## Why this fuss about NSG membership?

BL www.thehindubusinessline.com /opinion/why-this-fuss-about-nsg-membership/article8824716.ece

India needs technological help to build light water reactors, for which the Nuclear Suppliers' Group is irrelevant

The decision of the Nuclear Suppliers' Group (NSG) to deny India membership to its club is hardly surprising despite the government employing its diplomatic muscle in the run up to the group's plenary meeting in Seoul this month.

Prime Minister Narendra Modi's personal pleas to leaders of important countries, including China, certainly helped build broad support among NSG members for India. However, China's resolute opposition (which is quite independent of Pakistan's obstinacy) has ensured keeping India outside the NSG tent for now.

While the Prime Minister cannot be faulted for embarking on ambitious foreign policy goals, it is puzzling why he risked his personal reputation by hitching India's diplomatic horse to a wrong cart. NSG membership, while desirable, is an issue of marginal importance to India's nuclear energy development.

## NSG's exaggerated relevance

After the grand bargain following the nuclear détente with the US in 2005, India has gained substantially from the NSG waiver and partial safeguards agreement with the International Atomic Energy Agency (IAEA) in 2008 without having to sign the Nuclear Nonproliferation Treaty (NPT) and compromise its nuclear weapons programme.

There is already enough leeway for India to deal with nuclear vendor countries bilaterally for importing uranium, reactors, and fuel cycle technologies. Hence seeking formal membership to NSG even before fully exploiting the benefits of the 2008 grand bargain appears to be an unnecessary distraction from pursuing more important strategic objectives.

The failed attempt in Seoul, however, presents India an opportunity for a hardnosed evaluation of priorities in the nuclear sector and to undertake steps to recover lost ground. In any case, a NSG membership is not going to make countries rush to India with nuclear reactor orders.

Only a few countries with deep pockets have sustained their interest in building nuclear power plants after the Fukushima disaster. The most popular choice for new builds is light water reactors (LWRs) for which India itself will have to depend on countries such as Russia, France, US and Japan.

The heavy water reactor (HWRs) technology that India could potentially export with or without NSG membership is fading into the sunset because of its declining share in the global reactor fleet.

HWRs may be of interest to countries that aspire to build nuclear weapons under a civilian cover, but it is unlikely that India will show any enthusiasm to export reactors to countries with dubious reputations. Obstacles for import of specific technologies could be overcome through strategic bilateral engagement with relevant nuclear vendor countries.

Hence India is better off limiting its civilian nuclear engagement with Russia, France, the US, and Japan while also preserving the indigenous expertise in HWRs and associated fuel cycle technologies. While the domestic nuclear programme is testimony to India's sustained efforts to preserve its technological independence during the sanctions era, there is nothing sacrosanct about it.

## Changing technological realities

Re-examination of nuclear technology options and policy correction in order to adjust to new realities is not a sign of weakness. India will have to use the present window of opportunity (for which NSG membership is immaterial) to

obtain critical technology transfers from friendly countries to manage future uncertainties.

This is what the French and Japanese did earlier during 1960s and 1970s and what the Chinese seem to be doing skilfully now. Letting the bitterness of past experience come in the way of present choices and self-delusion about the capability of the indigenous nuclear programme to meet short and medium term energy demand will end up costing dearly in the long run.

Peter Senge in his classic *Fifth Discipline* argued that the hallmark of successful organisations is constant learning and willingness to change when faced with new realities and uncertainties. There is nothing wrong in re-examining the vision and roadmap that was laid out for India's nuclear energy development during a bygone era.

If Homi Bhabha were alive today he would have had no hesitation in effecting a course correction if it served the interests of national energy security and India's broader geopolitical goals.

This is not to suggest giving up on the hard-won indigenous nuclear capability. India is now a world leader in HWR development after the Canadians turned their back on the technology.

India is also one of the few countries that have acquired a formidable research and industrial experience in breeder reactor technology, even though its economic case has never been persuasive, especially when identified global uranium resources appear adequate for fuelling projected demand through the end of this century.

The reluctance of the nuclear bureaucracy to admit this reality and its continuing obfuscation about the economic benefits of certain aspects of the indigenous programme has made it an easy target for criticism.

## The space research example

Denial of NSG membership amidst fresh opportunities provided by the grand bargain of 2008 should encourage India's nuclear mandarins to take a fresh look at their development priorities.

With focused and sustained efforts it is within the realm of possibility that the NSG will find a way to accommodate India in a matter of time, provided India plays its cards well. In this context, the Department of Atomic Energy (DAE) would do well to look at the recent successes of the Indian Space Research Organisation (ISRO) and its enhanced global stature.

India's space programme was also subject to sanctions like the nuclear programme, but ISRO's focused and modular development strategy seemed to have paid off well. ISRO recently launched 20 satellites in one go including two student satellites from Indian universities and 17 of four foreign countries, and has become a world leader in a niche market.

Although the DAE is a technically superior and resourceful organisation compared to ISRO it seems to have muddled in the process of juggling with several reactor development fronts.

Perhaps, what is needed in the wake of denial of NSG membership is a hardnosed realism regarding priorities for nuclear energy development and a strategy to navigate the tangled thicket of international nuclear trade and commerce through bilateral engagements.

The writer is academic head at the National Institute of Advanced Studies, Bengaluru. The views are personal

(This article was published on July 8, 2016)