Zhang Xinjun, Chinese Journal of International Law (2006), Vol. 5, No.3, 647-662).

This has proved illusory. The reality is that "peaceful uses of nuclear energy" provide the equipment, materials and scientific and technological information needed for nuclear weapons and has resulted in proliferation. The International Atomic Energy Agency (IAEA) remains hampered by this self-contradictory mission to promote the peaceful use of nuclear energy and inhibit military uses or nuclear weapons. Yet, the IAEA also embodies at the international level essential technical expertise and mechanisms required to implement a nuclear disarmament treaty. Many of the IAEA's functions related to verifications and safeguards are critical and will continue to be important and expanded related for example to reprocessing and refinement.

But the IAEA is not charged with addressing or correcting existing contamination, waste or compensation problems, even though, following the Chernobyl accident, the IAEA has expanded its role in establishing and implementing safety and security standards of the nuclear system as a whole.

3. "Under strict and effective international control" means establishing rules and procedures for accountability, transparency, verification, inspection, compliance, dispute resolution and liability for harms, dangers and threats leading to complete nuclear disarmament.

A. Liability

The current tension continues to be related to the problem of not addressing or glossing over the existing damage from the nuclear system including contamination, waste, compensation

and clean-up. On the one hand the IAEA has attempted to correct and universalize the liability questions through the Vienna Convention on Civil Liability for Nuclear Damage (1993) and the Convention on Supplementary Compensation for Nuclear Damage (1997) to ameliorate future damage while continuing to promote nuclear energy. On the other hand, such attempts have not and probably will not lead to a “nuclear renaissance” because of the environmental problems and other economic constraints. A recent report of Centre for International Governance Innovation in Ottawa states that in order “to reduce the financial risk carried by taxpayers,” the Crown owned Atomic Energy of Canada, Ltd., designer of the Candu reactor was put up for sale in December, 2009 (“Dim Outlook for nuke industry,” Tyler Hamilton, Toronto Feb. 5 2010). To date there are no takers.

These problems include: delays, skyrocketing costs, design problems, fraud, waste problems, credit down grades and defaults. Federal subsidies and loan guarantees afforded the nuclear industry in the US have not and probably will not overcome these problems (Nuclear Power: The Renaissance that wasn’t,” PSR, 2010).

Even more important for this discussion is that there is, I would argue, already a customary rule in the US that prohibits or at least calls for a moratorium on new nuclear power plant construction because of the accumulated evidence of unresolved waste, compensation and clean-up of contamination problems. We’ve already decided that we don’t need nuclear power or nuclear weapons and are better off without them.

B. Waste

There is no solution to the waste or spent fuel problem. “Reprocessing does not eliminate the need for a repository . . . Further, the new reprocessing technologies being examined by the Energy Department, if adopted, would make huge additional quantities of plutonium accessible for diversion by terrorist groups and would undercut the ability of the US to oppose the spread of plutonium-separation technology to additional countries” (“Is US Reprocessing Worth the Risk?,” Steve Fetter and Frank N. von Hippel, Arms Control Today, 2009). Because of the expense and risks involved open Congressional Hearings on these matters are imperative.

C. Compensation

The US the Radiation Exposure Compensation Act (RECA) and the Energy Employees Occupational Illness and Compensation Program Act (EEOIPA) aimed at uranium miners and

workers in the atomic weapons industry are underfunded and with transparency and implementation problems due to conflicting jurisdictions, technical and national security concerns (c.f. “Energy Employees Compensation, GAO-10-302, 2010).

D. Environmental Clean-up

On behalf of 25 groups and individuals I made the following “Nuclear Issues” presentation to the Biennial Meeting of the International Joint Commission on Great Lakes Water Quality regarding the content of the New Agreement on Great Lakes Water Quality currently being negotiated between the U.S. and Canada.

Nuclear Issues

Regarding clean, appropriate energy supply technologies:

The International Joint Commission’s 2002 *11th Biennial Report* is the most recent to address “nuclear issues” (Sec. 12, “Further Matters of Importance”). It notes problems that were raised regarding metallurgical fatigue in nuclear reactors, radioactive waste discharges and waste storage in fast-track nuclear reactor license renewals and concludes: “Despite the above very real concerns, nuclear power can eliminate the need for fossil fuel generation and the increase in air-borne contaminants that would result.”

This conclusion is based on a false dichotomy. The choice you presented either denies the unsolved and highly dangerous problems of the nuclear fuel chain or is presented as a choice between the devil and the deep blue sea. The major problems of both climate change and the nuclear industry (dangers and costs of nuclear waste, contamination and proliferation) are human-induced and must be solved together. While these problems are global, what we accomplish in the Great Lakes basin can go a long way in facing the realities and dangers. We have and can develop clean, appropriate energy supply technologies without nuclear power (c.f. *Carbon-Free and Nuclear-Free: A Roadmap for U.S. Energy Policy*, Dr. Arjun Makhijani, IEER, 2008).

Restoration and preservation of Great Lakes Water Quality according to the Agreement must take into account all toxic chemicals for their virtual elimination.

You have in the past recognized that your definition of toxic chemicals includes their radioactive forms. Ten years ago the Nuclear Task Force partially completed work based on your recommendations. For example, in the IJC’s 1998 *Ninth Biennial Report* section on radioactivity you recommended the following:

1. Governments comprehensively review all monitoring at nuclear facilities in the Great Lakes Basin with a view to making the monitoring more accommodating to the needs of the Agreement.
2. Governments monitor toxic chemicals used in large quantities at nuclear power reactors, identify radioactive forms of toxic chemicals and analyze their impact on the Great Lakes ecosystem.

3. Governments investigate and report toxicological and ecological problems associated with tritium, carbon-14, iodine-129, isotopes of plutonium and radium-226.

The U.S. response in 1998 claimed that adequate monitoring and exposure assumptions and standards were in place and that the waste problems, particularly of high-level waste, would be solved by now. Neither is the case.

The IJC should this year make the following recommendations and take the steps necessary to ensure that they are carried out:

1. Standards of exposure to and monitoring of radionuclide contamination in the Great Lakes must replace the “Reference Man” standard and be updated to protect women and children, future generations and the ecosystem. (c.f., IEER, Reference Man Reports)

2. All monitoring and investigation of persistent toxic substances for virtual elimination necessary for restoration and preservation of the Great Lakes basin should include at least the radionuclides listed (above) in your 1998 recommendation.

3. No new licenses, permits or subsidies should be issued for any new nuclear reactors, waste sites or uranium mines until all problems including decommissioning, waste and proliferation as well as radiological and toxicological human and ecological effects are properly addressed and remediated.

D. Dispute Resolution: The Licensing Procedures example

Lastly, in successfully administrating a nuclear weapons convention, it will be wise to examine: “(1) the extent of legislative authority to delegate power to administrative agencies; (2) the nature of judicial review of agency action; and (3) formal aspects of agency procedure” (“The New Treaty Makers,” Jose E. Alvarez, keynote at Symposium at Boston College Law School in honor of Prof. Cynthia Lichtenstein, Nov. 2, 2001).

As an example of current problems on this point, Terry Lodge, the attorney representing groups intervening in the licensing procedure for the proposed Fermi III nuclear power plant in Monroe, Michigan prepared the following summary of current administrative problems:

The Atomic Energy Acts (1946 & 1954) and The Energy Reorganization Act of 1974 delegated sweeping power to administrative agencies. The Department of Energy (DOE) administers development and production of nuclear weapons and promotes of nuclear power and the Nuclear Regulatory Commission (NRC) regulates non-defense nuclear facilities. Both provide a continuing stream of technically-trained nuclear engineers and physicists whose expertise and livelihoods involve promoting both nuclear weapons and nuclear power, licensing civilian reactors and licensing high and low-level waste disposal facilities. As a result, Courts have adopted a hands-off approach deferring

regularly to NRC decisions which invariably grant and never revoke operating licenses for nuclear power reactors.

The formal aspects of NRC procedure (subject to the Administrative Procedures Act and the National Environmental Policy Act) are under constant erosion. What began in the ‘60s as an adversarial system has since the early 1990s been reduced to a single “combined operating license” proceeding. There is no attorney conducted cross-examination allowed of expert witnesses. Experts chosen by the NRC almost always come from the NRC or the utility-applicant. Once experts are selected, questions must be submitted to the licensing panels, which unilaterally decide whether and what questions to put to the experts and what, if any, follow-up questions it will put to the expert.

Putative interveners are denied basic due process rights because they are charged with having knowledge of everything in the public domain especially the mammoth and poorly-retrievable files and findings of the NRC itself, prohibited from any cross-examination of experts and from expert witness rebuttal. Intervenors must file their points of contention three or more years before the earliest conceivable trial date and in the case of Fermi III to question the efficacy of a reactor design so new that it has not yet been completed by General Electric/Hitachi.

Conclusion

In order to add our names and authority to the good-faith pursuit and conclusion of nuclear disarmament negotiations, I urge the Members of the International Law Section of the Michigan Bar to adopt the Nuclear Disarmament Resolution presented, to circulate it for signature, to transmit it to elected officials and to invite the Environmental Law Section of the Michigan Bar to join the ILS in convening a Nuclear Disarmament Committee so that we can further the discussions of this important seminar.

Thank you.