

**American Bar Association
Section of International
Law and Practice
Standing Committee on
World Order under Law
Reports to the House of Delegates***

I. International Atomic Energy Agency**

RECOMMENDATION

RESOLVED, That the American Bar Association recommends that the United States government continue and enhance its support of the International Atomic Energy Agency, and take the following steps, with the cooperation and agreement of other nations whenever appropriate.

- A. Take positive steps to enhance the safeguards system, which is intended to provide assurances of compliance by non-nuclear-weapon states to their commitments under the Non-Proliferation Treaty (“NPT”) and provide early warning in the event of any violations. To this end, and in support of steps the Agency has initiated since the 1991 Gulf War which revealed major shortcomings, the United States Government should:
1. provide to the Agency, as appropriate, and encourage other states to do so also, information from national technical means and other sources relating to suspicious activities or potential violations of the NPT, any safeguard agreements, or any UN Security Council resolution relating thereto;
 2. support inspections by the Agency at premises not declared by non-nuclear-weapon states parties to the NPT in order to determine whether they contain any type of nuclear activities and, if they do, to perform regular inspections of any nuclear materials and facilities so located;

*These Recommendations and Reports were approved by the House of Delegates in August 1995.

**H. Francis Shattuck, Jr., Chair, Paul C. Szasz, Rapporteur, George Bunn, John B. Rhinelanders, and John H. Shenefield were principally responsible for this report.

3. insist that the Agency, as a condition to any agreement to carry out safeguards in states not parties to the NPT as in all non-nuclear-weapon states parties to the NPT, subjects all nuclear materials and facilities to full-scope safeguards, including inspections;
 4. insist that the Agency rescind permission to transfer controlled items, such as nuclear-powered submarines, to non-weapon military activities to which no safeguards apply.
- B. Review and revise its historic position and insist that the Agency's safety standards, or authorized equivalents, be applied to all nuclear facilities that have received international assistance, whether commercial or non-commercial, including all those to which the Agency applies safeguards pursuant to the NPT or otherwise.
- C. Consider whether there is a need to separate promotional and control activities relating to nuclear energy, including the relative merits of the following options:
1. Retaining the current structure of the Agency, and thereby continuing to undertake both promotional and control activities through a single entity; or
 2. Replacing the Agency with the following:
 - a. a worldwide International Energy Agency with a mandate relating to all types of energy, to which the IAEA's power-related activities would be transferred;
 - b. an International Arms Control Agency with a mandate relating to controls under all multilateral arms limitation and disarmament conventions, which would take over the IAEA's safeguards, carried out pursuant to the NPT or otherwise, and other monitoring responsibilities; and
 - c. an International Nuclear Safety Agency, which might either be an independent organization, or be a joint subsidiary organ of the World Health Organization (WHO) and the International Labour Organisation (ILO), or possibly be attached to the proposed International Energy Agency;
 while transferring the IAEA's isotope-related activities to suitable existing agencies of the United Nations system.

REPORT

This report and recommendation is one of several relating to selected specialized agencies of the United Nations ("UN") and the International Atomic Energy Agency ("IAEA" or the "Agency"). They have been developed by the Section on International Law and Practice, International Institutions Committee, through the Working Group on U.N. Specialized Agencies and the IAEA as a further contribution of the A.B.A. to the 50th Anniversary of the UN, in fulfillment of

the A.B.A.'s Goal No. 8—to advance the rule of law in the world. This report relates to the IAEA. The recommendation relates to strengthening the safeguards administered by the Agency against diversion of fissile materials into nuclear weapons, to increasing adherence to safety standards developed by the Agency, and to a possible division of the Agency's functions.

It is the singular misfortune of the Agency that it was founded in the late 1950s on two major misconceptions relating to the course of development of nuclear energy: that this would rapidly become a major if not essential source of electrical energy in many countries; and that there would be only a limited number of suppliers of nuclear materials and equipment. Consequently, if these suppliers were all to cooperate with the Agency (which they could control through an appropriately structured Board of Governors), then the IAEA would become the central factor in a vital economic activity and would be in a position to regulate that activity in the recipient countries (to prevent diversion to bomb production and to ensure safety) by controlling the supply of materials and items essential to their continued power production. The unrealizability of such a program was a natal flaw that has required the Agency to modify both its goals and the means to achieve them.¹

The Beginnings of the Agency

The impulse for the creation of the IAEA was given by President Eisenhower's "Atoms for Peace" address to the UN General Assembly in December 1953, when in the wake of Stalin's death it was thought propitious to essay a modest easing in US-USSR tensions and at the same time benefit the world community by having each of the two main nuclear-weapon states transfer to the proposed Agency some of the fissile materials in their stockpiles (thus reducing these). The new organization could make these materials available, subject to appropriate controls, to other states wishing to establish nuclear-generated electrical power programs. After some three years of difficult negotiations, the IAEA was established with a somewhat broader agenda: "to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world."² In many ways the new Agency was modeled on the U.S. Atomic Energy Commission, and like it its principal task was to be the furtherance of nuclear power subject to controls against military diversion and to ensure safety, with other activities, such as isotope-related research, of secondary importance.

When the Agency started its operations in 1958 with some eighty members it was faced with the difficulty that readily available nuclear-generated electrical power was then still almost as far down the pike as when Eisenhower had spoken,

1. See generally Lawrence Scheinman, *The IAEA and World Nuclear Order* at 56-80 (Resources for the Future, 1987).

2. IAEA Statute (276 UNTS 3; 8 UST 1093; TIAS 3873), Article II.

and certainly was not an immediate prospect for most of its members. Indeed, most of these were not at a developmental stage that would have allowed them to utilize such a technology, except as an entirely foreign implant. Consequently, the Agency had to develop activities that would maintain the interest of the bulk of its membership and also prepare it for the eventual arrival of nuclear power. Thus, from the very beginning, the Agency's programs were skewed towards technical assistance and isotope-related activities, primarily in agriculture, medicine and industry.

As to the organization's principal objective, assistance in the development of nuclear power, its activities never became more than peripheral. Largely this was due to the attainment of electrical power generation turning out to be much more complicated and expensive than originally foreseen, so that significant projects to that end were always beyond the technical and above all the material capacity of the Agency—whose annual budget was never more than a minor fraction of the cost of a medium-size power reactor.

Consequent on the lag in the establishment of nuclear reactors for power generation, the Agency's safeguards also received an uneven start. Instead of constituting a control on Agency-assisted projects, which were few in number and insignificant from a potential military point of view, once the Agency's safeguards rules were established their first extensive application was to US-assisted overseas projects (the safeguards under which the USA assigned to the Agency). Another unexpected factor was that during the initial years the USSR, which had initially opposed the plans for establishing the Agency on the ground that it would lead to uncontrollable proliferation, actively opposed strong safeguards—on this point supporting India and other implacable opponents. Some years later the USSR once more switched positions and from then on (including Russia as the USSR's successor) became a partner of the USA on most safeguards proposals.

THE AGENCY'S CURRENT ACTIVITIES AND MANAGEMENT SAFEGUARDS

Objectively, and certainly from the point of view of most *developed* countries, the most important activity of the Agency is its safeguards—that is the control measures to prevent a non-nuclear-weapon state from diverting to nuclear weapons any nuclear materials ostensibly devoted to peaceful purposes—which the Agency carries out pursuant to Articles III.A.5 and XII of its Statute. The safeguard control measures are not, as was originally conceived, an ancillary function of the Agency's nuclear-power programme, but rather since 1970 constitute the implementation of one of the world's primary arms control measures, the Non-Proliferation Treaty ("NPT" or the "Treaty"),³ under Article III.3 of which

3. Treaty on the Non-Proliferation of Nuclear Weapons (729 UNTS 161; 21 UST 483; TIAS 6839; 7 ILM 811). Safeguards are also carried out under the Latin American Tlatelolco Treaty (634 UNTS 281; 22 UST 762; TIAS 7137; 6 ILM 521), and the South Pacific Rarotonga Treaty (24 ILM 1440), usually in association with NPT-based controls.

all non-nuclear-weapon states parties to the Treaty must conclude safeguards agreements with the IAEA. Consequently, in most of the countries in which safeguards are carried out, this is done not to control materials or equipment that the Agency has made available, nor even such as have necessarily been imported from some other state, but rather to control all *declared* peaceful nuclear activities—whether these are based wholly or in part on foreign assistance or are of purely domestic origin. Indeed, from the point of view of the efficacy of these controls, there is no doubt about the superiority of so-called full-scope safeguards (i.e., those that apply controls to all peaceful nuclear materials and facilities in a country rather than only to those that have been received from or been produced with direct or indirect assistance from a foreign state). While full-scope safeguards are applicable to all non-nuclear-weapon states parties to the NPT, they do not apply to non-parties, which at present include India, Israel and Pakistan. Further, the safeguards do *not* apply under the terms of the NPT to any of the facilities in the five nuclear-weapon states, although the USA and others have voluntarily put some of their peaceful programs under IAEA safeguards.

Over the years opponents of safeguards did succeed in whittling them down, from the very strict ones authorized (but not commanded) by the IAEA's Statute; to those set out in a series of "Safeguards Documents"; to those authorized in the respective safeguards agreements with states; to those provided for in the subsidiary implementation arrangements; to those that were actually carried out under prevailing circumstances. This constitutes a hierarchical scheme, in which no lower measure can ever be stricter than what is authorized by the higher, and in which any concession reluctantly made to one state generally has to be applied to all.

Nevertheless, for many years the Agency considered that its safeguards controls, while necessarily not perfect, were at least adequate to enable it to raise a hue and cry if a significant (i.e., from the point of view of making a minimum size bomb) quantity of nuclear materials could not be accounted for—or rather when it was deliberately prevented from carrying out controls required for such an accounting. It was clear, of course, that carrying out full-scope safeguards was dependent on the honesty of at least the initial reports made by the controlled country as to the peaceful nuclear activities that were being carried out within it, as the Agency had neither the legal (under the applicable safeguards agreement) nor the material capacity to roam around freely so as to detect any concealed nuclear activities or installations. However, the Agency acted as though what it might not be able to detect directly might nevertheless be hinted to it by states with effective intelligence services or with national technical means (e.g., low earth-orbit satellites) that could note if something suspicious went on within the borders of a controlled country—whereupon the Agency could, after some legal/political maneuvering, have its Board of Governors authorize a special inspection to observe more closely undeclared but suspicious facilities or activities. Until

1990, it certified annually that no state under safeguards had likely succeeded in diverting, whether covertly or overtly, a significant quantity of nuclear materials.

This complacency was shattered by the discoveries made in Iraq in the wake of its defeat in the Gulf War. Even though that country had since 1972 been under full-scope safeguards under a safeguards agreement⁴ required because of its participation in the NPT and even though special attention had been focused on that country in the wake of the 1981 Israeli destruction of its one declared reactor, it was discovered after the war by inspectors on the ground that Iraq had advanced quite far on several parallel tracks towards building nuclear weapons. These discoveries were made not as a result of normal IAEA safeguards, but in the course of unique special inspections, carried out in part by the Agency and in part by a special UN Commission, both acting under the authority of the UN Security Council. The fact that previously the Agency had had no hard evidence or even suggestion of the extent of these activities constituted not so much a failure of the Agency's overt safeguards system, because it was always recognized that even full-scope safeguards could not normally detect deliberately unreported activities, as it did failure of the implicit backup through the above-mentioned national intelligence services, which in this instance had failed completely. Neither the CIA, nor Mossad, nor other reputedly effective services seemed to have understood what was really going on in that extremely closed society. The Iraqi debacle has led to a re-examination of important premises of the safeguards system, and in particular to a strengthening of the rules relating to special inspections—the first real tightening of any aspect of the safeguards system since its establishment.

Soon, however, the difficulties of implementing an NPT-based safeguards agreement⁵ against determined opposition were demonstrated in a different context by North Korea. Here suspicion was aroused by a discrepancy as to amounts of plutonium separation noted by Agency inspectors, as well as by information obtained from a secondary source (i.e., US satellite images showing probable waste sites), but were hardened by the refusal of the target country to allow certain special inspections, which could only be explained rationally by a desire to conceal a diversion. The Agency was thus in a position to inform the Security Council of this likelihood—that is, to strike the international alarm—which is all the Agency could ever expect to do to prevent diversion.

Because at a recent conference the parties to the NPT extended its term indefinitely, the Agency's safeguards responsibilities under that Treaty have similarly been prolonged. The NPT parties at the same time also declared that "Decisions adopted by the [IAEA's] Board of Governors aimed at further strengthening the effectiveness of Agency safeguards should be supported and implemented and the Agency's capability to detect undeclared nuclear activities should be increased."

4. 872 UNTS 219.

5. IAEA/INFCIRC/403; 33 ILM 319; UNTS Reg. No. 28986; safeguards had previously been applied under a non-NPT agreement set out in 1065 UNTS 525.

Finally, it should be noted that the Agency's post-Gulf War actions in Iraq were justified by the charge under its Statute and its Relationship Agreement with the United Nations⁶ to assist the Security Council at the latter's demand. Similar justifications would have to be found if the Agency were to be charged, as has been proposed, with implementing the verification system of a Comprehensive Test Ban Treaty.

PROTECTION OF HEALTH AND SAFETY

On its face, the Agency's right and obligation to impose controls relating to the protection of health and safety are, *under its Statute*, almost precisely the same as those relating to safeguards. The drafters of that instrument evidently considered that failures to maintain a safe nuclear environment would constitute a danger to the world community comparable to nuclear weapons proliferation.

Notwithstanding, the Agency almost from the beginning took a completely different approach in respect of these two control activities. Yielding to the strongly held position of practically all members states, that safety is basically a domestic concern, the IAEA never attempted to impose any real safety controls over nuclear activities—not even with respect to the few that were directly assisted by the Agency. Only in the wake of the almost disaster of Three Mile Island and the massive one of Chernobyl was it recognized that such events could not only have significant material transboundary effects, but also injure the prospects of peaceful nuclear activities throughout the world. Yet, even Chernobyl was not able to reverse the rejection of international controls in this area, as appears clearly from the 1994 Nuclear Safety Convention⁷ developed by the Agency after extensive studies and negotiations, which reaffirms “that responsibility for nuclear safety rests with the State having jurisdiction over a nuclear installation” and “entails a commitment [by states parties] to the application of fundamental safety principles for nuclear installations rather than of detailed safety standards.”

Aside from the failure to impose its safety standards, which was also due to the absence of any external treaty regime (such as the NPT) that would have required states to accept such standards and Agency controls, it also seems likely

6. Article III.B.4 of the IAEA Statute requires the Agency to submit reports on its activities “when appropriate, to the Security Council” and “if in connexion with the activities of the Agency there should arise questions that are within the competence of the Security Council, the Agency shall notify the Security Council . . . and may also take the measures open to it under this Statute, including those provided in paragraph C of article XII [i.e., to carry out inspections provided for in safeguards agreements and to impose sanctions in case of non-compliance by a safeguarded state].” Article IX of the UN/IAEA Relationship Agreement (281 UNTS 369) provides that “The Agency shall co-operate with the Security Council by furnishing it at its request such information and assistance as may be required in the exercise of its responsibility for the maintenance or restoration of international peace and security.”

7. IAEA/INFCIRC/449; 33 ILM 1518.

that the Agency's functions as a promotor of nuclear power tended to interfere with impulses to take safety really seriously when advising states about the design of existing or future facilities. Safety (unlike safeguards) can be very expensive, and may affect the competitiveness of nuclear power in particular situations. Also, some three decades of practically accident-free operations worldwide tended to justify complacency.

This having been said, one must hasten to add that the Agency has accomplished something of great utility in this field: the continuous development of a series of safety standards for all types of nuclear activities. Utilizing its own staff, as well as national experts and those of other international agencies, in particular the WHO and ILO in the UN System and regional ones such as the ENEA of OECD and Euratom, it has promulgated a series of standards that can be utilized directly, or incorporated into national or international legislative or regulatory instruments. While perhaps not essential for the few most highly developed states able to create such standards for themselves—though even these may benefit when international uniformity is required, such as in transport regulations—most countries could not through their own efforts create health and safety instruments of such high quality.

NUCLEAR-RELATED INTERNATIONAL LEGISLATION

Over the years, the Agency has sponsored a number of international treaties related to the civil uses of nuclear energy. The first of these was the Vienna Convention on Civil Liability for Nuclear Damage,⁸ which took decades to enter into force for a minimal number of states and for various fundamental reasons is unlikely to accomplish the mission impossible for which it was designed; this is largely also true of the [Brussels] Convention on the Liability of Operators of Nuclear Ships.⁹ More useful is the Convention on the Physical Protection of Nuclear Materials.¹⁰ The two post-Chernobyl treaties, the Convention on Early Notification of a Nuclear Accident¹¹ and the Convention on Assistance in the Case of Nuclear Accident or Radiological Emergency,¹² govern matters for which the formal treaty structure appears somewhat too heavy and clumsy but which nevertheless are helpful. Finally, the new Convention on Nuclear Safety,¹³ though considerably compromised during the years of its negotiation, still does impose some minimal safety-related obligations on the parties and thus tends to internationalize a matter that most states with nuclear activities still insist is primarily domestic. Work has started on a convention on the safety of radioactive waste management.

8. IAEA Legal Series No. 2 at 501-12; IAEA Legal Series No. 4 at 3-15; 1063 UNTS 265.

9. IAEA Legal Series No. 4 at 36-46.

10. TIAS 11080; IAEA/INFCIRC/274/Rev.1; UNTS Reg. No. 24631.

11. IAEA/INFCIRC/335; 25 ILM 1377; UNTS Reg. No. 24404.

12. IAEA/INFCIRC/336; 25 ILM 1369; UNTS Reg. No. 24643.

13. IAEA/INFCIRC/449; 33 ILM 1518.

OTHER ACTIVITIES

The other activities of the Agency can roughly be lumped under headings such as research and development and technical assistance, with many in effect fitting into both these categories. Many are no doubt useful, though few are really essential to the role of the IAEA as conceived by the USA. Isotopes or other radiation sources have become useful tools in aspects of agriculture, medicine, industry and other research. But, as these techniques become well established, they take on the nature of tools that are better wielded by those expert in the trade in which they are used rather than by the toolmaker himself. For the nonce, the Agency cannot afford to surrender these and similar activities entirely, for it would risk becoming irrelevant to the bulk of its membership, whose sole contact with the organization would then be through the mild burden of safeguards.

GOVERNANCE

Like all similar international organizations (e.g., the specialized agencies), the IAEA is governed by an all-member General Conference, a restricted Board of Governors and a Director General who heads the Secretariat. Over the years, the power relations between these organs have somewhat shifted. The Board of Governors is clearly the central organ of the Agency. Though nominally the General Conference is hierarchically superior, in effect it can take few actions without a recommendation of the Board. The latter meets more frequently and its members are always present in Vienna though the number of its formal sessions has been far reduced.

One distinct change that has occurred is in the composition of the Board. Originally it had 23 members, only 10 elected by the Conference while the majority were co-opted by the Board from a rather restricted group of nuclear suppliers. Now the Board has 35 members, of whom 22 are elected by the Conference—to which it has therefore become far more responsive. Thus the originally designed dominance of the suppliers has waned.

FINANCING

Article XIV of the IAEA Statute foresees that the Agency will have an administrative budget (including unreimbursed safeguards expenses) to be met from assessed contributions, that it would earn money from operations in accordance with a scale of charges established by the Board, that it may receive voluntary contributions and that it might borrow money (solely on its own credit), presumably for capital expenditures. The budget is drafted annually by the Director General (though on the basis of biennial programs established in the framework a rolling 6-year plan), and recommended by the Board to the General Conference (which can only approve it or send it back to the Board).

For 1995, the total budget approximated US\$319 million, of which \$203 million (63.6%) was raised by assessment on member states (on a scale adapted from that of the UN), \$11 million (3.4%) from miscellaneous services and sales, \$9 million (2.8%) from other UN System organizations for joint programs, \$63 million (19.7%) from voluntary contributions for technical assistance, and \$36 million (11.3%) from contributions to special projects. Of the expenditures, \$90 million (28.2%) was spent for isotope-related activities (mostly in the form of technical assistance), \$77 million (24.1%) for safeguards, \$23 million (7.2%) for nuclear-power-cycle-related activities, \$32 million (10.0%) for health and safety, \$6 million (1.9%) for reimbursed work, and \$91 million (28.5%) for management and other overhead. There have never been any large capital projects requiring loans, nor has the Agency engaged in the sale of or other transactions in nuclear materials.

COORDINATION

The Agency is part of the UN System of organizations, not technically as a "specialized agency" as foreseen in UN Charter Articles 57 and 63, but still bound to the UN by a Relationship Agreement substantively identical to those of most similar institutions (e.g., ILO, FAO, WHO, UNESCO) and like these organizations less independent than the Bretton Woods institutions. It also has Relationship Agreements with many of these UN-related agencies, as well as Cooperation Agreements with several regional organizations.

As pointed out above, the Agency's principal substantive activity is the implementation of NPT-required safeguards. In recent years it has in addition carried out extensive controls in Iraq on the behest of the Security Council. Other activities are undertaken on behalf of common efforts such as those for the protection of the environment, in which connection Agency collaborators include UNEP, IMO, and the Basel Convention Secretariat.

The Future of the Agency

There are two important structural problems relating to the Agency: one inherent in itself, and one in the system within which it functions. The former is that the Agency combines the functions of promoting and of controlling nuclear energy—an incompatibility that years ago led to the splitting up of the U.S. Atomic Energy Commission eventually into the DOE and the NRC—and that is specifically condemned for national organizations by the Agency-sponsored new Nuclear Safety Convention. No matter how honestly they might try, nuclear promoters are too often incapable of the tough love required to insist on the great cost of additional safety measures or to give a true assessment of a mishap.

The external problem is that the world lacks a real energy agency, one capable of assessing on a continuing basis the competing alternatives and choosing the one most suitable for a particular task; one whose mandate is not to promote a particular form of energy but to promote regard for basic values, such as all

aspects of the environment, the proper balancing of current and future inputs and outputs, energy conservation, and social and economic costs.

The logical response therefore is to establish an International Energy Agency (*not* the limited European one created in the wake of the 1974 oil shock) into which the IAEA's nuclear power functions would be folded, and an International Arms Control Agency which would take over safeguards pursuant to the NPT as well as the controls for the Chemical Weapons Convention¹⁴ and for a Comprehensive Test Ban Treaty and any limitations agreed on the trade in or the production of conventional arms. Nuclear safety might require a specialized institution, an International Nuclear Safety Agency, which might either be an independent organization, or be a joint subsidiary organ of the WHO and ILO, or possibly be attached to the proposed International Energy Agency. Activities such as the many isotope-related ones would be transferred to the organization responsible for the substantive field in which radiation techniques have proven or may prove to be useful, e.g., to FAO, WHO, UNIDO.

If this separation of functions is too ambitious a goal in the short run, the following more limited reforms should in any event be implemented:

- (c) Safeguards should, on the basis of the Agency's experience in Iraq and North Korea, as well as developments in countries such as in India, Pakistan, Israel and South Africa, be made full-scope for all non-nuclear-weapons states. Also, as has happened since the Gulf War, the Agency should be unshackled from restrictions to officially declared facilities and materials, so as to allow (obviously subject to negotiated restrictions) for inspections any place and time—as originally foreseen in Article XII.A.6 of the IAEA Statute and as largely accepted under the Chemical Weapons Convention. This would mean: (i) that the Agency would no longer agree to carry out safeguards in non-NPT parties that are restricted merely to certain nuclear materials and facilities, but would insist that, as in all non-nuclear-weapon NPT states, all nuclear materials and facilities be subject to controls; (ii) the permission to transfer controlled items to non-weapon military activities (e.g., a nuclear submarine reactor) to which no controls apply should be rescinded; (iii) the Agency should be given considerable freedom to perform at least cursory inspections of unreported premises, merely to determine whether they contain any type of nuclear activities—and if they do, regular inspections should be carried out.¹⁵
- (d) Safety controls should be greatly enhanced, to include the requirement of substantive adherence to the Agency's safety standards (as developed from time to time) and compulsory monitoring of compliance by major facilities (in particular, reactors), at least in respect of all nuclear activities that have

14. Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and their Destruction (UN document CD/CW/WP.400/Rev.1; 32 ILM 800).

15. At present, the IAEA is moving toward accomplishment of (iii), but not (i) and (ii).