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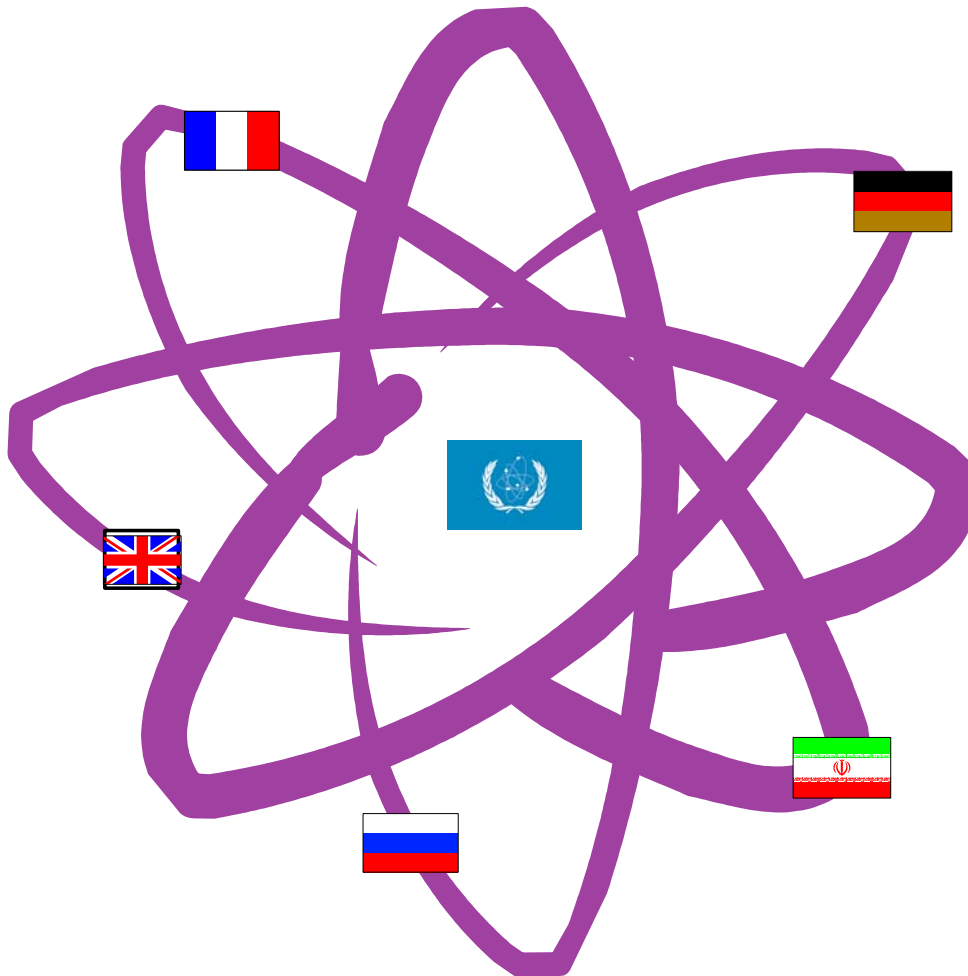
Iran as a Pioneer Case for Multilateral Nuclear Arrangements

Executive Summary and Conclusions

by

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The complete version of this paper, as well as other papers and editorials we have written on this subject, can be downloaded from our website at:

<http://mit.edu/stgs/irancrisis.html>

SUMMARY

This paper is a considerable expansion of pieces we published in February and April 2006 focusing on the Iran crisis.

It makes two recommendations for general nonproliferation policy, both particularly relevant in the event of a global expansion in nuclear energy. The first advocates multilateral facilities ranging over the fuel cycle from conversion to ultimate disposal. Building on this, the second proposes a virtual fuel bank organized through the IAEA. Both are necessary to persuade countries to forgo permanently national enrichment and reprocessing facilities.

The bulk of the paper details the Forden-Thomson plan for dealing with the Iran crisis, essentially a multilateral enrichment facility on Iranian soil with the capacity to provide material for a virtual fuel bank. Given that the escalating dispute has carried the parties well beyond an ideal agreed solution, the plan is put forward as the best option in a bad situation.

A treaty between Iran and the EU-3, Britain, France, and Germany, would establish a commercial partnership with the governments as shareholders; others could be invited to join. The capital would be provided by the shareholders. The board of the partnership would determine policy and control the budget. It would appoint an international company to run the day-to-day operations.

Iran would lease all its enrichment-related equipment and facilities to the partnership and would undertake not to enrich and reprocess except through the partnership.

The partnership would also lease URENCO centrifuges and install them in batches, the first in a few months, the last (making a total of, say, 50,000) seven or more years later. Until the first batch comes in to operation, the partnership would use Iranian P1 centrifuges; all of which would be phased out as soon as the URENCO centrifuges begin to operate. (We estimate that in this period the existing P1s could not produce enough HEU for a weapon.) To preserve secrecy, the sensitive parts of the P1's would be "black boxed" and handled only by Iranians;

similarly, the sensitive parts of the URENCO centrifuges would be black boxed and handled only by URENCO nationals. Self-destruct mechanisms would be installed in the URENCO cascades to deter and spoil expropriation.

If the Iranians accept our plan, they are unlikely to expropriate the internationally owned facilities. To do so would be a seizure of the property of powerful governments well placed to retaliate by various means. It would signal an intention to produce nuclear weapons while leaving the country vulnerable until the weapons had been built and tested.

The IAEA would be consulted on the design of the plant and would operate three forms of safeguards: full-scope, Additional Protocol and specially agreed transparency measures. Each shift of workers would have a majority of non-Iranians and non-Iranians would hold key positions in the management company. Together, these measures would protect both against diversion of material and against the establishment of a clandestine facility.

The LEU produced would be sold commercially on the global market and profits distributed according to shareholding. The Iranians would be customers like all others. Whereas the P1's will never produce enough LEU for more than one reactor, the URENCO machines can easily satisfy the needs of the full Iranian program (20 reactors by 2035) and still have approximately half the output to contribute to a virtual fuel bank.

We consider the pros and cons of certain variants (e.g. Russian instead of URENCO centrifuges) and also possible add-ons (e.g. a regional nonaggression treaty.) We conclude with the pros and cons of the whole proposal.

We claim that (1) our proposal meets the bottom line of both sides, enrichment on Iranian soil and no nuclear weapons in Iranian hands, (2) that the built-in safeguards are robust and effective and more likely to deter and prevent clandestine operations than any proposed alternatives, (3) while risks exist, our plan is the best option in bad circumstances. In addition, it points the way to strengthening the global non-proliferation regime.

Conclusions: The Pros and Cons

The great majority of governments and their advisors will be in favor of almost any agreement that resolves the nuclear quarrel between Iran and the West without damaging the non-proliferation regime. However, there will be a small minority who see advantage in the quarrel continuing and some of them may hope that it will lead to military operations against Iran.

Some Arab states are concerned that a nuclear Iran might be over-mighty and bullying but probably none would welcome U.S. (and still less Israeli) military action. Some Arab dissidents including al-Qaeda would welcome military action against Iran for one of two reasons or for both. All of them would see it as leading to an intensified jihad against the U.S. in particular and the West in general in which most Arabs and all Islamists could unite. Some, in addition, would be pleased that a “heretical” Shia country was being punished. In Washington, neo-cons hope to use the quarrel as an instrument to produce regime change in Iran. And some would welcome military action supposedly as a means of protecting Israel and inducing wholesale reform in the Middle East.

Apart from such general considerations, there will be specific reactions to our proposals in each of three communities: Iran, the West, the international community as a whole.

Iran

Those in Tehran who feel it is truly important for Iran to have a significant nuclear arsenal will not like our scheme. The penalties for either a “break out” via expropriation or a clandestine program would be both high and virtually certain. And the latter would be operationally difficult. They would prefer no scheme at all, in other words liberty to pursue their existing program, perhaps with a clandestine program on the side. If there has to be an agreement, the best, they feel, would be a renewal for a specified short period of the former suspension of some or maybe all enrichment related activities with minimum inspection.

The Russian proposal for a jointly owned enrichment facility at Angarsk in Siberia to which Iran would contribute financially but without access for Iranian technicians is not, as it

stands, acceptable to Iran. In an attempt to meet Iranian objections, the Russians seem to have contemplated allowing a pilot plant enrichment operation to continue in Iran but did not proceed when the Americans expressed strong opposition. That the Russian proposal was vague in some respects as, for example, on what would happen to existing enrichment-related facilities in Iran may not matter since the proposal seems lifeless or at least in the deep freeze. It appears that the Russians have recognized that a proposal which provides no work for Iranian nuclear technicians, no realistic prospect that the Iranians would ever be allowed to enrich on their soil and which locks Iran into dependence on its old enemy, Russia, is not viable. The Russians seem also to have recognized (as the Europeans and Americans have not) that their proposal provides the Iranians with the motive and probably the means to embark on a clandestine program. It is not a proposal that moderates in Iran would be able to support.

For those in Tehran who are not fixated on weapons and still more for those who have no intention of pursuing weapons, our scheme has considerable attractions. Apart from resolving a crisis and avoiding sanctions it would:

- provide a full fuel cycle operation on Iranian soil thus meeting public expectations while also ensuring that Iran's civil program could not be held to ransom;
- bring large scale foreign investment to Iran's nuclear program;
- rescue Iran's declared reactor program from obvious failure and validate Iran's repeated claim to be interested solely in civil nuclear power;
- provide responsible jobs for Iran's nuclear professionals;
- probably, in the long run, earn a profit and meanwhile permit Iran to export more oil and gas to earn hard currency;
- confirm the prestige of pioneering a new type of international institution.

Against these advantages, our scheme would keep critical secrets of the URENCO enrichment process from the Iranians. They would gain, no doubt, from performing sophisticated tasks alongside Western technicians, but it would not automatically or quickly lead to nuclear sophistication. Nor would it necessarily remove U.S. sanctions against Iran. For some Iranians, a multilateral project would be a poor second-best to a civil national program that could later be converted into a military one. These people will argue that Iran should not put itself in the hands of “neo-imperialists” and Western exploiters. But other Iranians will see collaboration with the EU-3 as an indication that Iran has been accepted into a respected position and as a symbol of the country’s emerging scientific prowess.

The International Community

Some countries may feel mildly jealous that the Iranians obtain advantages not offered to them, and may therefore be encouraged to make demands. But those seriously interested in nuclear power will welcome a guarantee of fuel supply that does not depend upon the word of certain great powers. Many countries will be glad that the West has found a way without sanctions or military force to prevent Iran from making nuclear weapons. At the same time, many will be pleased that the West has veered from unilateral dictates to a multilateral solution. They will hope that this signals more attention by the Nuclear Weapons States to their obligations under Articles IV and VI of the NPT. Several will see advantage in giving substance to the concept of Multilateral Nuclear Arrangements.

The West

The West has retreated from its unrealistic starting positions. We no longer ask Iran to give up its rights under the NPT permanently, nor to dismantle its conversion facility, nor do we insist on the Russian proposal. Unfortunately, these retreats may have encouraged the Iranians to suppose we will retreat further while simultaneously making Western negotiators unwilling to consider further compromises. On top of this our scheme involves considerable financial outlay and offers Iranians opportunities for learning to operate a modern enrichment facility.

These criticisms, however, are subordinate to the fact that the multilateral enrichment facility is to be on Iranian soil. Is this not exactly what we are trying to prevent, critics ask? In

saying so, they overlook the distinction between a national plant and a multilaterally owned and operated facility. What we are trying to prevent is not enrichment per se, but Iran's possession of nuclear weapons and this will be achieved by our multilateral proposal unless the Iranians cheat.

Many Westerners assume that they will cheat either by expropriation or by running a clandestine program. We have dealt above with both issues but they are so insistently repeated that it may be worth restating a few basic points.

We do not argue that our scheme is ideal, merely that it is likely to be the best available in difficult circumstances. Three years of a fairly consistent Western policy seem to be leading to a choice between military action and tacit acquiescence in the Iranians doing as they please. Both choices mean failure and defeat. Are the risks of pressing on with a failing policy acceptable? Or should we modify the policy? If so, are the risks involved in our proposal not less than those of the alternatives? After all, multilateral operations in Iran involving Iranian experts mean that the IAEA and the international personnel will have a thorough understanding of what the Iranians are doing. For this reason, a clandestine program is harder under our scheme than under any other. Expropriation is feasible and cannot be dismissed. But it is not likely. If the Iranians are determined to make nuclear weapons, they would do better not to agree to our scheme. To overthrow a treaty, seize the property of powerful governments, expel the IAEA and effectively announce a race to a bomb creates immediate and serious dangers which otherwise need not be experienced.

In this debate, much depends upon difficult-to-predict internal developments in Iran. Where there is a choice, the Six should be careful to reinforce the position of the moderates. It is undesirable to challenge the Iranian nation in a way that intensifies nationalism. At the same time, it is desirable to make use of the Iranian sense of honor and their repeated claims that they seek no weapons and would welcome multilateral operations in Iran.

The core argument for our scheme rests on two points: it prevents the Iranians from making nuclear weapons, and it is better than the available alternatives. But it has other advantages as well:

- it supports the NPT bargain at a time when the non-proliferation regime may be unraveling;
- it provides a credible guarantee of security of supply of LEU to all countries in good standing with the NPT and accepting full scope safeguards and the Additional Protocol;
- it is a step towards persuading other countries not to go in for national enrichment or reprocessing plants;
- it pioneers in a practical way Multilateral Nuclear Arrangements that may have important applications in other parts of the nuclear fuel cycle, and other parts of the world;
- it is cheap at the price.