



## Kazakhstan and India's Quest for Energy Security

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With the inking of a Memorandum of Understanding between Nuclear Power Corporation of India and Kazakhstan's state owned company KazAtomProm<sup>1</sup> on January 24<sup>th</sup> 2009, Kazakhstan became the fourth country in the world to pledge civilian nuclear cooperation with India. Kazakhstan is the world's third largest nuclear fuel producer. It has invited India to join in uranium mining & cooperation and joint oil exploration as well.

Though the modalities of nuclear commerce between India and Kazakhstan are yet to be set, it may be argued that Indo-Kazakh nuclear and fossil fuel trade would not only help India meet its energy requirements but also bring the two Asian giants closer than ever. This point may be supported by many factors.

First, Kazakhstan is the world's second most uranium rich country. It has 15 percent of the world's uranium resources. Over 2001-2006 domestic production rose from 2,000 to 5,279 tonnes uranium (tU) per year, and further mine development is under way with a view to raise annual production to 18,000 t U per year<sup>2</sup> Kazakh authorities have in the recent past officially claimed that by 2010 Kazakhstan will become the largest producer of uranium in the world, with a share of thirty two percent of the total global annual production. Kazakhstan claims that by 2018, it will produce 30,000 tU annually. If the target set by Astana is realised, Kazakhstan will try to reach out to new markets to sell its produce. India, the new entrant to the nuclear energy commerce, would then be a most lucrative market for Kazakhstan, thereby bringing them closer on sharing yellowcake.

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Secondly, India is in dire need of energy. As per the Planning Commission data, India would need 800,000 Megawatt (MW) of energy by 2032 and fossil fuels available domestically would not be sufficient to fuel the booming economy. Currently, indigenous coal fired thermal units account for around 63 percent of power generation in the country; the share of nuclear energy is only 3 percent. Indian coal is of poor quality, having an average heating value of about 4500Kcal/kg, compared to over 6000 Kcal/kg for most internationally traded coal. It is high in ash content, typically 30-45 percent.<sup>3</sup> India's energy needs if fulfilled through fossil fuels produced domestically will not only be costly for India but also damage the environment. Anil Kakodkar, Head of Indian Atomic Energy Commission argues:

*Even after making use of all available domestic resources, it is impossible to meet the required electricity generation requirement profile...during the coming few decades. In order to meet the energy requirement driven by Indian economy,*

*there is a huge energy gap that needs to be filled. The gap between requirement and supply can be easily met if about forty gigawatt electricity (GWe) capacity light water reactors (LWRs) are imported during the period 2012-2020. While this forty GWe additional capacity, on its own appears to be only a small fraction of the required capacity to meet the deficit, with the use of spent fuel of those LWRs for launching a series of fast breeder reactors (FBRs), the deficit is practically wiped out by 2050. one may also note that, on account of exponential nature of growth, in case the imports of these LWRs is delayed*

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*by a decade, the energy deficit in the year 2050 would be 178GWe and the corresponding requirement for coal import will be 0.7 billion tonne. The latter is approximately twice the annual coal requirement in our country today<sup>4</sup>.*

India is precariously dependent on the Gulf countries for its oil supplies and needs to diversify the sources of supply. Overdependence on the Gulf for fossil fuels might prove dangerous for India's energy interests. Oil supplies from the Gulf region are getting increasingly erratic and are subject to challenges of maritime threats coming from the Somalian coast. Reemergence of Taliban and insurgency in provinces bordering Durand Line pose major challenge to the viability of oil coming from gulf through transnational pipeline. Owing to these problems, \$7.5 billion IPI (Iran-Pakistan-India) pipeline project is in doldrums.<sup>5</sup> India is not keen to be a part of any further negotiations on the issue especially after the 26/11 terror attacks. Terrorist attacks in Lahore on 3 March pose a serious question on security guarantee supposedly provided by Pakistan.<sup>6</sup> The contentious issues of transit and transportation make the prospects of this project gloomier and India has not attended the tri-lateral talks with Iran and Pakistan in the last one year<sup>7</sup>. To make the matter worse, Iran and the US are still struggling to get back to normalcy in their relations and the Iranian nuclear programme is yet to be approved of by the world community. All these issues together indicate towards the bleak possibility of uninterrupted oil supply to India or other countries.

China has realized this problem well ahead of the rest of its neighbours including India. Despite the fact that China has shown interest in IPI indicating that it would step in shall India move out, it signed a pact with Kazakhstan to secure its oil supplies for the future. Opening of China-Kazakhstan pipeline in December 2007 and attempts to make a new export corridor stretching from the Caspian basin to China indicate that it wants to make sure that even if oil supplies from conflict ridden Persian Gulf and Sudan discontinue, its interests are not hampered. Such an option is not beyond India's reach as well.

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figures at 35 billion barrels (twice as much as the North Sea) and with the projected reserves of 100-110 billion barrels by 2015, it would be among the world's top three oil exporters. The country has already listed 241 oil fields, out of which only 74 fields have been explored by 142 companies. The oil

production will hit the target of 92 million tons per year by 2009 and 140 million tons a year by 2012. With the discovery of the Kashagan and Kumkol oil fields, the country's prospect of becoming an important player in the world's energy and oil markets is going to be a reality.<sup>8</sup> This makes it important for India to seek closer cooperation with Kazakhstan, which India is trying to do. In this context, a major breakthrough point came up when On January 24<sup>th</sup> 2009 Kazakhstan's state owned Kazmunai Gas signed a deal with ONGC Videsh Limited-Mittal Energy Limited (a joint venture between state owned ONGC and Industrialist Lakshmi Mittal). By virtue of this deal, ONGC Videsh-Mittal combine has got twenty-five percent stakes in Satpayev block in the Caspian Sea. In March 2009, India sought stakes in four Kazakhstan oilfields; Kashagan, Kurmangazy, Tengiz and Drakhan. India has offered its technical expertise in exploration and production (E&P) in nine other oilfields including Akku and Shetusy.<sup>9</sup> During his visit to Astana, Murlidhar Deora, minister of petroleum and natural gas proposed to import coal from Kazakhstan. R.S. Sharma, chairman and managing Director of National Thermal Power Corporation later added, "The discussions with Kazakhstan are at a very preliminary stage. This is part of our plan to import around 15 mt per annum of coal".<sup>10</sup> This is a crucial development in the light of the fact that currently NTPC is facing acute shortage of coal at its projects. India had 256 billion tones of coal reserves of which around 455 mt is mined a year. Coal shortages have been disturbing India for long, as the production has decreased from 6.2 percent (April-December) in 2005-06 to 4.9 percent in the corresponding period in 2007-08.<sup>11</sup> Keeping this in mind, India has proposed to help Kazakhstan building gas processing and petrochemical plants at Atyrau and Akhtau.

This seems a great move on part of India, but India can not afford to forget its past experience. India and Kazakhstan tried to cooperate in the areas of oil and gas in the past also.

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However, such attempts have been rather tardy. P. Stobdan argues:

*India did try to explore opportunities in the region's oil and gas deposits. Kazakhstan's failure to fulfil its past commitments for giving a slot to India in its oil fields certainly remained a discouraging point. India's inability to win the bid for PetroKazakhstan by the OVL-Mittal combine in 2005 only reinforced the point that Central Asia was not ready for India's entry.<sup>12</sup>*

However, the blame must not be put solely on Kazakhstan as India's attempts too have been erratic and dependent on a multitude of external and internal variables. One of the major bottlenecks as perceived by officials from both sides is the trade route linkage. This is more of a psychological issue than a physical one as there is a feasible Kazakhstan- China-India route. The key, however, lies in India's commitment in pursuing China to agree to such a route and to the parties involved to ensure the security of such a route.

Thirdly, the waiver given by the forty five member Nuclear Suppliers' Group in September 2008 rejuvenated the possibility of India seeking uranium from a wide range of countries. In addition to Kazakhstan, the potential partners include Uzbekistan, Niger and Mongolia. Kazakhstan certainly won't like to lose out to its neighbours in cooperating with India, given the fact that uranium supply would bring in huge profits for its economy. Competition among countries is likely to get more intense in the light of the fact that the world is going through deep economic slump and there has been a sharp fall in global oil prices. This might act as a catalyst for India to get uranium easily and at a more competitive price than it otherwise would have got.

Sourcing uranium from Kazakhstan is critical for India because the two top uranium producers; Australia and Canada are not enthusiastic about cooperating with India. Australia has already denied yellowcake to India, owing to India not being a member of Nuclear Non Proliferation Treaty (NPT). India's diplomatic efforts failed to yield any positive outcome on the issue of India-Australia nuclear commerce. Canada, the second largest uranium rich country, is yet to approve such

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an agreement.<sup>13</sup> In this context, Astana is the only option New Delhi could look for to secure reliable uranium supplies.

Fourthly, Kazakhstan strongly supported India's case at the Nuclear Suppliers' Group meet in September 2008. This is despite the fact that Kazakhstan suffered a lot by being the nuclear test site of the former Soviet Union. Kazakhstan

overlooked India's non-signing of Nuclear Non Proliferation Treaty and took India's credible nuclear non-proliferation record as a parameter for its support at the NSG meet.

Fifthly, India's relations with Kazakhstan have been exceptionally cordial. The Kazakh President Nursultan Nazarbayev is the first head of a Central Asian Republic to become the Guest of Honour at India's Republic day celebrations (2009). His previous visits to India have been in 1992, 1996 and 2002. Shared vision of 'Asian Century' has kept India and Kazakhstan together ever since Kazakhstan came up as an independent State. Kazakh President Nursultan Nazarbayev's idea of Conference on Interaction and Confidence building measures in Asia (CICA) is an appreciable attempt to bring together a range of Asian countries and address common issues of concern.<sup>14</sup> Through this multilateral organization, India is not only addressing its concerns on terrorism and other non-traditional security issues; it is taking its ties with Kazakhstan to a higher level also. However, commercial ties don't match up to diplomatic bonding between the two countries. Civilian nuclear agreement between New Delhi and Astana would give a new impetus to bilateral trade and commerce. Apart from supply of yellowcake to India, joint exploration of uranium resources and setting up Nuclear power plants in India could also become mutually beneficial for the two countries.

Deepening the engagement with the second largest former Soviet Republic would be a great asset to the Indian foreign policy. India's relationship with Kazakhstan is time tested as India is one of the few non Soviet bloc countries which had access to the 'Other Side of the Soviet Moon'. The beginning of India-Kazakhstan energy cooperation could mark the end of India's arguably inconsequential presence in the Central Asian region.

Kazakhstan, the largest of Central Asian republic could help India in deepening and broadening its presence in the region. Time is now for India to formulate a comprehensive policy towards Central Asia in general and Kazakhstan in particular. The real

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challenge, therefore, is to concretise the trust into mutually beneficial and lasting relationship. However, much depends on how fast New Delhi and Astana go beyond flashy diplomatic fandango to understand the commonality of their interests and how far they realize that their mutual interests intersect.

## Notes

- <sup>1</sup> Set up in 1997, Kazatomprom is Kazakhstan's state owned company. It commands all uranium exploration and mining as well as other nuclear related activities, including exports and imports of nuclear materials.
- <sup>2</sup> For details see, <http://www.world-nuclear.org/info/inf89.html> Accessed on 18th March 2009.
- <sup>3</sup> Government of India, *Economic Survey 2007-08*, New Delhi, Oxford University Press, chapter 9, pp. 206-17
- <sup>4</sup> Kakodkar, Anil. "Cutting a Fair Deal", *The Indian Express*, New Delhi, 8 July 2008.
- <sup>5</sup> India is struggling on the Turkmenistan- Afghanistan-Pakistan-India (TAPI) gas pipeline project as well due to issues relating to gas reserves, transit fees and security of gas supply.
- <sup>6</sup> Pakistan's status as a stable country came under serious doubt on 3<sup>rd</sup> March 2009, when Sri Lankan Cricket team was attacked by terrorists in Lahore despite tight security. The team bus carrying Sri Lanka's cricketers to Gaddafi stadium in Lahore was fired upon by masked gunmen.
- <sup>7</sup> "IPI pipeline faces uncertain future". *The Hindu*, New Delhi, 5 January 2009.
- <sup>8</sup> Stobdan, P. 2009, "India and Kazakhstan Should Share Complimentary Objectives", *Strategic Analysis*, Vol. 33, Issue 1, p 3.
- <sup>9</sup> "India seeks stakes in four oilfields in Kazakhstan" *Financial Express*, New Delhi, 18 March 2009.
- <sup>10</sup> "NTPC plans power projects in Kazakhstan to secure coal assets", at <http://www.inform.kz/showarticle3.php?lang=eng&id=177524>
- <sup>11</sup> Ibid.
- <sup>12</sup> Ibid
- <sup>13</sup> Canada is apprehensive on nuclear trade with India. Nuclear commerce with India has not been a good experience for Canada, as India used the civilian nuclear facilities imported from Canada to conduct its nuclear tests in 1974.
- <sup>14</sup> India's concerns on terrorism have been addressed in CICA Summits. New Delhi has hosted a meeting of Senior Officials Committee (SOC) meeting of CICA on February 21, 2009.



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