

# THINKING ABOUT NUCLEAR POWER IN POST-SADDAM IRAQ

**Norman Cigar**

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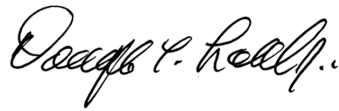
## FOREWORD

Pressure for the future spread of nuclear power for both peaceful and military purposes has been recently noticeable especially in the Middle East. Virtually all countries in the region have expressed an interest in utilizing at least some aspect of atomic power, and in this monograph Dr. Norman Cigar examines the status of such thinking in post-Saddam Iraq. Public discussions in Iraq are surprisingly free, and one can find a willingness to express a range of views, even on a sensitive topic such as nuclear power, that would have been unthinkable a few years ago.

Dr. Cigar has sampled opinions from all key sectors in Iraq—government officials, politicians, religious figures, scientists, academics, and news media pundits—largely the informed public, or those who are likely to have influence on future decisions in this arena. Dr. Cigar highlights the consensus for the rebuilding of a nuclear establishment at least for peaceful purposes, but also the divergent views in the country on the utility of nuclear weapons, and the fragmented and evolving political environment in which such decisions will be made. He also evaluates the concrete steps being taken by the new Iraqi government to play a role in the peaceful nuclear sector and the very real obstacles which it will have to overcome. Dr. Cigar highlights the difficulty of isolating Iraq from regional trends and the need to manage and control the process through international and bilateral safeguards, requiring some U.S. policy decisions.

The Strategic Studies Institute is pleased to offer this study as a contribution to identifying and analyzing this significant emerging policy issue, hoping it will be of relevance and interest to military and civilian

analysts, planners, scientists, and national and allied policymakers. It is also anticipated that the results of this analysis will provide a useful data baseline to help policymakers in their efforts to control proliferation and minimize the risk of nuclear accidents in order to ensure a safe Middle East.

A handwritten signature in black ink, reading "Douglas C. Lovelace, Jr." in a cursive script.

DOUGLAS C. LOVELACE, JR.  
Director  
Strategic Studies Institute

## ABOUT THE AUTHOR

NORMAN CIGAR is a Research Fellow at the Marine Corps University, Quantico, Virginia. Before retiring, he taught military theory, strategy, and policy, operational case studies, nuclear war theory, and regional studies at the Marine Corps Command and Staff College and the School of Advanced Warfighting. Previous assignments include service as a senior political-military analyst in the Pentagon, where he was responsible for the Middle East in the Office of the Army's Deputy Chief of Staff for Intelligence. During the Gulf War, he was the Army's senior political-military intelligence staff officer on the Desert Shield/Desert Storm Task Force. Dr. Cigar is the author of *Why Did Iraq Want Nuclear Weapons? Perspectives of a Would-be Nuclear Power* (forthcoming) and of *Iraq's Vision of the Nuclear Battlefield*. He has written numerous works on politics and security issues dealing with the Middle East and the Balkans, and has been a consultant at the International Criminal Tribunal for the former Yugoslavia at the Hague. Dr. Cigar was also a Visiting Fellow at the Institute for Conflict Analysis & Resolution, George Mason University. He has studied and traveled widely in the Middle East. Dr. Cigar holds a D. Phil. from Oxford (St. Antony's College) in Middle East History and Arabic; an M.I.A. from the School of International and Public Affairs and a Certificate from the Middle East Institute, Columbia University; and an M.S.S.I. from the National Defense Intelligence College.



## SUMMARY

This monograph provides an overview and analysis of thinking in Iraq on the issue of nuclear power. Nuclear power has long held a special fascination for Iraq, and despite past controversies, this issue continues to draw the attention of numerous influential Iraqis in the post-Saddam era. Informed public opinion in Iraq today is clearly a more important factor for understanding the background of decisionmaking than it was during the Saddam era, so that this monograph addresses the views of all the sectors of Iraqi society likely to have an input into decisionmaking in this arena.

There is an emerging Iraqi consensus on the desirability of a peaceful nuclear program, with arguments supported by the expected benefits for electric power generation, agriculture, and medicine, as well as an eventual transition from oil. National pride is also a motivating factor, as nuclear power is viewed as an indicator of modernity and as proof of being able to keep up with regional neighbors. As for a military application of nuclear power, those expressing a positive view—all outside the current government—see nuclear weapons as an effective political and military instrument and as necessary to balance Israel's nuclear arsenal, although their support is voiced on behalf of "the Arabs" in general rather than using the more sensitive term, Iraq. The belief in the effectiveness of a balance of terror in ensuring security and stability is widespread. Perceptions about a prospective Iranian nuclear weapon, however, most often break down along confessional lines, with most Shi'a welcoming the prospect as a boost to the Shi'a community's security, while Sunnis continue earlier views of a nuclear-armed Iran as a threat. There is little

concern over potential environmental implications or potential accidents, or attention to ethical issues.

One should expect in Iraq the same movement toward nuclear power as in the rest of the Middle East, at least in the civilian sector. However, daunting obstacles remain to rebuilding the country's eviscerated nuclear infrastructure, which resulted from the dismantling of many facilities, the removal of fissionable material, and the emigration or death of former nuclear scientists. However, Baghdad has taken steps to reintegrate the country into the nuclear research structure of the Arab world and to end existing restrictive international controls. For example, it has requested that France build a new reactor, and has made an effort to regenerate its domestic scientific community. There is no indication of any intention to reestablish a military program; any decision to do so in the future would be impossible to predict, given Iraq's evolving domestic political dynamics.

It will be difficult for the United States or the international community to ignore or reject outright Iraq's expectations for a nuclear program, given the deeply-felt entitlement throughout Iraq's informed public and in light of the almost universal regional trends. But the United States can help to manage the process of an orderly, safe, and peaceful nuclear reintegration of Iraq in the civilian sector. At the same time, the United States and the international community should ensure that any return to a nuclear program be accompanied by Iraq's acceptance of strict international monitoring and controls to prevent any diversion to the military field or terrorist use. U.S. policymakers and military leaders should also focus on ensuring that any peaceful nuclear program in Iraq be as secure from accidents as possible through training and assistance.

Once stability increases in Iraq, U.S. military and civilian government agencies should launch an effort to educate the Iraqi military, government officials, and the general population on the benefits and risks of nuclear power. Intelligence analysts should continue to monitor Iraqi public opinion on the nuclear issue, as well as any Iraqi actions which could lead to undesired results, including support from other countries. More broadly, U.S. and international leaders can work to modify the overall Middle East regional threat environment so as to alleviate the domestic pressures for nuclear proliferation both in the civilian and in the military sphere, especially by encouraging genuine progress in the Arab-Israeli conflict. Finally, U.S. policymakers can support and reassure the Iraqi government and public, with regard to an incipient Iranian nuclear threat, although the inclusion of an "umbrella" for Israel or requests for a permanent U.S. military presence in the region would likely derail such an initiative. Awareness of and sensitivity to Iraqi thinking on the nuclear issue, in general, will facilitate the crafting of more effective U.S. policies which can in turn contribute to the security of the Middle East region and beyond.



# THINKING ABOUT NUCLEAR POWER IN POST-SADDAM IRAQ

## INTRODUCTION

### **The Terms of Reference.**

Nuclear power has long held a special fascination for Iraq, as it has for many other countries, not only as a source of energy and as an engine of technological progress, but also as a potent weapon in a country's arsenal and as a tangible achievement which could serve to legitimize a regime in the eyes of national, regional, and world opinion.<sup>1</sup> Although Saddam Hussein's well-documented effort to acquire nuclear weapons ultimately came to naught, it nevertheless has weighed heavily on the country's recent history.

The persistent issue of nuclear power has continued to draw the attention of Iraqis in the post-Saddam era. Discussions in the news media, despite their understandably subdued tone given the sensitive political environment of the past few years, reveal a continuing interest in a nuclear future for the country. In fact, it appears that discussions about nuclear power have been increasing in frequency as a new status quo took form and as the U. S. presence was expected to recede. Public opinion in Iraq indicates an enduring interest in reestablishing a nuclear capability at least for peaceful purposes, although Iraqis also still seek to grapple intellectually with the concepts of the utility and consequences of nuclear power in geostrategic and military terms.

Nuclear issues were pivotal in U.S. policymakers' focus and argumentation—if perhaps grossly misused and mistaken—in the period preceding the launching

of Operation IRAQI FREEDOM in 2003.<sup>2</sup> However, such concerns have now largely disappeared from the policy horizon. The absence of any weapons-related nuclear facilities, a fact emerging after the invasion, and the pressing immediate concerns stemming from efforts to rebuild the Iraqi nation have overshadowed the continuing significance of such issues. Nevertheless, any developments in the nuclear arena will unavoidably require decisions by the United States and the international community on how to manage the situation so that Iraq's interests can be addressed while ensuring a secure local and regional environment.

How Iraq will decide to proceed in the nuclear sphere in the future is still unclear. This monograph analyzes the public discussions by Iraqis in the news media about nuclear power in the post-Saddam era in order to gauge prevailing views about the utility and feasibility of all aspects of nuclear power. The thesis here is that there is a mounting consensus and pressure for establishing a nuclear capability, at least in the nonmilitary sector, a prospect that is perhaps not surprising in light of a similar trajectory throughout the Middle East. As for support for a military nuclear capability, the situation is more ambiguous—not surprising perhaps, given the sensitivity of that issue and the delicate current political balance in Iraq—but present indications are that while many Iraqis do view even a military application as positive, unpredictable domestic political considerations will be crucial in whether Iraq pursues such a path in the future.

Informed public opinion in Iraq today is clearly a more important factor for understanding the background of decisionmaking than it was during the Saddam era, when it was essentially mute. This factor

is even more salient given the fragmented nature of the country's present-day political establishment and the lack, at least for now, of a hegemonic center. This public dialogue among Iraqis extends to the issue of nuclear power, although discussions in this area may still not be completely unfettered, given the continuing sensitivity of the topic, and especially given the possibility of an adverse American reaction. One can presume that present discourse is thus affected by at least some self-censorship, as well as by the normal prudence in the case of public figures, who must be careful to avoid treading in controversial areas because of their official status. Nevertheless, there are enough Iraqis sufficiently open with their views that one can delineate the general lines of thinking about options for the future of nuclear power in the country.

### **Research Sources and Methods.**

The research for this monograph focuses on the views of Iraqi participants in the discussion about nuclear power both in Iraq and in the diaspora. The latter's opinions are easily available to the public back home in Iraq via the internet. Thus there is now largely a single discussion arena, at least for the informed public. In fact, those Iraqis based abroad may feel less constrained about expressing their views than those in Iraq, given the still substantial, albeit diminishing, U.S. presence and scrutiny.

The commentators considered here range across the spectrum of politics and society, including nuclear scientists, government officials, political and religious figures, and intellectuals. It is these actors who are involved in the discussions on nuclear power and who bring expertise or influence to the table. Any decisions

in this area are not likely to be the result of popular involvement, although opinion makers do seek to generate public support for their ideas. The views of Iraqi nuclear scientists are especially important, given their status as subject matter experts and celebrities. Their role in shaping the perceptions of rising generations of Iraqi scientists and political leaders may be significant. Religious figures who take a public stand also provide a degree of moral approval, a factor which is considerably more significant now than it was during the Saddam era. Notably missing from the discussions are any active duty military voices, although that may be understandable, given the immediate security concerns which preoccupy the Iraqi military and the continuing sensitivity of its status in today's evolving political environment.

One cannot always determine these days whose views a commentator may be reflecting publicly, whether his own or those of more influential backers—domestic or foreign—who for politic reasons have thus far chosen to remain silent. The significance of the opinions of various individuals, of course, will be of unequal weight in these discussions—depending on their level of expertise, political ties, present job, or access to particular news media. Surveying all such views is nevertheless useful, as it provides a sense of the parameters of Iraqi thinking and insights into how the issues are framed with regard to the desirability and utility of nuclear power in the country's future. When there are discordant views, these are always noted in the study. Thus, in the absence of such indications, the assumption is that there is a consensus.

Scott Sagan has provided a useful approach to understanding why states acquire nuclear weapons, and one can extend at least part of that framework to

the issue of nuclear power in general, whether civilian or military. He identifies three main national motivations, namely, the need to respond to foreign threats, the product of domestic political and bureaucratic dynamics, and the desire to project an identity of modernity and technological prowess. Elements of all three can be glimpsed in the case of Iraq.<sup>3</sup>

## **LOBBYING FOR ATOMIC POWER**

### **The Economic Argument.**

Discreet lobbying by Iraqis in favor of reviving the country's nuclear program—at least for peaceful purposes—began soon after the downfall of Saddam. As early as the fall of 2003, Iraqi nuclear scientists were urging a resumption of a peaceful nuclear program, touting the tangible benefits that would accrue to the country.

Take for example, Hamid Al-Bahili—originally the director of the Osirak/Tammuz reactor complex, a professor of nuclear engineering, and at present Adviser in the Office of the Prime Minister and an Iraqi government representative on nuclear issues abroad. His upcoming book, serialized in the newspaper of one of the main Shi'a parties, charts his vision for a nuclear future in the post-Saddam era. Al-Bahili stresses the importance of nuclear power for Iraq and highlights its peaceful roles, such as the generation of electricity and uses in medicine, industry, and agriculture.<sup>4</sup> Iraqi scientists abroad also expressed support for nuclear power, and in fact Asad Al-Khafaji, then working in Canada, argued that the absence of the peaceful use of nuclear power would be considered "backwardness in the cultural, economic, and technological arenas."<sup>5</sup>

Acknowledging the concern of some about the potential destructiveness of nuclear weapons, at the same time he dismissed arguments that oil and natural gas would be available forever, and severely criticized those who saw "any activity with nuclear energy as simply futile and playing with fire."<sup>6</sup> The editor of an Iraqi scientific journal likewise concluded that "simply put, we cannot do without nuclear power . . . as a fundamental substitute for the generation of electric power. When oil and gas supplies run out, nuclear power will be the inexhaustible stand-by for the generation of future energy."<sup>7</sup>

Such testimonials on behalf of the benefits of nuclear power have continued in subsequent years, including those by government officials. Al-Bahili has since lauded Iraq's "very, very great achievements" in the nuclear arena during the Saddam era, and proposed a comprehensive plan to rebuild Iraq's scientific system.<sup>8</sup>

Then there is Dhiya' Butrus Yusuf, Chief of the Plant Breeding Department of Iraq's Ministry of Science and Technology, who has laid out in detail the potential uses of nuclear technology in agriculture—as an alternative to chemical pesticides, a counter to livestock diseases, a multiplier of soil fertility, a tool for genetically engineering plants, and a food preserver via irradiation. He concludes that "nuclear technology can be an efficient, effective, and cost-effective solution to many of the problems which agriculture faces around the world," then adding that "Iraq was one of the countries which initiated its nuclear program for peaceful uses beginning in the 1960s of the last century, and whose scientists are trying to maintain the momentum of that work to this day."<sup>9</sup> An Iraqi energy expert, pointing to the current problems in generating power in Iraq, maintains that the country

should begin shifting from its diminishing oil reserves to renewable sources of energy, stressing that it had uranium deposits that would last one million years, that each square foot of uranium was equal to seven million barrels of oil, and that nuclear fusion could provide energy for "billions and trillions of years."<sup>10</sup> Al-Khafaji, too, has continued his efforts on behalf of nuclear power, suggesting that a concerted effort be made to convince Iraqi decisionmakers of the benefits of rebuilding that capability.<sup>11</sup>

Not surprisingly, Iraq's Minister of Science and Technology, Ra'id Fahmi, has been a strong supporter of nuclear power, equating its establishment to a basic prerequisite for Iraq's social and economic rebirth, while giving assurances that Iraq would comply fully with all international guidelines.<sup>12</sup> One of the most eloquent spokesmen in favor of resuming a nuclear program has been Hussein Al-Shahristani, currently Iraq's Minister of Oil, and himself one of the country's most experienced nuclear scientists. He has argued, for example, that "it is vital for Iraq to have a developed nuclear research program for the peaceful use of nuclear power in the fields of medicine, agriculture, and industry," but admitted that Iraq's abundant reserves of oil and gas were already sufficient for the production of energy.<sup>13</sup> Al-Shahristani was also careful to stress that civilian reactors could not be used to produce material for nuclear weapons and that there was little likelihood of a diversion of nuclear materials.<sup>14</sup>

Perhaps sensing that the case for nuclear materials pertaining to medicine might be the least controversial application, discussants have surfaced it most frequently. One Iraqi scientist, for example, noted that when the country's nuclear program had been can-

celebrated, “the first victim [was] our hospitals.”<sup>15</sup> Significantly, in 2008 the Baghdad municipal authorities announced their intention to establish a 50-bed nuclear medicine hospital.<sup>16</sup>

### **National Pride.**

Many Iraqis view nuclear power for their country as a basic national right or, as Minister Fahmi called it, Iraq’s “sovereign right.”<sup>17</sup> Some politicians have been more reserved, with the key factor for them being not the desirability of nuclear power but the timing. As one member of the Iraqi National Assembly stated on United Arab Emirates (UAE) television, “The time is not appropriate *at present* to build a nuclear reactor, [we prefer] new oil refineries for the short term instead, since even though the nuclear option would address a real problem, Iraq for now did not have the necessary possibilities.”<sup>18</sup> However, another participant on the same television program, while admitting that the internal situation and state of the infrastructure were inadequate at present, countered that Iraq as a state had the right to acquire a nuclear capability, that now was simply “a short pause (*tawaqqufat shwayya*) with regard to nuclear power,” and that nuclear power was a form of “fantastic energy.” He proposed at least small research reactors for the present.<sup>19</sup>

Nuclear power is seen in Iraq by virtually everyone in the informed public—equally true in much of the region—as quintessentially emblematic of scientific and intellectual progress, a sort of litmus test for a country’s standing in relation to its peers, and something to which a government can point as a concrete achievement to boost its national pride and legitimacy. Supporters of nuclear power in Iraq have

argued that this has been the “most important field of scientific-technological research bar none in Iraq.”<sup>20</sup> An Iraqi government scientist even concluded that “no country can progress and develop culturally and scientifically without [nuclear technology].”<sup>21</sup> In the same vein, Dhiya’ Butrus Yusuf accepted as a given that “one of the benchmarks of progress for states and peoples is the possession of nuclear technology.”<sup>22</sup> For one nuclear scientist, an Iraqi nuclear capability was even essential as a guarantee against Iraq returning to “the wasteland of backwardness and poverty.”<sup>23</sup> Not surprisingly, Iraq’s Ministry of Science and Technology now has an atom symbol as the most prominent element of its logo, while the homepage of the Ministry’s official website is dominated by a large animated atomic emblem.<sup>24</sup>

Iraqis naturally compare their country to their neighbors in the region and must now find it distressing to see themselves falling behind countries they had often looked down upon in the past as having a lower level of progress. Baghdad certainly feels itself regressing as other countries in the region take steps to develop nuclear power capabilities—not to speak of nuclear weaponization in Iran and Syria.<sup>25</sup> For example, one Iraqi university professor was proud that Iraq had been “at the forefront of the Arab and Middle East countries in terms of having the solid advanced scientific brains and capabilities in all disciplines and fields,” but now fretted that the recent brain drain would remove Iraq from “the caravan of scientific progress and to its significant regression in comparison with the past period when we were far in the lead.”<sup>26</sup> A former senior Iraqi military officer likewise urged public support for convincing the Iraqi

government to build nuclear power plants, stressing that this was already being done in Egypt, Saudi Arabia, and the UAE.<sup>27</sup> The Iraqi news media routinely highlight the nuclear plans of neighboring countries with an implicit sense of envy and resentment. As noted above, Iraqis must find it particularly galling for countries that in the past they considered backward and insignificant – such as Kuwait – to be passing them by in nuclearization. In fact, for Dhiya' Butrus Yusuf, one reason for reenergizing the nuclear program is to raise Iraq's status above "the ranks of the other countries."<sup>28</sup>

## **NUCLEAR WEAPONS IN IRAQ'S FUTURE?**

Understandably, the greatest concern for the United States and the international community should be any Iraqi thinking about reviving a nuclear weapons program, however unlikely and unrealistic that might be in the near term. Here, as one might expect, discussions are often more discreet or indirect than is the case when dealing with nuclear power for peaceful purposes. The issue, if talked about openly at all, is often done by Iraqis living outside of Iraq. Usually, arguments by Iraqis in favor of nuclear weapons are softened by speaking about and on behalf of "the Arabs" rather than specifically about Iraq, or by focusing on the utility of nuclear weapons possessed or being developed by Iraq's neighbors or by countries further afield. This indirect approach is expected to be less controversial in the eyes of outside observers. Iraqi commentators of all affiliations – apart from unreconstructed Ba'athists – are sensitive about potential accusations of promoting policies linked to the Saddam regime, especially with the predominant American presence in Iraq since 2003. Addressing the

issue in regional terms may also be a way to garner broader support among neighbors.

Not surprisingly, the remaining Iraqi Ba'athi opposition has been the most outspoken in supporting nuclear weapons for Iraq, praising Saddam for his nuclearization efforts while he was in power, and acknowledging for the first time that that effort had begun as early as the Osirak/Tammuz reactor project, the principal motivation having been to confront Israel.<sup>29</sup>

However, there is also a broad feeling among many other Iraqis engaged in these discussions that nuclear weapons in general provide a country with a unique military capability and that such weapons have a beneficial impact on any country's security and geopolitical influence. For example, one Iraqi nuclear scientist concluded that "nuclear weapons have played an enormous and pivotal role in determining the shape of the balance of international relations whereby the strong exploit the weak."<sup>30</sup> Often, Iraqis nowadays address the issue by emphasizing the importance of nuclear weapons for other countries' strategy and, in particular, for what many perceive as Israel's or Iran's ambitions for regional hegemony.

### **Assessing Nuclear Threats to Iraq.**

The perspective that Iraqi discussants have on a nuclear threat to their country not only reveals their assessment of the potential utility of nuclear weapons, but may also influence their readiness to support a similar Iraqi path one day. In the past, insofar as an actual or potential nuclear threat was concerned, Baghdad considered Israel, the United States, and eventually Iran to be most potentially threatening. In some ways, the Iraqis' view of threats has remained

constant, but in other ways it has evolved since the collapse of the Saddam regime.

*The Israeli Threat.* As far as Israel is concerned, there remains in Iraq (and elsewhere in the Arab world) a deep-seated concern about the perceived threat from that country – including the nuclear aspect – and such concern is advanced frequently as motivation and justification for further proliferation in the region. For example, an op-ed piece in a Shi’a publication in Iraq held that “Israel threatens the Arab countries . . . with its nuclear monopoly and its aggressive policies against the Arab states and also threatens international stability.”<sup>31</sup> According to this source, Israel was said to have achieved “geo-political victories” in the form of unequal political agreements with the Arabs specifically because of “the imbalance of power in the region in which Israel is the hegemonic actor who raises the nuclear, military, and economic stick over the heads of everyone else.”<sup>32</sup>

An Iraqi nuclear scientist was likewise critical of Israel’s nuclear monopoly, asserting that “when only one side has nuclear weapons, that leads to an unjust hegemony in the geo-political situation in the region.”<sup>33</sup> Yet another commentator stressed that it was the Israeli nuclear threat which prompted neighboring countries to also embark on nuclear proliferation.<sup>34</sup> For his part, the Shi’a Grand Ayatollah Ahmad Al-Hasani Al-Baghdadi of Najaf saw as unfair that “Israel has the right to possess 200 nuclear warheads, while no other state in the region has the right to have even a single nuclear bomb,” attributing such an imbalance to the U.S. desire to maintain Israel as the strongest power in the region.<sup>35</sup>

*The Ambivalence Toward an Iranian Nuclear Threat.* On the other hand, perhaps no single aspect of Iraqi

thinking on nuclear weapons has evolved as much as perceptions of a nuclear threat from Iran. In the past, the Iraqi argument in favor of nuclear weapons was often cast in terms of the need to counter an incipient Iranian nuclear capability, as well as the existing Israeli one. However, in today's context, Iraqi concerns about a future Iranian bomb have become considerably more nuanced, with views frequently – but not exclusively – dividing along sectarian/communal lines.

*The Iraqi Shi'a Viewpoint.* Many in Iraq's Shi'a community, while not wishing to subordinate their country to Iran, nevertheless may consider the latter as a guarantor against what they see as threats from neighboring Sunni countries, Israel, or the United States, and view Iran's acquisition of nuclear weapons with relative equanimity. As one Iraqi Shi'a commentator put it, "Nowadays, Islamic Iran is the strong rear area [*al-dhahr al-qawi*] for Iraq."<sup>36</sup> In a similar argument, Iraq's activist Shi'a Grand Ayatollah Al-Baghdadi noted that "we look at the Islamic Republic [of Iran] as a regional power, and as the Islamic strategic depth for the Arab and Islamic peoples."<sup>37</sup> At the same time, Iraqi Shi'a observers frequently parrot Iran's argument that its nuclear program is intended solely for peaceful purposes.<sup>38</sup> An Iraqi Shi'a academic typically downplayed any Iranian nuclear threat to Iraq, arguing during a lecture in the United States that "Iran is a sovereign state and has the right to express its point of view on what concerns it; it is their decision to make and it is none of our business."<sup>39</sup> Similarly, a Shi'a Parliamentarian, Falih Al-Fayyadh, claimed that Iraq "is not frightened by Iran's possession of nuclear weapons . . . because that will not affect Iraq in the least," since relations between the two countries "do not permit either to threaten the other." Instead, he added, it is Israel's nuclear arsenal about which Iraq

ought to be concerned, since Israel has “aggressive plans” in the region.<sup>40</sup>

Grand Ayatollah Al-Baghdadi, predictably, disapproved the “American-Israeli plans for opposing “the peaceful nuclear program of the Islamic Republic [of Iran].”<sup>41</sup> Another writer on an Iraqi Shi’a website, purporting to express “the point of view of many sons of Iraq,” likewise reacted harshly to those Arab commentators who urged the United States to strike Iran before it acquired nuclear weapons. He dismissed the views of those in the region who were fearful that “Iran and the Safavid Shi’a would acquire nuclear weapons” as stemming from hatred of Iran and of the Shi’a in general and from jealousy of the latter’s success.<sup>42</sup> Indeed, he suggested that “the important question now thrown out on the table is . . . what if Iran or any other Shi’a . . . could liberate Palestine and Jerusalem?” He surmised that even then the Sunnis would be implacable enemies of the Shi’a and hostile to Iran.<sup>43</sup> Instead of being concerned about Iran, a pro-Muqtada al-Sadr writer most feared that the United States would use the excuse of an Iranian threat to Israel to deploy a missile shield in Iraq in order to defend Israel.<sup>44</sup>

Some Iraqi Shi’a even went so far as to see Iranian nuclear weapons as a positive development, with Mundhir al-Kawthar claiming it would be “for the good of humanity.” In this observer’s view, the Iranian nuclear program—and clearly what is alluded to by this term are nuclear weapons—would provide a balance to “Israel’s arrogance” and pressure the United States to solve the Iraq, Afghanistan, and Palestinian issues. According to the same source, Iran’s nuclear program “does not represent any danger whatsoever.” On the contrary, he assured readers that a nuclear

capability “would ensure peace in the broader Middle East region,” and credited nuclear deterrence as the reason for a reduced likelihood of war between India and Pakistan. Arguing that it was unfair to accept that Israel and North Korea could be nuclear powers but not Iran, the author attributed Iran’s desire for nuclear weapons as defensive, stemming from its fear of Israel and the United States, and contending that the Western countries were opposed because they “do not like a state with an independent will” in an oil-rich region, and that the Arab leaders were simply alarmed about the threat to their own positions.<sup>45</sup> Another Iraqi writer concluded that if Iran acquires nuclear weapons, it would mean “the collapse of classical American military superiority over the latter,” and predicted that the United States would therefore try to prevent Iran from achieving that decisive capability.<sup>46</sup>

On the other hand, one Shi’a nuclear scientist living in Algeria, Abd Al-Kadhim Al-Abboudi, diverged from the general Shi’a consensus, weaving instead a complex web of nuclear conspiracies that accuse the United States, Israel, and Iran of all plotting to use nuclear weapons against the Arabs. His leftist secular political leanings apparently trumped his communal ties.<sup>47</sup>

Given the prevailing public opinion in Iraq, the Nuri Al-Maliki government categorically rejected the use of Iraqi airspace for any Israeli strike against Iran.<sup>48</sup> On the U.S.-financed Radio Sawa, even the country’s Sunni Vice President, Tariq Al-Hashimi, perhaps out of concern about an Iranian backlash and resulting instability in the region in case of a U.S. attack, advised against an attack on Iran’s nuclear infrastructure, going so far as to claim that Iran had a right to its peaceful nuclear program.<sup>49</sup>

*The Iraqi Sunni Viewpoint.* Other Iraqis, however, have been much more critical of Iran's potential acquisition of nuclear weapons. Some have expressed skepticism of the need for Iran to go nuclear even for peaceful purposes, citing other better sources for generating electricity, such as solar power, and have also raised doubts about Iran's stated intent not to use nuclear power for military purposes.<sup>50</sup>

One secular leftist observer interpreted Iran's quest for nuclear weapons as revealing its "aggressive objectives."<sup>51</sup> A Sunni commentator concluded that if Iran were to acquire nuclear weapons, that would "put the region under Iranian control."<sup>52</sup> Another Sunni writer opined that the balance of power between Iran and Iraq had already been broken and that having nuclear weapons could help Iran spread its Shi'a propaganda. He worried that no neighbor could match Iran's "pretensions of hegemony."<sup>53</sup> Still another writer expressed indignation at what he saw as Iran's demeaning treatment of Iraq and equated Iran's current leadership with Saddam in its willingness to use weapons of mass destruction (WMD) against others as well as for blackmail. Thus he saw a need for the West to block Tehran.<sup>54</sup> An Iraqi intellectual living abroad even inquired rhetorically as to who would be more merciful with its nuclear weapons toward Iraq—Iran or Israel. He posited that the Iranian regime was more dangerous, since it was similar to that of Saddam and would not be deterred by the thought of mass casualties. What is more, he concluded, "The Islamic religion will not serve as a deterrent to leaders such as the present rulers of Iran in their using all banned [weapons] in pursuit of their national interests at the expense of all the Arabs and Muslims."<sup>55</sup>

Lieutenant General Wafiq Al-Samarra'i, at one time chief of military intelligence under Saddam, dismis-

sed the idea of a nuclear threat to Iraq from Israel, claiming that the latter would use that capability only for deterrence. Asked if he thought that Iran instead had already become the greater threat, Al-Samarra'i replied: "Yes, no doubt about it."<sup>56</sup> Others also dismissed an Iranian nuclear threat to Israel, believing instead that it was Iran's Arab neighbors who would be the first victims, given Tehran's hostility toward the latter.<sup>57</sup> Another commentator—a former leader of the Iraqi Communist Party—expressed the view that Iran would use its nuclear capability for military purposes, but not against Israel. Rather, it would use it to blackmail and threaten Iraq and the Gulf states, and urged the European Union (EU) to bring the matter up in the United Nations Security Council.<sup>58</sup> Indeed, one commentator claimed that once Iran had nuclear weapons, its resulting swagger would lead "to a renewal in the export of the Revolution again after it had been stopped by the First Gulf War."<sup>59</sup> A Sunni candidate for Speaker of Parliament, Taha Al-Lahibi, downplayed an Iranian nuclear threat to Iraq but only because he claimed, sarcastically, that Iran already had a dominant presence in Iraq and did not need to use nuclear weapons to get its way with Baghdad, and that it should be the other neighbors instead who must worry.<sup>60</sup>

A U.S.-financed Baghdad newspaper, on the other hand, counseled Iran not to threaten its neighbors with its nuclear program, but the reason given was that such a threat would drive other regional states to seek protection from foreign forces.<sup>61</sup>

Commentators in Iraqi Ba'athi circles, predictably, have been especially alarmist about an Iranian bomb, and one Ba'athi spokesman claimed that Iran would "exploit its nuclear project as a tool for pressure to increase its share of Iraq's remains," in competition

with the United States.<sup>62</sup> Another commentator on the official Ba'ath website concluded that, thanks to nuclear weapons, Iran will have taken "a great step toward imposing its hegemony over all the countries of the oil region."<sup>63</sup> Another spokesman for the Ba'ath made a universal plea for help in preventing "the rise of a nuclear Iran by whatever means."<sup>64</sup> In fact, another Iraqi Ba'athi went so far as to claim that the United States planned to maintain the Ba'ath Party "in reserve" if it struck at Iran because of the latter's nuclear program, due to the Ba'ath's implacable enmity toward Iran.<sup>65</sup>

### **Assessing Other Nuclear Threats.**

In contrast, there seems to be limited public concern in Iraq about Syria's potential for acquiring nuclear weapons. Perhaps this relative indifference may be because Syria's success is not viewed as imminent, that Syria is not seen as a direct threat, or that less information is available about Syria than about Iran or Israel. After the Israeli air strike in September 2007 against what Iraqis believed were Syrian nuclear facilities, for example, the principal concern seems to have been that Iraq might be affected by nuclear fallout, given the proximity of the targeted area to the Iraqi border.<sup>66</sup> Iraq's Association of Muslim Scholars, a grouping of Sunni ulama, accused the United States of repeating the same policy against Syria as it had against Iraq in the "nuclear weapons farce," i.e., by falsely claiming that Syria was developing nuclear weapons.<sup>67</sup> Some Iraqis remain vocally critical of Iran, such as one newspaper editor who termed the Iranians' pursuit of nuclear weapons "a threat not only to the security of the region but specifically to the security of the Arab Gulf"—and implicitly therefore also to

Iraq. Syria's greatest fault, in his view, was its support for Iran's nuclear program rather than any activity by Syria in the same field.<sup>68</sup>

Viewing matters from a Shi'a position, on the other hand, one Iraqi observer even posited a future nuclear threat to Iraq from Jordan, given the latter's hostility to the Shi'a community in both Iraq and Iran. His conclusion was that for Iraq to achieve a "balance of terror" vis-à-vis Jordan, it would have to build its own nuclear reactors, although use of the latter on behalf of a weapons program was only implicit.<sup>69</sup>

As for any future American nuclear threat – which had played at least a supporting role in spurring Iraq's pursuit of nuclear weapons during the Saddam era – that is not seen as a pressing likelihood nowadays, and even if there were any such concern it is unlikely it would be revealed publicly, given the sensitivity of the local political situation as the United States continues its pullout.

### **The Kurdish Viewpoint.**

Iraqi Kurds, less deeply involved in the national and regional debate on nuclear power for Iraq, appear more concerned about any potential negative effects of nuclear power on their own area and may still feel a latent concern about the potential military use of nuclear weapons against their community in the future, a fear born of past experience with Saddam's use of chemical weapons against them. For example, Masoud Al-Barzani, President of the Kurdistan region, when asked about the Iranian nuclear program, responded blandly: "We hope that the region will be free of all destructive nuclear weapons, because we suffered in the past from such banned weapons, and

the Kurdish people paid a great price because of that at the hands of the former regime.”<sup>70</sup>

At the same time, some Kurds do voice concern about Iran’s impending acquisition of nuclear weapons. Intellectual Jawdat Hushiyar, for example, stated: “There is no doubt that an Iran with nuclear weapons will upset the existing military balance in the region dangerously, and particularly between Iraq and Iran,” a situation that could prove dangerous if some dispute were to erupt between the two countries. He then excoriated Iraq’s religious-based Shi’a parties for ignoring the threat.<sup>71</sup> Other Kurds, like Parliamentarian Abd Al-Bari Zibari, have more typically been prone to temporize, noting that “it is way too early to consider Iran a nuclear state.” He expressed the belief that international pressure would very likely convince Iran to desist and that the United States would not permit Iran to acquire nuclear weapons in any event.<sup>72</sup>

Religiously motivated Kurds, on the other hand, seem to take a more nuanced position, based on a greater sensitivity to the Israeli threat. One Kurdish writer on a religious website, for example, held that a nuclear Iran would provide a balance against Israel, but would also prove threatening to non-nuclear neighbors, especially in the Gulf. He noted that nuclear proliferation would be difficult to halt unless the double standard favoring Israel was terminated.<sup>73</sup>

### **The Utility of Nuclear Weapons.**

Whatever the partisan and confessional coloring of the debate, virtually all Iraqi commentators agree that nuclear weapons are effective in bestowing greater power to a country. Most Iraqis involved in such discussions seem to be in the “optimist” camp of nuc-

lear partisans, who see proliferation as a means to achieve balance and stability through mutual deterrence. They take comfort in the analogy – however analytically tenuous – of the relationship between the superpowers during the Cold War. Asad Al-Khafaji, for example, held that “destructive nuclear weapons were used to kill millions of innocent civilians at a time when one side had a monopoly. When the monopoly was broken and that weapon spread to the reaches of the East and West, surprise, surprise, the situation then became secure! . . . In sum, I support the proliferation of nuclear weapons to all the parties involved in a conflict.”<sup>74</sup>

Even an Iraqi who counseled Iran to end its nuclear program so as to avoid a confrontation with the United States and Europe nevertheless acknowledged that “the acquisition of nuclear weapons by any state results in a relative psychological reassurance (*istiqrar nafsi*) and confidence for that state in relation to foreign military threats and attacks against it by others.”<sup>75</sup>

At the same time, others have acknowledged the potential for an upsurge of instability, as a state acquiring such weapons is also said to “experience an increase in its might and an expansion of its power and influence.”<sup>76</sup> One observer concluded that “if Iran acquires a nuclear bomb, the White House will no longer be able to block any Iranian attempt to expand eastward or westward, as it was able to do with the Iraqi Ba’athi regime when it attempted to swallow up Kuwait.”<sup>77</sup> And still another Iraqi writer, although dismissing widespread charges that Iran had aggressive intentions against its neighbors, and praising it instead for its challenge to Israeli expansionism, concluded that if Iran did acquire nuclear weapons “that will mean opening the terrible gates of hell for the Americans.”<sup>78</sup>

As noted earlier, when Iraqis verbalize their support for a nuclear sector within the military realm, they often broach the topic using the more ambiguous term of “the Arabs,” seeking to avoid any politically-charged allusions to Iraq itself. For example, Iraqi nuclear scientist Asad Al-Khafaji argued that it was the balance of nuclear terror which had kept the peace between the superpowers during the Cold War, as well as between India and Pakistan. He then asked rhetorically: “Must the Arabs continue to cater to the feelings of their Western allies and not disturb the situation of a lack of strategic nuclear balance of power in the region?”<sup>79</sup> Al-Khafaji, perhaps sensing that talk of a renewed unilateral nuclear program in Iraq might be premature, urged the Gulf Cooperation Council (GCC) countries instead to use their money to finance a joint nuclear development effort with other unnamed Arab countries, arguing that this would allow the GCC states to dispense with large conventional forces for defense.<sup>80</sup> Elsewhere, he has used the more vaguely amorphous term “the countries of the Gulf.” This term could be interpreted to include Iraq as the actor who could establish a nuclear “balance of terror with the Jewish state or with the Shi’a state [*i.e.*, Iran],” a scenario he viewed as “a legal international right which no one can dispute.”<sup>81</sup>

Another nuclear scientist, Numan Al-Naimi, openly opined that Iraq, too, should have that right, insisting that “possession of a nuclear [capability] is a legitimate right in order to have technology, science, and the power to defend oneself. Depriving Iraq of this technology only achieves the West’s strategic goal,” and he went on to rue the fact that the post-Saddam government did not protect the country’s scientists and that many had even been imprisoned.<sup>82</sup> To be sure,

even those supporting nuclear weapons for Iraq have been careful to emphasize that such a capability would be used only for deterrence by creating a "balance of nuclear terror" with Israel and Iran, thereby contributing to regional stability and security. As Al-Khafaji put it, "The principle of 'the balance of nuclear terror' is the only practical solution to putting an end to the arrogance of just one party which has nuclear weapons in a conflict."<sup>83</sup>

Bogus claims in the news media by Iraqis to the effect that Western forces have already used nuclear weapons against Iraq may also make the environment more congenial to an Iraqi nuclear option in the future. For example, the former Commander of the Republican Guards, Lieutenant-General Sayf Al-Din Al-Rawi, maintained that U.S. forces had used neutron weapons in the attack on Baghdad Airport, while an unnamed Iraqi physicist accused the British of using air-launched nuclear-tipped missiles against Southern Iraq.<sup>84</sup> There are claims by other Iraqis that the international atmosphere is not conducive to nuclear disarmament, the elimination of nuclear weapons being unrealistic. They point to the U.S. retention and modernization of its own nuclear arsenal, with one Iraqi commentator labeling nonproliferation talk as "no more than sophistry" and asserting that peaceful coexistence is "just a myth."<sup>85</sup>

*Making a Case for Nuclear Weapons.* An Iraqi Shi'a pundit, Hamid Al-Shakir, has made perhaps the most straightforward and extended argument in the Iraqi news media in favor of acquiring nuclear weapons.<sup>86</sup> He develops his basic premise by asking whether, given that some states have nuclear weapons, others should seek a symmetrical capability or whether they should accept the "status quo so as to ensure the

superiority of some states over others in order to create a peace of the strong over the weak." Al-Shakir views international relations from a realpolitik perspective, emphasizing the primacy of power, and noting that "international law is nothing but the other face of power." For him, it is technological, military, and strategic power which give states a "seat at the table" where the right and the wrong of law are determined. Only power can lead to authentic peace rather than peace imposed by the enemy – neither good intentions nor an imbalance of power can produce peace. Moreover, he specifically equates the possession of nuclear weapons with having a seat at the table.

Al-Shakir accuses the West of promoting peace in the Middle East while opposing the buildup of military power by local states, again asking whether the "Islamic Arab states" can accept peace with Israel and the world while they are "completely empty and bereft of all power." In particular, he focuses on whether peace can be crafted between a weak state and a great nuclear state, noting that no one wants to negotiate from a position of weakness, and that if one side lacks nuclear weapons it is automatically weak. He continues to stress the need for peace through strength. He even warns that one could wake up one day and find an Arab or Islamic country "wiped off the human map by devastating nuclear bombs. . . at the hands of Israel or the United States of America." In his view, Israel would be willing to undertake such an attack so long as it knew that there was no equivalent retaliatory capability.

He concludes in no uncertain terms that "nuclear war cannot be deterred except by possessing one's own nuclear weapons!" His solution to this precarious situation is for the Arab or Islamic states to also acquire

nuclear weapons, whereupon these states' "standing among the nations and peoples [would] change genuinely." In his view, having nuclear weapons will bring about real peace, security, and stability. However, displaying obvious confessional partiality, Al-Shakir concludes that "this realistic strategic perspective is what induces us to demand the development of an Islamic Shi'a nuclear arsenal which will revive the spirit of genuine balance in the Middle East region, and thus make possible the establishment of a different balance between the Arabs and Muslims, on the one hand, and Israel and the West, on the other."

He concludes his analysis with a warning to the effect that "if our Arab and Islamic states do not hasten to acquire standing nuclear deterrent forces, they unavoidably will confront real extermination in the form of a total war which will force them to surrender so that the master-slave relationship can be consolidated." While it is not clear whether the author favors nuclear weapons in the hands of Iran, of a Shi'a-dominated Iraq, or both, what is unambiguous is his conclusion that nuclear weapons are required in order to achieve a balance with Israel and the United States. In key aspects, this perspective is a carryover of earlier thinking in Iraq on the utility of nuclear weapons, and one that today is widely shared in the region as a whole.

### **Marginal Dissonant Views.**

The only apparent dissonant element in this overview of Iraqi thinking would seem to be the prevailing opinion in one online forum session run by the BBC Arabic service. Asked whether the Arabs should have the right to acquire nuclear weapons, the majority of 47

replies by Iraqi respondents were negative. However, such surveys should be approached with caution. Quite apart from the impossibility of determining the identity of participants in an anonymous online forum (Kurds, Christians, émigrés, those declaring false data, etc.), the BBC site was likely to attract younger, Western-oriented, contributors, with little political clout. What is more, the often critical assessments expressed in this forum about the “Arabs” may reflect Iraqi views of their neighbors’ capabilities and trustworthiness more than views about their own country.<sup>87</sup> Ultimately, the impact of a small number of anonymous bloggers on the national debate is likely to be insignificant.

### **Ethical Perspectives.**

One does not find discussions in Iraqi circles about the moral/ethical implications of nuclear weapons, even by religious figures, such as emerged in the West especially in the early years of the nuclear era. On the contrary, those Iraqi Shi’a ulama who have broached the subject have used a religious argument to support the acquisition of nuclear weapons. For example, Grand Ayatollah Al-Baghdadi told Syrian TV that “this Islamic Arab Umma [Arab world] must acquire nuclear weapons.” Otherwise, he concluded, the United States would continue to oppress and attack the Arabs, making them the latest victims of American colonialism.<sup>88</sup> While Iraqi Sunni clerics have not openly made religious arguments in support of nuclear weapons, those Iraqi Sunnis seeking moral support for the acquisition of nuclear weapons can rely on the existing widespread explicit approval among mainstream Sunni religious clerics throughout

the region on the legitimacy of WMD, the acquisition of which is often declared to be a duty for the Umma.

### **Environmental Considerations.**

Unlike in the past, today there is scope in Iraq for expressing publicly concerns about the safety and environmental impact of nuclear power. Whatever unease Iraqi experts have expressed on this subject, however, has been largely oriented on the effects stemming from the past. Although commentators have painted a grim picture of the current radiological contamination in Iraq, they most often blame the situation on U.S. actions, particularly on U.S. neglect in the wake of the collapse of security after the invasion in 2003, when nuclear waste materials were looted or otherwise disposed of improperly. For example, scientists such as Anis Al-Rawi, Dean of the College of Science at Baghdad University, and Hamid Al-Bahili have described in graphic terms how – after U.S. forces left the Osirak/Tammuz nuclear complex unguarded – the locals took barrels containing nuclear waste materials, emptied the contents into the river, and then used the barrels for their own storage purposes or to deliver milk from dairies. They speak of the likelihood of severe long-term health consequences for the average Iraqi from the contamination that resulted – including sterility, birth defects, and cancer – suggesting that the United States should be responsible for providing medical care for anyone thus afflicted.<sup>89</sup>

The country's embryonic environmental movement has also addressed the contamination of Iraq's soil and water stemming from the U.S. use of depleted uranium munitions.<sup>90</sup> In fact, one report concluded that the existing contamination was an "environmental

and health disaster," listing all the horrendous resulting medical problems.<sup>91</sup> One Iraqi scientist also worried that the United States might pressure Iraq into allowing it to accept nuclear waste, and warned the Iraqi government not to do so.<sup>92</sup> This same Iraqi scientist, in fact, proposed a postponement of any new nuclear initiatives until the current nuclear sites were cleaned up, noting that "the present time is not at all appropriate for such a [new nuclear] initiative until the appropriate authorities address this [contamination] issue and decontaminate all the land completely."<sup>93</sup>

However, in Iraq the focus on safety or environmental issues does not seem to be linked to the future or to be intertwined with considerations about the basic desirability of nuclear power. Although such allegations released in the public domain may give second thoughts to some about the safety of nuclear power, no one in Iraq has critically addressed the long-term environmental concerns in discussions about new nuclear facilities. On the contrary, an Iraqi scientific journal made the case that whatever the negative aspects in terms of the environment, nuclear power was still the best long-term option.<sup>94</sup>

An unnamed Iraqi government scientist, in fact, assured the public that nuclear energy "cannot cause pollution to the environment."<sup>95</sup> Other Iraqis, such as nuclear scientist Asad Al-Khafaji, have minimized the risks of radiation in general, with the latter declaring his belief "that the risk of being struck by a speeding car, or drowning at sea, or falling from the tenth story, or having a cup full of sulfuric acid spilled on one's head is [no] less dangerous than being exposed to radiation!"<sup>96</sup> In fact, Al-Khafaji imputed such concerns to a foreign campaign to turn Iraqis against nuclear power contrary to the country's national interest.<sup>97</sup>

Joining the debate, an Iraqi cinematographer even suggested that there was ample space in the deserts in the Middle East to dispose of nuclear waste safely.<sup>98</sup> As in the case of civilian nuclear reactors, even for those tied to weaponization, most Iraqis involved in discussions of nuclear power do not voice concern about potential dangers. When one Iraqi did voice reservations about the environmental dangers of nuclear power, it was confined to Iranian reactors, but that may have been more politically motivated than based on environmental criteria.<sup>99</sup>

To be sure, Iraqis have been sensitive to the presence, in Iraq, of any U.S. WMD. For example, Article 7 of the U.S.-Iraq Status of Forces Agreement adopted in December 2008, only allows the United States to introduce military equipment into the country “on condition that it has no direct or indirect connection to weapons of mass destruction (chemical weapons, nuclear weapons, radiological weapons, biological weapons, and the wastes related to such weapons).”<sup>100</sup> However, in this case, sovereignty issues were probably more important than environmental ones.

Again, the Kurds have had a different point of view than other Iraqis, with one of their leaders, Masoud Al-Barzani, reiterating his general opposition to any nuclear activity whatsoever in Iraq: “Actually, I am simply against nuclear weapons. I am even against building a nuclear reactor for peaceful purposes,” citing the risk of a catastrophic nuclear accident.<sup>101</sup>

## PROSPECTS AND IMPLICATIONS

Although the nuclear power situation in Iraq is still evolving, with the opinions surveyed here indicating a variety of views on some issues, the positions expressed

by those Iraqis who are knowledgeable, involved, and influential as to policy do help clarify some trends for the future.

### **The Near-Term Trajectory.**

In Iraq, one should expect the same movement toward nuclear power as in the rest of the Middle East. Iraq is an integral part of what has long been recognized as a regional system in terms of security, politics, and culture and cannot be insulated from broader regional dynamics.<sup>102</sup> As an Iraqi academic argued at a conference, Iraq, because of its geographic location, is part of the Arab world, and one cannot simply separate or isolate it from its Arab neighbors.<sup>103</sup> Moreover, as another academic emphasized, “Arab, Islamic, and regional” forces cannot escape having an impact on Iraq’s policies.<sup>104</sup>

Even with the still tenuous domestic situation, most Iraqis feel that their country by right ought to play a—or *the*—leading role in the Arab world. Despite the domestic fragmentation in Iraq, there seems to be an emerging academic consensus, at least among those able to overcome confessional loyalties, that Iraq should again play a major regional role, and that what is holding Iraq back from “influencing the regional system” is only “the lack of consensus among the patriotic Iraqi forces.” Moving from analysis to prescription, a conference participant concluded that “Iraq must regain its place in the world and in the Arab world in general, and vis-à-vis the neighboring countries in particular.”<sup>105</sup> As the Deputy Chair of Iraq’s National Assembly reminded his colleagues at the 15th Conference of Arab Parliaments held in Oman in 2009, “Iraq is still an important factor in the Arab

world [*Umma*]," and he assured them that Iraq would be "returning to the Arab arena in full force."<sup>106</sup>

As noted, Iraq is part of a regional geostrategic and political system, and what its neighbors do with respect to nuclear power is likely to have a significant impact on Baghdad's own decisionmaking process. Even more than Iran's actions with regard to nuclear weapons, what Saudi Arabia, Syria, or Turkey do may be even more salient for Iraq. Some Iraqi observers take it for granted that if Iran acquires nuclear weapons then the Arab states in the Gulf, for their part, will be impelled to undertake "an arms race, including a nuclear one," adding an additional unsettling factor to the Iraqi calculus.<sup>107</sup>

For many Iraqis, being a regional leader, as noted above, also means being a leader in the field of nuclear power. It should not be surprising that Iraqis would want to participate in the same trends emerging around them in the region. At the moment, and for the foreseeable future, the tendency among virtually all of Iraq's neighbors is to consider or actually embark on some type of nuclear power development, including some oil-rich states such as the UAE and Kuwait. Any Iraqi government will likely seek to avoid opening itself to criticism for its lack of support of scientific progress, whether in comparison to Iraq's neighbors or to the previous regime. Scientific achievements, and especially in the glamorous and high-profile field of atomic power, may well be the chosen vehicle to bolster the new regime's domestic and regional legitimacy.<sup>108</sup>

### **Rebuilding an Infrastructure.**

There have been discreet initiatives by the Iraqi government to help reestablish a nuclear program. Of course, in the recent past, the development of

civilian and military nuclear programs in Iraq were intertwined, serving as a catalyst for conflict with the West, particularly the United States, one could have expected that after Saddam's fall and the end of the occupation, measures would be taken to reorganize the country's nuclear establishment.

In August 2003, the Provisional Government formed the Ministry of Science and Technology, absorbing the formerly independent Atomic Energy Organization and the Military Industrialization Corporation. Some Iraqis voiced this as an attempt to downgrade the country's nuclear potential, with an editorial in an Iraqi scientific journal criticizing the move and calling for "a review of the hasty decision." The editorial suggested that at least a separate nuclear directorate be retained in the new ministry, arguing that all "developed countries" have nuclear power agencies.<sup>109</sup> A distinct National Nuclear Power Committee was established within the new Ministry. In 2009, the Baghdad government also announced its intention to establish an official independent oversight body, the National Committee for Atomic Energy, to not only coordinate with the International Atomic Energy Agency (IAEA) and other relevant foreign entities, but also "to energize the Iraqi nuclear installations" and "to prepare high-quality specialists [for overseeing] the national program in order to prepare such cadres of [the appropriate] quality and number."<sup>110</sup>

Over time, Iraq has taken concrete steps to rebuild at least some aspects of its nuclear capabilities. Iraq's Minister of Science and Technology, Ra'id Fahmi, for example, requested formally that his country's outstanding "nuclear file" dating from the Saddam regime be "closed . . . completely . . . officially, and for good," and cast his case against the lingering obstacles

in terms of “the right of states” to use nuclear power for peaceful purposes.<sup>111</sup> One can sense an underlying resentment, even within government circles, of what is perceived as an unjustified suppression of Iraq’s legitimate right to atomic power. For example, when announcing that Iraq would adhere to the IAEA’s additional protocols on nuclear assurances, the government spokesman, Ali Al-Dabbagh, added that this would help strengthen Iraq’s ongoing efforts to end the oversight of the IAEA’s Iraqi task force by eliminating the “excuses” (*mubarrirat*) on which some Security Council countries rely to have that team continue its oversight work.<sup>112</sup>

In practical terms, the Iraqi government has also worked to reintegrate the country into the Arab world’s official nuclear research mainstream and to highlight the country’s expertise after years of isolation. The Arab world, for its part—perhaps anxious for additional balance between Iran and Israel—has indicated that it would welcome Iraq back in the nuclear fold. For example, Iraq has been able to resume cooperation with the Arab League’s Atomic Energy Agency. The Secretary General of the Arab League, Egypt’s Amr Moussa, reiterated in August 2008 to a visiting Iraqi delegation dealing with nuclear power that “the Arab countries must absolutely enter the field of the peaceful uses of atomic energy.”<sup>113</sup> Iraq also served as the Chair for the Arab League’s 3-day conference monitoring Israeli nuclear activity “in violation of the Treaty on the Non-Proliferation of Nuclear Weapons,” held in Cairo in 2008, and helped work on the joint Arab position in response to “the threat of Israel’s nuclear weapons.”<sup>114</sup>

Later that same year, the Director General of the Arab Atomic Energy Organization invited a high-level Iraqi delegation to participate in the agency’s

21st conference in Beirut, Lebanon, where plans were discussed for Arab cooperation on the peaceful uses of nuclear power to 2020. Iraq's Minister of Science and Technology stressed at the conference his country's eagerness to become involved again, stating that Iraq was "fully prepared to offer the experience of its scientists and specialists" to develop a joint strategy. Moreover, he was gratified that a recommendation was to be made to the Arab League to support the lifting of United Nations (UN) Resolution 707, passed in 1991, which had mandated intrusive inspections in Iraq and prohibited activity in the nuclear field.<sup>115</sup>

Iraq has also been showing greater assertiveness on other aspects of this issue, with its National Assembly, for example, in 2009, resurfacing an earlier claim against Israel for compensation for the damage the latter caused by its 1981 air strike against Iraq's Osirak/Tammuz reactor.<sup>116</sup> This issue has continued to remain active, with complaints that since Iraq was obliged to continue paying reparations for the 1990 invasion of Kuwait and since it still owed money to France for the reactor, a 1981 UN Resolution calling for reparations for the reactor should be enforced.<sup>117</sup>

During his visit to France in February 2009, Iraq's Minister for Electricity, Karim Wahid, requested that France help build a nuclear reactor in Iraq "because . . . the future is in nuclear power."<sup>118</sup> Also indicative of Iraq's interest in foreign assistance in the nuclear area was the apparent gaffe by an Iraqi government official in announcing that Italy's partially state-owned Eni energy conglomerate would invest in nuclear power in Iraq. Eni, perhaps embarrassed by the public disclosure, was quick to stress that its investment would be only in the oil sector.<sup>119</sup> By late 2009, an Iraqi diplomat, Ali Al-Bayati, Counselor at the Embassy in London, told Abu

Dhabi's *Al-Arabiyya* TV that his country had "begun to study a plan to acquire nuclear technology for peaceful purposes," which he declared was "Iraq's right."<sup>120</sup>

*Objective Obstacles.* There are, to be sure, significant practical obstacles that militate against a rapid resumption of nuclear-related activity—civilian and, even more so, military—to include the country's physical infrastructure (still incompletely reconstituted), marginal fuel resources, and depleted human capital.

*Nuclear Materials and Facilities.* Iraq's nuclear facilities were damaged by U.S. air strikes in 1991 and again in 2003, with decontamination and decommissioning beginning with international help after Saddam's fall.<sup>121</sup> Iraq's recent disposal of its nuclear fuel material also presents a serious obstacle to a rapid reestablishment of its nuclear program. In an operation shrouded in secrecy in 2008, Iraq sold its stock of 550 metric tons (in 3,500 barrels) of apparently commercial-grade yellow cake (milled uranium oxide), to the Canadian company Cameco.<sup>122</sup>

The Iraqi government appeared to be sensitive to domestic criticism, insisting that the entire operation had been Iraq's alone and that the United States had only provided technical advice (although the U.S. military had transported the materials, reportedly at only 10 percent of the actual shipping cost).<sup>123</sup> An Iraqi government spokesman cited the reasons why Iraq had divested itself of the material as being environmental concerns and the expense of providing security, as well as "the impossibility of using it locally anyhow."<sup>124</sup> As Iraq's Minister for Science and Technology, Ra'id Fahmi, later clarified, however, there were also political motives, namely, a desire to meet the terms of UNSC 1991 Resolution 687, so as to bring Iraq into full

compliance with the provisions of the cease-fire of that year.<sup>125</sup> At the same time, the Minister saw this as an important step toward acquiring assistance “for Iraq to reestablish its right to engage in nuclear activities for peaceful purposes.”<sup>126</sup>

Some in Iraq were incensed by the transfer of the nuclear materials. Iraq’s Association of Muslim Scholars, for example, fulminated against what it called “the theft, . . . of a great national treasure” in its Communique 568 of July 8, 2008. Calling for a condemnation of the action, the communique reiterated that the uranium oxide remained Iraqi property and that “soon Iraq’s rights would return to the people.”<sup>127</sup> Another Iraqi observer living in Sweden cast doubt on the Iraqi government’s assertion that it had agreed to the initiative, dismissing the rationale that it had been done for the safety of the Iraqi population and labeling the U. S. operation “banditry . . . more like the action of a cowboy.”<sup>128</sup> A former senior Iraqi military officer likewise called those who claimed that the uranium was sold out of fear that terrorists would gain access “ignorant, gullible, and lacking a conscience.”<sup>129</sup> He insisted that the uranium had been locally mined and should have been used locally rather than sold for “a trifling price.”<sup>130</sup>

*Iraq’s Scientific Community.* Iraq’s scientific human capital is also far from being reconstituted. To be sure, the knowledge base gained with the breakthroughs achieved in the last phases of Iraq’s program before its sudden termination during the Gulf War is still extant in the minds of the country’s former scientists. However, they are now scattered and far removed. With most now approaching retirement age and with no sustained program in place to train and organize their successors, reconstituting the old programs

will become difficult and complicated unless present personnel trends are reversed.

Nuclear scientists—as well as other Iraqi academics—have often felt threatened in the aftermath of Saddam’s fall. Many were pursued by the U.S. occupation force for arrest in connection with their previous activity. Moreover, it appears that many intellectuals have also been targeted for assassination or kidnapping, and many have fled abroad—including to other Arab countries and Iran—because they felt vulnerable.<sup>131</sup> Reports of murdered Iraqi scientists have been frequent in the Iraqi media and on the Web, with one journalist claiming that “if one wants to destroy this country, it can be accomplished by killing its scientists,” since that would scuttle Iraq’s “development, progress, and rebirth.”<sup>132</sup> A leading Iraqi nuclear scientist, Nur Al-Din Al-Rabi, estimated that Iraq lost some 5,500 scientists through emigration or assassination.<sup>133</sup> Another source estimated that of those killed, 350 were nuclear scientists.<sup>134</sup> As a baseline, an Iraqi nuclear scientist estimated that at one time some 2,000 scientists and researchers, and 10,000 engineers and technicians, had worked on Iraq’s nuclear program.<sup>135</sup>

While those responsible have seldom been identified and may include financially-motivated criminals, Iranian intelligence, and sectarian killers, Iraqi sources frequently have blamed unnamed “foreign intelligence” or have alleged the Mossad, Israel’s secret service, implicating at times U.S. acquiescence.<sup>136</sup> The attribution to Mossad may be plausible, given the latter’s track record of reported assassinations in earlier years of individuals connected with Iraq’s arms programs, allegedly including the developer of Iraq’s “super gun,” Gerald Bull, and the then-director of its nuclear program, Yahya Al-Mashadd.<sup>137</sup>

The Iraqi government has more recently begun to make efforts to reconstitute the country's scientific community by significantly raising salaries for professors and announcing plans to send 10,000 graduate students and faculty in the sciences abroad over the next 4 years for study and research.<sup>138</sup> The Iraqi government is also seeking to repatriate scientists in the diaspora.<sup>139</sup> In 2009, Iraq's Prime Minister, Nuri Al-Maliki, specifically stressed the need to invite nuclear scientists to return home.<sup>140</sup> However, due to continuing security concerns, this process of reintegrating academics may be slow. As of October 2008, for example, of 6,700 professors who had left after 2003, only 150 had returned.<sup>141</sup> The United States, for its part, developed a pilot program to recruit Iraqi scientists formerly involved in the country's military research programs for new civilian jobs.<sup>142</sup> Despite such efforts, it is unlikely that the damage suffered by Iraq's scientific establishment can be undone quickly, and there are indications that returning academics are often disappointed by the lack of immediate employment opportunities.<sup>143</sup>

*Nuclear Security Concerns.* Security related to a nuclear program, both from accidents and the diversion of nuclear materials, will remain a valid concern. First, as with any nuclear program, and especially a fledgling one, there is the possibility of mechanical or human error, leading to an accident which could have disastrous implications for the entire region.<sup>144</sup> The current reduced complement of experts in the field available in Iraq and the still rebuilding government structures may heighten the risk and complicate a rapid and effective disaster response and damage control capability.

Moreover, radioactive materials inherent in even a peaceful nuclear program could be misappropriated by terrorists for use in a radiological dispersal device (the so-called “dirty bomb”). The still unstable security situation in Iraq and the continuing disruptive activity by al-Qaeda, even if at a substantially reduced level, are legitimate reasons for concern in this area. The fact that three employees of the Ministry of Science and Technology were arrested in 2008 on charges of al-Qaeda membership highlights the continuing potential risks of compromise by terrorists of sensitive technology, information, or materials.<sup>145</sup> The high degree of corruption at all levels of Iraq’s political system and society poses a real security vulnerability in this respect.<sup>146</sup> The dire economic straits under which so many Iraqis live only magnify the risk for corruption potentially leading to such a diversion.<sup>147</sup>

Although unlikely, the possibility of reestablishing a covert Iraqi nuclear weapons program in the future cannot be dismissed categorically. Despite the progress made over time, there are still questions today about the effectiveness of international monitoring of civilian nuclear programs to ensure against diversion of resources to a military program. A report of the Nonproliferation Policy Education Center, which evaluated the efficacy of the IAEA in detecting and ensuring against such an eventuality, stated that the inspection agency continues to have serious deficiencies in this regard.<sup>148</sup> The willingness of other governments to transfer nuclear technology in return for money adds to the peril of covert nuclear proliferation.<sup>149</sup> Iraqis, however, seldom voice such concerns. A rare exception was a leftist writer in Iraq who did worry about the widespread trend in the Middle East to seek nuclear reactors for allegedly

peaceful purposes, noting that such technologies could be diverted for military purposes.<sup>150</sup>

*Iraq's Decisionmaking Parameters on Nuclear Weapons.* Whether Iraq ever decides to seek to reestablish a military nuclear program will depend on complex domestic and regional dynamics.

*The Factors in Decisionmaking.* The preceding analysis suggests that, despite the upheaval accompanying the U. S. invasion and the elimination of the Saddam regime, the idea of the utility of nuclear weapons may still be present in certain circles, and may one day be revived in Iraq. Andrew Flibbert, in particular, has made a cogent inferential case that Iraq's historical experience, geography, and regional security situation will predispose it to renew its quest for nuclear and other WMD even in the absence of Saddam. He stresses enduring conditions as driving a future return to proliferation in Iraq, while criticizing what he terms the overemphasis on personality in our analytical perspective, that is, a focus on the role an individual such as Saddam played in such a process.<sup>151</sup> As Flibbert puts it:

Without a fundamental transformation of the regional security environment, too many incentives will drive any future sovereign Iraqi state to seek nuclear and other WMD. Most of the underlying causes of Iraq's pursuit of WMD remain in place today, and nothing is likely to change the continuing reality. The war launched by the United States could generate the greatest proliferation pressure of all.<sup>152</sup>

Some, on the other hand, have made convincing arguments for the continuing importance and impact of leaders and personalities in making key decisions in world affairs, all the more so for the individual-oriented regimes common in the Middle East.<sup>153</sup>

Perhaps the most fruitful framework for understanding the developing decisionmaking situation on nuclear power in Iraq is a combination of both approaches. However important they may be, even enduring historical or geographic factors do not foreordain a country's policies or security choices. As an analogy, although naval theorist Alfred Thayer Mahan isolated various long-term geographic, historical, economic, and social factors as predisposing a nation to become a sea power, he nevertheless capped his taxonomy with a final factor: "The Character of the Government, including therein the national institutions." This human factor in Mahan's judgment, could balance the preceding natural conditions: "Nevertheless, it must be noted that particular forms of government with their accompanying institutions, and the character of rulers at one time or another, have exercised a very marked influence upon the development of sea power." He thus recognized that governments have a free will, exercising what he calls "intelligent will-power."<sup>154</sup> For example, countries with a geographic configuration such as a long coastline or location near key waterways could still be oriented on being continental powers rather than sea powers—such as the United States until at least 1898, or Japan until World War II—because of conscious policy choices.

In that vein, what this survey of Iraqi opinion within the informed public does indicate is the existence of a domestic intellectual and political environment that is receptive to the notion of nuclear weapons as a useful and legitimate instrument of national power. However, there is no direct linear correlation between such opinions and the eventual acquisition of nuclear weapons. In particular, there would still be a requirement for a viable leadership to

mobilize domestic opinion and resources, deal with the international consequences, and then formulate and implement concrete policies. As an Iraqi academic argued, the geographic factor in and of itself is not the sole determinant of Iraqi policy. As or more important will be how decisionmakers utilize and maximize the potential of geography to promote specific policies.<sup>155</sup>

*The Domestic Political Dynamic.* Iraq's political establishment at present is visibly fragmented, and the political situation is likely to remain unstable for some time to come, with Sunni, Shi'a, and Kurdish blocs assessing threats and remedies from markedly different perspectives, not to speak of the splintering and shifting alliances within the confessional/ethnic communities and political blocs themselves.<sup>156</sup> Iraqi intellectuals recognize that the role of their country in regional and international affairs is still evolving and anything but clear, a consensus conclusion reached at a roundtable of academics in Baghdad recently.<sup>157</sup> The country's political leaders will likely be distracted for the foreseeable future by far more pressing domestic challenges, and Iraq may be entering a long bout of instability not unlike that of the 1950s-60s.

Whether certain attitudes are translated into concrete policies in the near future or ever—especially insofar as a renewed attempt to acquire nuclear weapons is concerned—depends on numerous unpredictable events. No one can forecast what the final constellation of forces within Iraq will look like, and internal dynamics will play a pivotal role in determining Iraq's security orientation and priorities and its practical approach to WMD. Paradoxically, if Iran acquires nuclear weapons, a Shi'a-dominated government in Baghdad might welcome from Iran a nuclear umbrella against Israel or hostile Sunni

neighbors and perhaps forgo developing its own nuclear arsenal. Such an eventuality would obviously provide Tehran with continuing leverage over Iraq. Or a nuclear Iran might help a Shi'a-controlled Iraq by selling to it or otherwise providing nuclear know-how and materials, perhaps as a way to help finance Iran's own nuclear program. Conversely, a Sunni-dominated or secular government in Baghdad might be encouraged by other Sunni neighbors to develop nuclear weapons as a counterbalance to Iran if the latter becomes a nuclear power.

It is reassuring that a recent Iraqi Minister of Science and Technology, Rashad Mandan Omar, categorically affirmed that Iraq would never acquire WMD in the future, describing the reason as follows: "Our country and our people are tired of all those stupid policies which the former regime adopted, and which cost us in material and moral terms."<sup>158</sup> Indeed, the new Iraqi Constitution, adopted in 2005, bars the acquisition of all WMD. Article 9 states that "the Iraqi Government shall respect and implement Iraq's international obligations regarding the non-proliferation, non-development, non-production, and non-use of nuclear, chemical, and biological weapons, and shall prohibit associated equipment, materiel, technologies, and delivery systems for use in the development, manufacture, production, and use of such weapons."<sup>159</sup> On August 19, 2008, Iraq signed the Comprehensive Nuclear Test-Ban Treaty. In addition, in September 2009, the Iraqi Council of Ministers approved a bill to establish a government agency to monitor a ban on all WMD in Iraq, and forwarded the legislation to the Parliament for discussion.<sup>160</sup> Such initiatives, however, may be insufficient in the long term unless the present perceived threat environment and domestic intellectual attitudes in Iraq change.

*The Limits of U.S. Guidance.* U. S. moral suasion on the nuclear issue may be undercut by what some Iraqis perceive as an American double standard, in regard to both its acceptance of Israel's continuing nuclear monopoly and its divergent approach to its own nuclear capabilities vis-à-vis those of Iraq and other countries. For example, the late Isam Al-Baghdadi, then editor of *The Iraqi Scientific Review*, surfaced the issue in 2003, albeit somewhat elliptically. Having echoed former Soviet leader Mikhail Gorbachev's questions about the U.S. failure to ratify the Nuclear Test-Ban Treaty and its development of a new generation of nuclear weapons, Al-Baghdadi wondered whether the United States considered only its own interests in dealing with the proliferation issue: "Why does the [U.S.] prohibit other countries from looking after their own security priorities?"<sup>161</sup>

Another observer likewise noted a double standard, taxing the IAEA for having been harsh with Iraq's nuclear program while being soft on Iran's.<sup>162</sup> Still another frustrated Iraqi commentator charged that "America was silent and is still silent, along with the other countries which have nuclear weapons, about the Israeli nuclear program."<sup>163</sup> This perception of a double standard by the United States with regard to Israeli nuclear weapons has also led to Iraqi skepticism of U.S. proposals for a nuclear security umbrella in the region, given Iraqi perceptions of Israel as a potential threat. One commentator pointedly inquired: "If the United States defends Israel from Iran, who will defend the Arabs from Israel?" He then recommended that the Arabs create their own strategic counter, balance to Israel.<sup>164</sup>

Ba'athi sources have been predictably vocal to the effect that the United States was not preventing Iran's march toward nuclear weapons, with one commen-

tator even arguing that the United States was secretly favoring “its old Iranian ally,” and that the United States did not mind the latter’s acquiring nuclear weapons with which it could threaten the Arabs.<sup>165</sup> An Iraqi Shi’a writer, on the other hand, also criticized what he saw as the U.S. double standard, but focused on the fact that Washington was “pursuing Iran day and night” while exempting India from controls over its nuclear activity.<sup>166</sup>

## CONCLUSIONS

A number of conclusions can be drawn from this analysis.

1. In the near term, one can expect increasing Iraqi calls for a revival of the country’s nuclear capability, at least in the civilian sector, which reflects a general consensus within key sectors of Iraqi public opinion as well as a growing regional trend.

2. The Iraqi government will continue to reestablish its legitimacy by its support of a nuclear program.

3. Significant practical obstacles will hamper rapid Iraqi development in the nuclear field without foreign support.

4. Despite a continuing widespread perception of the utility of nuclear weapons, at least within some sectors of Iraqi opinion, a near-term resumption of a military nuclear program is not likely, although volatile conditions in the region and within Iraq itself could change that likelihood at some time in the future. The nature of the government in Baghdad will be key to any such decision.

## RECOMMENDATIONS

Several policy recommendations can be made based on the preceding study. While some ways to help manage the future are applicable specifically to Iraq, others may require a regional approach that subsumes Iraq.

**First, U. S. and international policymakers should start thinking about helping to manage the process of an orderly, safe, and peaceful reintegration of Iraq in the civilian nuclear sector.** It will be difficult for the United States or the international community to ignore or to outright reject Iraq's expectations on the nuclear issue. Given the deeply-felt entitlement throughout Iraq's informed public and in light of the almost universal regional trends, to seek to hamper Baghdad's parallel efforts may well be counterproductive, causing significant resentment without succeeding in any case.

Joint projects and technical cooperation with the international community could encourage the establishment and application of robust environmental safeguards and facilitate an effective verification regime and strict accountability for Iraqi civilian programs and facilities, while helping Baghdad achieve its stated objectives. An ancillary benefit of encouraging and guiding an Iraqi nuclear program for peaceful purposes is that it could employ many of the country's nuclear scientists, including many of those now in the diaspora, thereby reducing the likelihood that they might put their talents to work for other state or nonstate entities for nonpeaceful purposes.

**Second, policymakers in the United States and the international community should ensure that any return to a nuclear program be accompanied by Iraq's acceptance of strict international monitoring and**

**controls to prevent any diversion to the military field or terrorist use.** It remains to be seen whether Iraqis would be happy with tight controls, such as using imported already-enriched fuel, and ensuring that any bomb-potential by-products are exported. However, we should insist on such precautions. While a regional regime of guidelines would likely be more effective and more palatable to Iraq and other countries, such an option is likely to stumble on the issue of exceptions made for Israel.

**Third, U.S. policymakers and military leaders should focus on ensuring that any peaceful nuclear program in Iraq is as secure from accidents as possible which, as noted, remain a continuing challenge even in technologically advanced countries.** The United States can help in this area by providing sound technical advice, as well as training in operational safety and disposal of nuclear waste, and assistance with the development of emergency response capabilities to deal with the aftermath of any accidents.

**Fourth, once stability in Iraq increases, U.S. military and civilian government agencies should launch an effort to educate the Iraqi military, government officials, and the general population on nuclear power.** The focus should be on the realistic benefits and costs of nuclear power, and in particular, on the risks and undesirability of nuclear weapons. Traditionally, the Iraqi military has viewed the use of nuclear weapons as a viable warfighting tool, and greater familiarity with the dangers of such a capability might help dampen future desires to proceed in that direction.<sup>167</sup> This education can be accomplished as part of broader existing security courses or specialized instruction in the United States for key Iraqi personnel, as well as through public diplomacy directed toward a more general public.

**Fifth, intelligence analysts should continue to monitor public opinion in Iraq on the nuclear issue, as well as any covert activities which could lead to undesirable results, including support from other countries.** At least for now, opinions can be expressed fairly openly in Iraq, reflecting attitudes both inside and outside the government. Developments in Iraq are dynamic so that changes need to be recognized, understood, and addressed in a timely manner.

**Sixth, U.S. and international leaders can work to modify the Middle East regional threat environment so as to alleviate the domestic pressures for nuclear proliferation both in the civilian and in the military sphere.** Unlike the realist assumption that states act as monolithic entities, the Iraqi case reminds us that frequently there is an interplay of fractious domestic forces and opinions, and that the international community can have an influence on outcomes by its advice and even more so by its actions.

Specifically, a reduction in regional tensions by defusing perceived threats resulting from long-standing conflicts, in particular the Arab-Israeli conflict, could have a positive effect. A continuing fear of Israel's nuclear intentions, as well as the embedded perception of a double standard by the international community when dealing with Israel's nuclear weapons as opposed to those of other regional states, spurs and justifies calls for the proliferation of nuclear weapons as a counterweight. At the very least, genuine progress toward a resolution of the Arab-Israeli issue would create an environment that is less conducive to consensus for the need of nuclear weapons. A parallel effort affecting the regional environment in this respect should aim to avoid threatening regimes such as Iran's with forcible change. Such threats can be

expected to make regional rulers defensive, putting a premium on acquiring a nuclear deterrent as a buttress to regime security, thus sparking a cascade effect.<sup>168</sup>

**Seventh, U.S. policymakers can reassure governments and publics in Iraq and elsewhere in the region by providing a protective umbrella against the incipient Iranian nuclear threat they fear.** Such a step has been already broached in principle by U.S. officials.<sup>169</sup> An umbrella arrangement could play a key deterrent role against an Iranian threat and could also have a constructive impact on Iraqi decisionmaking, since Iraq might be less prone to look for the same capability in order to keep up with the rest of the region if its neighbors were also deflected from pursuing the nuclear weapons path. However, the inclusion of Israel in such a pact or requests for a permanent U.S. military presence in the region would likely derail it, as Egypt has already made clear.<sup>170</sup> Moreover, there may be substantial doubts among Iraqis that have to be overcome. Lieutenant General Wafiq Al-Samarra'i dismissed outright any reliance on U.S. protection against regional nuclear threats, arguing that "talk of a U.S. nuclear umbrella for the region is misplaced [*qasir*] . . . since there is no guarantee that the present international balances and interests will continue over the long term as they are now. Who can guarantee that American power will continue as it is now?"<sup>171</sup>

Despite the complex challenges involved, this concept—if properly refined in concert with genuine progress on the Arab-Israeli peace process—could provide at least a measure of security that might slow down a regional arms race. Of course, it must be approached in a less formal and less public manner, perhaps as a private understanding of which all players are aware. In any event, any such U.S. assurances need to be crafted in a way that eschews publicly

highlighting the inability of local regimes to provide for their own self-defense. Such a muted approach would preserve their domestic legitimacy while at the same time holding to a minimum the risk of the U.S. being dragged into a local conflict.

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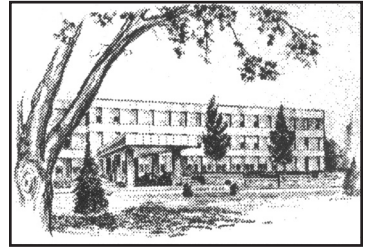
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