

“Negative Reaction”

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For those in the political know, facts and arguments are nowhere near as important as a good story. As one Washington wag recently put it, narrative, no matter how sound or wobbly, always trumps substance.

A case in point is the storyline Foggy Bottom and the White House are using for proposed U.S. nuclear cooperation with India. The narrative is smooth and soothing; the substance and arguments behind it, though, are beyond half wrong.

The pitch is simple: The deal, they insist, is a win-win. India, the world’s largest democracy, has long desired access to nuclear technology that multilateral proliferation control agreements and U.S. laws have kept it from getting. The U.S., after Iraq, needs new friends, especially in Asia, to deal with an increasingly hostile China and unstable Middle East. Give New Delhi the nuclear technology it wants, our diplomats argue, and the U.S. gets greater access to India as a strategic partner of a billion citizens.

Then there are the deal’s claimed energy, environmental and economic benefits. Because India needs more electricity, selling it nuclear power reactors, U.S. officials argue, means more U.S. and Indian jobs, less Indian pollution from burning coal, fewer greenhouse gas emissions, and reduced demand for fossil fuels, which, in time, should lower U.S. gas prices. An additional benefit of providing India with more nuclear power, officials say, is that it should reduce New Delhi’s dependence on Iranian oil and natural gas.

Finally, although U.S. nonproliferation experts claim the nuclear deal might undermine global nuclear nonproliferation restraints, the deal’s backers insist it would strengthen them. It would bring India into the nonproliferation mainstream, they argue. So far, India has been kept out of the international nonproliferation regime because it never joined the Nuclear Non-Proliferation Treaty (NPT). The deal would finally reverse this, U.S. officials insist, by getting India to agree to place 14 of its 22 reactors under international inspections and building on India’s “impeccable nonproliferation record” by securing India’s agreement to restrain its nuclear exports with additional controls.

To secure these benefits, the State Department wants Congress to change U.S. law, which requires Congress to approve each nuclear export to any state that, like India, never signed the NPT, possesses and has tested nuclear weapons and refuses to allow all of its nuclear facilities to be inspected. If Congress does not change the law immediately, France, Russia and the U.K., State Department officials warn, may reap the benefits of making nuclear sales to India first.

This is quite a story. There is only one problem with it: Nearly every one of its key points is wrong. In fact, the U.S. can expect few, if any, substantive strategic benefits from the deal for the next decade or more, and any significant economic or environmental payoffs that might accrue from installing more nuclear power in India are even further off. The

security risks associated with this deal and its hurried implementation, meanwhile, are much closer in.

Since the deal's announcement, New Delhi has publicly refused White House requests that India define how large it intends to make its "minimal deterrent" nuclear force, suggesting that India might well exploit the deal's civilian assistance to free up its domestic nuclear assets for military production. Pakistan, in turn, already has reacted to this prospect by seeking dramatically increased nuclear assistance from China. And Beijing? It has quietly made it clear that it is more than willing and able to ramp up its nuclear weapons efforts against any buildup New Delhi might attempt. Finally, Russia is taking its cue from Washington's proposal to bend international rules of the Nuclear Suppliers Group (a multilateral nuclear control group that has prevented India from getting affordable foreign nuclear fuel) for India by jumping (disingenuously) to supply India with uranium for "safety" purposes even before there has been an international consensus to do so.

These developments have prompted some to suggest that rather than rush to bend rules to send India controlled nuclear goods immediately, the U.S. and its allies need to slow the nuclear deal's implementation and use the time gained to encourage India and its immediate armed neighbors — China and Pakistan — to restrain their military nuclear production to assure the deal truly is a clear plus for nuclear nonproliferation.

To appreciate the merit of this recommendation, one need only consider why the benefits of the deal are more distant and the dangers closer than what the deal's supporters suggest. Here, what's most important is to understand that although American economic and educational ties with India are sure to improve steadily — with or without Congress approving nuclear cooperation — the prospect of Washington securing strategic military cooperation with New Delhi concerning China or Iran is unlikely for many years.

Certainly, there is little the U.S. or Indian governments can do to reverse the continuing rise in India-U.S. commerce in the fields of information technology, outsourcing of U.S. service industry work and intercourse in higher education. U.S. high-technology firms rely on Indian expertise both in India and in their companies in the U.S. Americans literally cannot pay their income taxes without assistance from Indians answering their questions by phone in Bombay. This two-way trade between one of the world's largest English-speaking countries and the world's largest advanced economy will only continue to grow. The picture is much the same in higher education: Increasing numbers of courses in the U.S. are being taught remotely via the Internet by Indian science and math teachers in India. Meanwhile, the number of paying Indian students attending colleges and universities in the U.S. has grown to more than 88,000 per year.

The U.S. and Indian governments could easily increase this commerce. The soundest way to accomplish this, though, is not to transfer risky, uneconomic government-controlled, loan-guaranteed nuclear, satellite or rocket technology — a sure-fire way to raise a thicket of thorny political, diplomatic and security issues — but rather by simply getting the two governments to get out of the way of the otherwise natural movement of private

knowledge, expertise and capital. In India's and America's case, this entails opening up the U.S. visa system to allow a greater interchange of educated Indian experts and students and knocking down Indian tariff, regulatory and financial barriers to U.S. and foreign investment. Unfortunately, with America's post-Sept. 11 tightening of immigration and India's lingering desire for commercial self-sufficiency, such liberalization is yet to be fully realized.

STRATEGIC SELF-INTEREST

And meaningful Indian strategic military cooperation with the U.S. — when might it be likely, particularly regarding the threats posed by Iran and China? Not for quite a while. The reason why is simple. Over the next 10 to 15 years, India's strategic self-interest is best served by tightening its ties first with China and Iran, not in competing against them with the U.S. India, after all, is still a relatively poor country with a relatively large but weak military. Changing this will not only require time, but increased commerce, a steady, large flow of oil and gas and relative peace with Pakistan and China. This explains why India is unique among nations in having major strategic cooperation agreements not only with the U.S., but with China and Iran as well. China borders India, makes low-cost manufactured goods and seeks Indian help to develop its service sector. It is one of India's largest and most natural trade partners. To bootstrap its growing economy, India wants to increase its two-way trade even further with Beijing. That's why the strategic cooperation agreement it signed in April of 2005, explicitly sets two trade objectives that assures China will remain India's leading trade partner for the next 15 years.

India and China also cooperate to bid on energy in Central Asia and other markets. The rationale behind this cooperation also is basic: If India tries to compete with China for foreign sources of energy, it is likely to lose out to Chinese bidders and only spend more money than it would otherwise for the energy it needs.. Whatever Indian hawks may promise Americans or aspire toward in competing militarily against China, then, will be modulated by this much more immediate and pressing concern and India's current, military weakness compared to China.

This brings us to India's strategic cooperation agreement with Iran, signed in January 2003, which covers military cooperation, high-technology exchanges, energy investment and the stabilization of Afghanistan. India has long sought to outflank Pakistan militarily and diplomatically to deter Islamabad from causing trouble in Kashmir and threatening war. If India is to build up its economy and military might, war with Pakistan is the last thing it needs. That's why it has sought Iranian help. First, it is providing Iran with road-construction assistance to gain access and distribute aid to Afghanistan and Central Asia as part of India's efforts to keep citizens in these states from supporting Muslim terrorists in Kashmir.

Second, India is training Iran's navy in a series of exercises and been discussing how it might upgrade Iran's mechanized army. India's aim here is to raise the specter of being able to use Iran as a military base of operations against Pakistan in any future war. This

has proved embarrassing to Washington. Most recently, the Indian navy invited Iranian naval personnel to Mumbai for military instruction. Although the U.S. State Department tried to deny press reports that training took place, the Indians themselves conceded that this “routine” visit involved naval training. The U.S. Navy, also, to its merit, verified that the news reports were correct. This caused a mild flap on Capitol Hill.

But there is more: India also has helped Iran’s weapons of mass destruction programs. The most disturbing example was made public in September 2004 when the U.S. sanctioned one of India’s top nuclear scientists — Dr. Y.S.R. Prasad — a former chief of the state-run Nuclear Power Corp. Prasad, who says he only offered Iran nuclear safety assistance when he visited there in 2003 and 2004, is famous for developing a technique for extracting tritium from heavy water reactors. Tritium, a hydrogen isotope needed to make lightweight, missile-deliverable nuclear warheads. Iran is building a heavy-water reactor. Besides Prasad, the U.S. government sanctioned Prasad’s nuclear associate, Dr. C. Surendar, and last December, two other Indian chemical entities under the U.S.-Iran Non-proliferation Act for assisting Iranian missile and chemical-weapons efforts. Despite Indian pleading to acquit both sanctioned scientists, Washington last December chose only to drop charges against Surendar: Prasad’s transgressions, apparently were too egregious; sanctions against him were maintained.

Finally, India has significantly increased its energy ties with Iran. India refines nearly half of Iran’s gasoline. It also has demands of its own. Certainly, as India’s economy grows, it will need even more oil to fuel growing consumer and industrial demand to power more cars and trucks. India also needs more natural gas to meet increased industrial requirements and to fire smaller gas-fired generators. The latter are increasingly necessary to meet peak-load electrical demands that arise as India’s power grid grows. That’s why, since signing its strategic cooperation agreement with Iran, India has offered Tehran long-term government-to-government contracts for the delivery of liquefied natural gas worth \$5 billion and is negotiating with Iran and Pakistan on a pipeline project worth more than \$7.5 billion. Iran gets the political recognition it desires and India secures an urgent, critical, reliable supply of energy for which no amount of coal, hydro or nuclear power could substitute.

POWER PLAYS

This, then, brings us to the White House’s second argument in favor of the deal, that U.S. nuclear exports to India will not only wean India off Iranian natural gas and oil, but provide thousands of U.S. jobs and reduce the pollution and greenhouse gases that otherwise would be produced from the continued burning of coal. This second part of the story is popular, but it, too, is flawed. In fact, for the next 10 to 15 years, nuclear power, even if deployed according to India’s own ambitious plans, will have little or no effect either on India’s desire for increased oil and gas imports or on its level of coal burning.

This is not what the American public is being told. In a recent press conference, President Bush explained why the nuclear deal was good for America: If India used more nuclear power, it would reduce demand on oil and cheapen gas prices in the U.S. In a similar vein,

Secretary of State Condoleezza Rice testified on Capitol Hill on April 5 that helping India ramp up its nuclear power industry would help wean India away from having to rely on unstable supplies of oil and gas in the Middle East, starting with Iran.

These are nice theories, but they are based on mistaken technical premises. First, India consumes more energy to power its cars and trucks than it does to power its electrical sector, and none of its vehicles run on electricity or are likely to do so for decades. As the U.S. does all it can to expand India's economy and infrastructure (especially its road system), the number of cars and truck on India's roads will expand along with increased demand for the oil products needed to lubricate and fuel them. Building more nuclear plants in India will have absolutely no effect on this increased demand.

Second, of the electricity India produces, no more than 10 percent is generated from burning imported oil (heavy furnace oil to be exact). Substituting all of this with nuclear-fired electricity might be desirable, but it would hardly make a dent in India's rising oil demand. More important, total substitution is not possible: India's oil-fired plants are needed to help supply peak-load demand (short-term spikes in electrical demand caused by hot weather, the use of electric lights at night, etc.) — something large coal and nuclear plants, which are geared to supply base-load demand (the constant, known daily industrial and consumer requirements for electricity) cannot easily supply.

Third, burning coal for electricity will continue to increase in India even as more nuclear plants are built. With the second- or third-largest coal reserves in the world, India is the Saudi Arabia of coal. Indian coal production and distribution are well-developed, vested interests at least as strong as nuclear power (coal fires more than 60 percent of the electrical generation in India; nuclear, no more than 3 percent). As India's economy and electrical requirements grow and its electrical-grid distribution system expands to meet them, nuclear power will have difficulty competing against further construction of coal-fired plants. These plants will continue to be cheaper and quicker to build, able to produce electricity for less, and will employ far more people than the nuclear sector. In the next decade, for example, Indian energy planners anticipate adding 83 gigawatts of electrical capacity, almost all of which will be met with new coal-fired systems.

Finally, for the next decade or more, the cheapest, easiest and cleanest way to address India's growing electrical demands is not to build more nuclear plants, but rather to increase the efficiency of the current electrical system. Consider the facts: The Indian nuclear sector is planning to expand its nuclear power capacity from 3 GW to 30 GWs in the next 15 to 20 years. Yet, Indian industrial planners recently determined that by merely establishing efficiency standards for electrical appliances, ending rampant electrical theft from the grid and government giveaways of free electricity to select constituencies, and increasing the use of more efficient peak-load generation systems (e.g., increasing the use of natural gas-fired plants) India could save an equivalent amount of electricity production in just a decade with far less investment.

DUNG AND TWIGS

This, then, brings up the issue of curbing pollution. It turns out that the most urgent pollution problem facing India has nothing to do with burning coal. Instead, it is directly related to the continued burning of the greatest source of energy produced and consumed in India — the incineration of cow dung and twigs. This energy source is used for home heating and cooking and causes intense unsanitary conditions of local water sources (e.g., lakes and streams). Unfortunately, eliminating this sort of pollution will be difficult to accomplish with any form of grid-delivered electricity since most of the consumers of cow dung lie well beyond the limited reach of India's electrical grid. The quickest, most appropriate solution here is not expanding nuclear power, but rather the increased, local deployment of renewable energy. Indian energy planners understand this and expect to increase wind, micro-hydro and biomass in order to supply 12 additional GWs of electricity (i.e., four times what nuclear power is currently supplying) before 2015.

As for the pollution likely to be caused by increased coal usage, the best approach is to help India with clean coal technologies and carbon dioxide sequestration. This is what the U.S. Department of Energy is endeavoring to do with India. It understands what has already been explained. Indian coal-burning plants will continue to make up the bulk of India's base-load electrical generation capacity, which is likely to increase for at least the next 20 years no matter how many nuclear power plants are built.

Finally, a word about American jobs. Secretary Rice recently told the House International Relations Committee that between 3,000 and 5,000 direct jobs likely will be created as a result of India's desire to buy eight foreign machines in the next decade. The truth, however, is that for the next 10 to 15 years the more likely number of U.S. jobs the deal will create is closer to zero. The reasons why are simple.

First, Indian officials have never gotten any of their major nuclear growth projections right. In the early 1960s, the father of India's nuclear energy program, Homi Bhabha, projected that by 1987 India would have 25 GW of electricity-generation plants on line. This was a pipe dream. The next official projection was that India would have 43.5 GW of nuclear electricity on line by 2000. The actual number turned out to be one-twentieth that figure. Today, India has no more than 3.3 GW of nuclear power capacity operational. Anyone trying to gauge the odds of India following through on its latest plans to increase nuclear power capacity tenfold before 2020 would be wise to consider the accuracy of these earlier projections. India may buy additional foreign reactors, but the odds of it completing them within the next decade are highly uncertain.

Allowing that India's construction schedule might slip, how many American reactors might they eventually buy? Nobody knows for sure, since India has made no commitment to buy American. The only foreign reactor and nuclear-fuel sales to India have been Russian. There are good reasons why. Russia pays relatively little attention to India's lack of nuclear-liability insurance. In the U.S., the concern is so great (U.S. firms fear nuclear accidents overseas could result in lawsuits that could destroy them), nuclear sales to states like India require guaranteed loans from the U.S. Export-Import Bank. So far, U.S. lawmakers have shown little inclination to support such loans: Last year, it blocked extending Export-Import Bank credits for nuclear sales to China. China, like India, has

only a minimal nuclear liability fund and a checkered safety history. Whether Congress would view nuclear sales to India differently remains to be seen.

Russian nuclear products also are cheaper than the alternatives. The two reactors that India is building cost a fraction of their American, Canadian and French counterparts. The Russians, moreover, are willing to bend the rules to make a sale far more quickly than its competitors. This recently was demonstrated when Russia announced it would sell India the lightly enriched uranium it needed to keep two U.S. General Electric-designed reactors at Tarapur operating. This announcement flew in the face of Nuclear Supplier Group (NSG) prohibitions against its members, which includes Russia, from selling nuclear fuel to states, like India, that refuse to open all of their nuclear facilities to international inspections. Russia made the sale, though, claiming (disingenuously) that they were critical to assure the safe operation of the plants — a reason, if true, that would make the sale permissible. Moscow, of course, made the sale to block General Electric from doing so and to lock in whatever future reactor sales India might make.

Finally, although India is eager to expand its nuclear sector, it wants to do so with as little dependence on foreign suppliers as possible. That's why, despite official Indian projections of a 10-fold growth in on-line capacity, New Delhi has, so far, only spoken about buying no more than eight foreign reactors (i.e., little more than 25 percent of the projected total).

At least for the next decade, then, the hope that the deal will create a significant number of U.S. nuclear sales or jobs is unlikely to be realized. That's why former Sen. Sam Nunn, who serves on the corporate board of General Electric — the one U.S. company most likely to make nuclear sales to India — argued that the economic benefits of the deal were not that significant; hardly enough to keep Congress from demanding that the deal provide more nuclear nonproliferation results.

Here, the key concern is that the deal could enable India to build nearly an order of magnitude more weapons annually. Unless slowed down and complemented with a cap on military fissile production, critics worry that the deal could undermine international nuclear nonproliferation controls and significantly ramp up a nuclear arms competition in Asia.

On these points, the White House and State Department have been on the defensive. Recently, Rice insisted that since India has 50,000 tons of uranium reserves, it already has more than enough to make as many weapons as it wants and that restricting its access to foreign ore would have no impact on its ability to build more weapons. Nothing in the agreement would prevent India from making more weapons, she conceded, yet she then went on to praise the deal as constituting a historic breakthrough for nonproliferation because it would place eight more of India's existing 22 civilian reactors under International Atomic Energy Agency (IAEA) inspections. When pressed on this point, Rice allowed that India, of course, in the future was free to keep as many new, additional reactors from being inspected as it wanted. But she thought India was more likely to open most of its future reactors to inspections since India lacks sufficient domestic reserves of

uranium to fuel the fleet of civilian machines it needs and wants (every Indian reactor accepting foreign fuel would have to be opened to IAEA inspections).

Finally, although India has refused to cap its military fissile production, Rice believed India was unlikely to make many more weapons since it was constrained by a possible arms rivalry with China and Pakistan. Eventually, she hoped, India would join other nations in agreeing to an international military fissile production cutoff.

Again, the storyline here is smooth and soothing. Unfortunately, much of it is incomplete and all of it misleading. India has 50,000 tons of uranium in reserve, but this ore is of low quality and all of it is still buried in the ground. In fact, it costs five times as much to mine and produce India's low-concentration ore than simply buying foreign uranium on the spot market. India's actual domestic uranium production (i.e., the amount it mines, mills, and processes into yellowcake) is a far lower and more telling figure — only about 300 tons per year. Unfortunately, India's reactors consume 435 tons annually (400 for power reactors and another 35 for India's two military production machines). That's the rub: India is consuming more uranium than it produces. It has gotten away with this so far by relying on yellowcake it stockpiled years before. This store, however, has all but run out, and Indian nuclear experts expect Indian reactors to run out of fuel next year. This is why India is so eager to buy foreign uranium ore and wants the U.S. deal sealed and completed soon. Currently, the rules of the NSG prohibit uranium sales to states like India — nonmembers of the NPT who refuse to open all of their facilities to IAEA inspections.

Full implementation of the U.S.-Indian nuclear deal, of course, would change all of this by getting the NSG to make an exception for India. India could then fuel most of its civilian reactors with foreign ore and free up most of its domestic uranium production for military purposes — something its current lack of uranium does not allow. This is why India's security hawks have publicly urged India to embrace the U.S.-Indian nuclear deal: It is to India's advantage, they argue, to import as much foreign uranium as they can to “conserve our native uranium” to make more bombs.

How many more weapons are Indian planners hoping to build? Reportedly, as many as 400 by the next decade — roughly a ten-fold increase. Anxious about this, The White House hoped it could reassure the world (and India's neighbors) by publicly asking New Delhi in April to go on the record to “define” how large India's minimum nuclear deterrent force might be. India abruptly refused to do so.

FOREIGN REACTION

How are other countries reacting to this? Pakistan, which has approximately 70 nuclear weapons, jumped to get China to pledge to help it ramp up its “peaceful” nuclear energy program. With Chinese help, Islamabad just announced that it plans to expand its nuclear program at least twenty-fold over the next 25 years. Pakistan also is moving quickly to expand its military uranium enrichment program significantly in an effort to keep pace with any Indian move.

Meanwhile, diplomatically, Islamabad has made it clear that it is willing to agree to cap its own nuclear weapons efforts if India does as well and Pakistan is allowed to receive foreign nuclear assistance like India. China also has reacted, warning India that the deal threatens to “undermine global disarmament moves” (i.e., it may force China and others to reply by bulking up their own arsenals). Iran and North Korea, meanwhile, have cited the U.S.-Indian nuclear deal as creating a clear double standard: They too want foreign assistance to develop peaceful nuclear energy but are being told they can’t, while India, which has tested nuclear weapons and never signed the NPT, is being told it can.

Predictably, the White House and State Department have dismissed these developments and the proliferation concerns they raise. In this regard, they are increasingly alone. For the first time in the U.S., every nonproliferation organization outside of government — conservative and liberal — has joined in criticizing a U.S. nuclear initiative as being ill-conceived. Japan’s foreign minister and Germany’s Prime Ministers have publicly complained that the deal establishes a double standard that will hamper allied efforts to restrain Iran and North Korea. Australia, one of the world’s largest providers of uranium, meanwhile, has said nice things about the deal but announced that it would not allow Australian ore to be sold to India. Privately, at the last meeting of the NSG, after the proponents for the deal — the U.S., Russia, France, and the U.K.— spoke, a European nation’s representative spoke against it, sat down and was cheered by virtually the entire audience. Their key concern is that in haste to get to yes, the U.S. and India have given too short a shrift to avoiding a possible arms race. For them, the deal appears to reward a weapons state that never signed the NPT, broke its own “peaceful” end-use pledges and other nations’ export controls to acquire its own nuclear weapons complex, and tested nuclear weapons. They worry that, unless conditioned further, the deal might encourage other states to think they can follow this model and be rewarded as well.

That said, killing the deal is not a political option. Bush and Indian Prime Minister Manmohan Singh have put their stock of political capital into seeing the deal through. The U.S. Congress, whose approval is required, moreover, is unlikely to let it die. Congress is, however, interested in conditioning it. It certainly wants to reserve Congress’ current rights to review whatever nuclear cooperative agreement the White House negotiates with India (the legislative package the White House has proposed would water these rights down substantially). Many in Congress also are inclined to do nothing until and unless the Nuclear Suppliers Group acts first to make an exception for India and the IAEA has completed its safeguards agreement with India.

Finally, some in Congress want the White House to demand more of India in cutting off its relations with Iran and in following the example of the world’s other NPT nuclear weapons states — U.S., U.K. Russia and France — by announcing an end to military fissile production as a matter of policy. Even China is believed to pursue such a de facto policy, and Pakistan has made it clear that it is willing to do so if India is. They question whether pushing ahead with the current deal will reduce the chance for real fissile production restraint. Quietly, senior State Department officials have suggested that they might be flexible on some of these points.

All of this suggests final approval could take more time than India and the White House originally contemplated and that the current story they've been pushing to support the deal is anything but the last word.

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