# Thorium Power News Update February, 2008

#### Letter from the CEO

Dear Stockholders:

We are pleased to share this latest news update, which includes company news as well as industry-related developments.

# Latest Company News

As reported in *World Nuclear News* and other publications, we announced the appointment of Dr. Hans Blix, the world renowned nuclear authority and former director of the IAEA, as a Senior Advisor. As detailed in the announcement, Dr. Blix works closely with Thorium Power's team of experts in nuclear energy deployment and technology, especially within the company's international relations practice. Elsewhere, we were pleased to see the recent coverage in *The Business Standard*, India's leading business publication. Titled "India should be a major player in the Nuclear Renaissance," the article extensively quotes from an interview with Thorium Power's Dennis Hays: "Properly-designed thorium fuels offer zero greenhouse gas emission while directly addressing two major concerns about uranium. Thorium Power's fuels do not produce weapons-usable material in its spent fuel and the amount of waste is greatly minimizing in terms of volume, weight and radiotoxicity. We hope to have the first commercial contract in 2010 and expect to see the first commercial thorium-fueled reactor within the next few years."

# **Industry News and Developments**

In Europe, we witnessed a number of key developments: The Norwegian Ministry for Foreign Affairs concluded that the country would contribute \$5 million to help develop an international reserve of nuclear fuel controlled by the International Atomic Energy Agency (IAEA). Separately, the Norwegian Thorium Committee urged more research into thorium and recommended that the thorium option be kept open in so far it represents an interesting complement to the uranium option to strengthen the sustainability of nuclear energy. In other news from Europe, the Council of the European Union approved the European Strategic Energy Technology Plan, which proposes research into nuclear energy. Britain, meanwhile, became the 21st member of the Global Nuclear Energy Partnership (GNEP), a move that follows the recent pro-nuclear urgings of John Hutton, the Business and Enterprise Minister. With regards to the US-India deal, India and the IAEA have moved a step closer to finalizing the agreed of the safeguards agreement, having concluded the fifth round of talks in Vienna.

Once again, these latest developments support our unique positioning as a source of solutions to address the major industry concerns – how to solve proliferation, reduce waste and improve profitability.

Very Truly Yours, Seth Grae Chief Executive Officer

# Thorium Power in the news

The Business Standard – India should be a major player in the nuclear renaissance (02.10.2008) – In an interview with India's leading business publication, Thorium Power's Dennis Hays outlines the company's business strategy, key objectives and mission: "Properly-designed thorium fuels offer zero greenhouse gas emission while directly addressing two major concerns about uranium. Thorium Power's fuels do not produce weapons-usable material in its spent fuel and the amount of waste is greatly minimizing in terms of volume, weight and radiotoxicity. We hope to have the first commercial contract in 2010 and expect to see the first commercial thorium-fueled reactor within the next few years."

**World Nuclear News – Blix to advise Thorium (02.05.2008)** – The leading industry trade journal reports on Thorium Power's appointment of Dr. Hans Blix, the world renowned nuclear authority and former director of the IAEA, as a Senior Advisor. As detailed in the announcement, Dr. Blix will work closely with Thorium Power's team of experts in nuclear energy deployment and technology, especially within the company's international relations practice.

# General industry news

**World Nuclear News – Norway pledges support for international nuclear fuel bank** (02.29.2008) – WNN reports that the Norwegian minister for foreign affairs announced that the country would contribute \$5 million to help develop an international reserve of nuclear fuel controlled by the International Atomic Energy Agency (IAEA).

**World Nuclear News – European energy plan silently supports nuclear (02.29.2008) –** The industry journal reports that The Council of the European Union has approved the European Strategic Energy Technology Plan, which proposes research into nuclear energy, including a sustainable nuclear fission initiative focusing on the development of Generation IV reactor technologies.

**World Nuclear News – UK joins Global Nuclear Energy Partnership (02.26.2008)** – The industry journal reports that the UK is now the 21st member of the Global Nuclear Energy Partnership (GNEP), after business and enterprise minister John Hutton accepted an invitation to sign the scheme's Statement of Principles. The development follows Hutton's recent announcement about the importance of nuclear power to Britain's future energy needs.

**World Nuclear News** – **Norway's thorium option 'should be kept open' (02.18.2008)** – Commenting on the recent findings of the Norwegian Thorium Committee, WNN notes that the report recommends that "the thorium option be kept open in so far it represents an interesting complement to the uranium option to strengthen the sustainability of nuclear energy."

The Chattanooga Times Free Press – Environmentalists warming up to nuclear energy options (02.27.2008) – The daily newspaper reports on the environmental community's increasingly positive stance on nuclear power, and it also underscores the increasingly favorable climate in the political and public arenas. As noted in the article, an August 2006 survey by Bloomberg and the *Los Angeles Times* found 61 percent of respondents said they support the increased use of nuclear power. Meanwhile, a January 2007 by United Press International and Zogby found 62 percent either "strongly agree" or "somewhat agree" that new nuclear plants should be built.

# India-US nuclear agreement

**AFP – India must pass by July key India-US nuclear deal (02.20.2008)** – The wire service reports on the US-India deal and includes commentary from Sen. Biden and Sen. Kerry, two of three Democratic senators who recently visited New Delhi. The senators note that India must complete all of the steps needed to conclude the nuclear technology deal with Washington to ensure the US Congress approves it before the presidential polls. The article also notes that "PM

Singh "appeared to be still optimistic" about the bill's clearance by India despite opposition from the left parties."

**The Hindu – India-IAEA talks progress; consultations to continue (02.29.2008)** – The leading newspaper reports that India and the IAEA have moved a step closer to finalizing the 'agreed text' on India-specific safeguards agreement, a key requirement under the Indo-US deal. According to the article, considerable progress was made during their fifth round of talks at the IAEA's headquarters in Vienna.

## Bloomberg News – U.S. Plans to Work with India to Implement Nuclear Agreement

(02.13.2008) – The wire service reports on the latest developments from the US-India deal, noting that the U.S. has committed to ongoing consultations with the Indian government to implement the nuclear energy accord. As noted in the article, the Bush administration is trying to expedite the deal before the U.S. presidential election.

### Norway pledges support for international nuclear fuel bank World Nuclear News February 29, 2008

The Norwegian minister for foreign affairs, addressing an international disarmament conference in Oslo, announced that the country would contribute \$5 million to help develop an international reserve of nuclear fuel controlled by the International Atomic Energy Agency (IAEA).

The concept of a multilateral nuclear fuel bank has been under discussion for many years, and the IAEA convened an expert group look at multilateral approaches to the nuclear fuel cycle in 2004. It recognised that providing assurance of nuclear fuel supply to countries that would voluntarily forego developing such technologies themselves would be a key element in limiting the spread of sensitive nuclear technologies and increasing non-proliferation assurances. Countries could be confident that they would be able to obtain nuclear fuel for electricity generation without the risk of their supply being disrupted for political reasons, and would not be driven to invest in their own national uranium enrichment capabilities with possible additional proliferation risks.

"Norway is committed to building support for an international consensus on practical steps to support global non-proliferation and disarmament goals," said the country's minister of foreign affairs Jonas Gahr Støre. "This nuclear fuel reserve is one such concrete and effective step in this direction. We will engage in building broad international support and funding for the initiative."

The nuclear fuel reserve initiative was launched in September 2006 by the non-profit Nuclear Threat Initiative (NTI), which is co-chaired by philanthropist CNN founder Ted Turner and former US Senator Sam Nunn. President George Bush signed a US funding allocation into law on 26 December 2007. It matches a September 2006 commitment of \$50 million from the NTI. The NTI contribution is contingent on two conditions that must be met by September 2008. The IAEA must take the necessary actions to approve the establishment of the reserve, and one or more member states must contribute an additional \$100 million - or the equivalent value of low-enriched uranium (LEU) - in funding for the reserve.

With \$105 million now allocated for the plan, a remaining \$45 million needs to be raised to reach the plan's stated target of \$150 million. The Norwegian financial commitment is the first non-US contribution put towards the NTI plan. IAEA director general Mohamed ElBaradei said: "I welcome Norway's generous contribution to the establishment of a nuclear fuel reserve under IAEA auspices." He added, "This is an important first step towards establishing an equitable multilateral framework for the nuclear fuel cycle that provides assurances against supply disruptions and strengthens the nuclear non-proliferation regime."

The NTI proposal of nuclear fuel bank under IAEA auspices is one among several multilateral nuclear approaches currently under consideration. A Russian proposal seeks the establishment of a joint enrichment facility at the country's Angarsk Electrolysis Chemical Complex, with the inclusion of an IAEA controlled LEU reserve, while a German plan calls for multilateral uranium enrichment under the auspices of the IAEA and with a uranium enrichment plant in an extraterritorial area provided by a third-party state. The NTI plan calls for a dedicated LEU stockpile to be owned and administered by the IAEA. Matters of the fuel bank's location, organization, and conditions for access are left to the agency and its member states to decide upon.

Norway itself does not have any nuclear power plants and has not announced any plans to construct any. However, investigations are underway into the potential exploitation of Norway's significant resources of thorium, which can be used as an alternative to uranium for fuelling reactors.

#### Environmentalists warming up to nuclear energy options By Herman Wang, Washington Bureau The Chattanooga Times Free Press February 27, 2008

WASHINGTON, DC - In the wake of the Chernobyl disaster and Three Mile Island scare nearly three decades ago, the environmental movement took up the cause against nuclear proliferation with the rallying cry, "No new nukes!"

But with rising energy prices and worries about global warming, some environmentalists are shifting their position on nuclear power, viewing it as a viable alternative to polluting coal-fired plants.

"All we're doing is saying it's on the table," said Tony Kreindler, a spokesman for Environmental Defense Fund, a nonprofit environmental advocacy group. "Our fundamental position in all of this is really that the market should sort out what the best technologies are. Nuclear is certainly a possibility."

Many environmental organizations, however, remain opposed to nuclear power, citing the high costs of getting reactors online and problems with disposing of radioactive waste. Other critics point out that nuclear reactors may become terrorist targets and that spent fuel can be reprocessed into nuclear weapons.

While all environmental groups agree on the need to curb emissions, opponents of nuclear power say the government subsidies and investments in the industry would be better spent on increasing efficiency in appliances or supporting emerging renewable energy technology, such as biofuels, solar and wind.

"I think we can get a lot bigger bang for the buck on energy efficiency," said Marty Hayden, legislative director of EarthJustice, which opposes building new nuclear plants. "Moving renewables forward in the near-term is more important and should be where the money goes."

#### TVA PLANS TO BOOST NUCLEAR OUTPUT

Polls indicate Americans are growing more supportive of the nuclear industry.

An August 2006 survey by Bloomberg and the Los Angeles Times found 61 percent of respondents said they support the increased use of nuclear power to slow projected global warming, while only 30 percent rejected it. Seventy-one percent of 18-to-29-year-olds supported nuclear energy, compared to 59 percent of respondents 30 and over.

A poll in January 2007 by United Press International and Zogby found 62 percent either "strongly agree" or "somewhat agree" that new nuclear plants should be built. No new nuclear reactors have been built in the United States since the 1979 accident at Three Mile Island in Pennsylvania.

"I think what we're seeing is that as people are becoming more aware of the problems of air pollution and global warming, people are getting a lot more interested in nuclear as a solution," said Jonathan Gilligan, a political science professor at Vanderbilt University who studies environmental policy.

That's exactly how the nuclear industry is promoting itself, as Congress debates climate change legislation that could place carbon emissions caps on power plants.

Tennessee and Georgia lawmakers have been supportive of the industry, saying nuclear power plants produce almost no carbon dioxide, a greenhouse gas emitted by burning fossil fuels, such as coal.

Just over half of the country's electricity is generated from burning coal, while nuclear generates about 20 percent.

"For decades, we moved away from nuclear. That has hurt our country," said U.S. Sen. Bob Corker, R-Tenn., a member of the Senate Energy Committee. "We need to step up the pace as quickly as possible. I think we're going to see a tremendous increase in nuclear usage, and fortunately Tennessee is positioned to be a major part of that."

The Tennessee Valley Authority, which supplies much of the energy to Tennessee and Georgia and operates three nuclear plants, currently generates 30 percent of its electricity from nuclear power and has plans to increase that percentage by potentially bringing new reactors online.

Given the favorable political climate for nuclear power, many energy experts say the expansion of nuclear power appears inevitable.

"I personally would love to see wind and solar get adopted, but those technologies are a ways off," Dr. Gilligan said. "Nuclear's probably going to have to play a part in between until we can get those technologies viable."

#### European energy plan silently supports nuclear World Nuclear News February 29, 2008

The Council of the European Union has approved the European Strategic Energy Technology Plan, which proposes research into nuclear energy, without mentioning nuclear energy in their approval document.

The European Strategic Energy Technology Plan (SETP) aims to speed up development of clean, efficient and low-carbon technologies, with strong participation from private sector industries. The plan proposes six European Industrial Initiatives, including a sustainable nuclear fission initiative focusing on the development of Generation IV reactor technologies.

The Council, which is made up of energy ministers from the individual member states, agreed to approve the plan, but only after finding compromise language to gain approval from the Austrian minister. No mention of the nuclear initiative was made and the word "nuclear" did not appear in the Council's conclusions. Instead the document referred to 'low carbon technologies' and 'advanced energy technologies', in addition to frequent references to renewable technologies.

Slovenian Minister of the Economy, Andrej Vizjak, President of the EU Council, said that Martin Bartenstein, Austrian Federal Minister of Economics and Labour, would submit a special declaration that would detail the Austrian position. Vizjak claimed the Council approval of the plan was a "major success of the Slovenian presidency".

European Commissioner for Energy Andreas Piebalgs stressed that the Council had approved the plan and the plan, including all six industrial initiatives, was unchanged.

The Council will discuss financing for low carbon options in the SETP later in the year, when Austrian opposition to nuclear energy is likely to feature again.

#### UK joins Global Nuclear Energy Partnership World Nuclear News February 26, 2008

The UK has become the 21st member of the Global Nuclear Energy Partnership (GNEP), after business and enterprise minister John Hutton accepted an invitation to sign the scheme's Statement of Principles.

The UK's move from an observer to an active participant in GNEP was expected to come sometime this year but surprised observers in coming just weeks after the country announced a new pro-nuclear policy. It was on 10 January that Hutton announced to the country that nuclear power was vital to Britain, and invited private enterprise to build nuclear power plants to help fill an energy gap that grows to 30-35 GWe by around 2020.

Hutton said: "With a new generation of nuclear energy now set to be part of the UK's future energy mix, the UK is in position to play a role in this global initiative." John McNamara of the UK's Nuclear Industry Association expressed his organization's support for Hutton's move, adding: "The UK was the first country to develop a civil nuclear generating industry and it is right that the UK supports this important international partnership at a time of worldwide renaissance in nuclear."

A government announcement said Hutton would also meet 'US energy companies to discuss potential investment in new nuclear build in the UK' while in Washington. Until now only European utilities had been in the spotlight for significant investment.

Signing the document in Washington DC, Hutton said: "The UK shares in the vision of improved non-proliferation and nuclear waste management and recognises the real benefits of initiatives such as GNEP to implement the right solutions and further develop international standards and best practice." On the US side, energy secretary Sam Bodman said, "As a long-standing global leader in the field of nuclear energy, the United Kingdom brings to GNEP expertise and knowledge that we can all benefit from."

The UK had been a notable absentee from GNEP ranks, and Bodman said the country's addition brought "great momentum to GNEP". Now the UK has joined, the partnership includes all the countries that pioneered nuclear power in the 1950s, all the permanent members of the UN Security Council, all the major uranium exporters and - with the exception of India - all the countries with reprocessing facilities.

#### Norway's thorium option 'should be kept open' World Nuclear News February 18, 2008

Current knowledge of thorium-based energy production and the geology of the natural resource are insufficient to determine the potential value to Norway, according to a report to government.

The report, entitled *Thorium as an Energy Source - Opportunities for Norway*, was commissioned by the government in early 2007. The Research Council of Norway (RCN) was given the responsibility to organize this study and the Thorium Report Committee was established in March 2007. The committee was chaired by Mikko Kara, executive vice president for the VTT Technical Research Centre of Finland.

The committee was given the mandate to produce a report establishing "a solid knowledge base concerning both opportunities and risks related to the use of thorium for long-term energy production." In addition, the study was to "assess Norway's possibilities for participating in potential future development of thorium as an energy source."

The use of thorium-based fuel cycles has been studied for about 30 years, but on a much smaller scale than uranium or uranium/plutonium cycles. Basic research and development has been conducted in Germany, India, Japan, Russia, the UK and the USA. Test reactor irradiation of thorium fuel to high burnups has also been conducted and several test reactors have either been partially or completely loaded with thorium-based fuel. So far, only India is taking concrete steps to develop thorium-based nuclear power generation.

The report states: "According to the US Geological Survey, Norway has one of the major thorium resources in the world. The listed resources, i.e. 170,000 tonnes, have a potential energy content which is about 100 times larger than all the oil extracted to date by Norway, plus that of the remaining reserves." It adds, "Most of the thorium enriched minerals are situated within three main regions: the Fen Complex in Telemark County, the Permian Oslo Province, and on the southeast coast of Norway, in the Kragerø and Langesund area."

However, the study concluded that: "Due to a lack of data, it seems impractical to develop meaningful cost projections for any nuclear energy system using thorium. It seems obvious that the contribution of the raw material to the cost structure of the electricity generated will be small, comparable to that of the uranium cycle or even lower. The main economical challenges to the development of a thorium based energy production will be the acquisition of funding necessary to carry out the required research and development."

The report recommends that the "potential contribution of nuclear energy to a sustainable energy future should be recognized." In addition, the committee said that an investigation into Norway's thorium resources should be conducted in order "to assess whether thorium in Norwegian rocks can be defined as an economical asset for the benefit of future generations." It also suggests that testing of thorium fuel in the Halden Reactor in Norway should be encouraged. The OECD Nuclear Energy Agency's (NEA's) Halden Reactor Project has been in operation for more than 49 years. It is supported by approximately 100 organizations in 18 countries.

The report also suggests that Norway should strengthen its participation in international collaborations by joining the Euratom fission program and the Generation IV International Forum (GIF) program on Generation IV reactors suitable for the use of thorium. It also suggests that Norway should join the European effort in the development of an Accelerator Driven System (ADS) using thorium.

The committee recommends that "the thorium option be kept open in so far it represents an interesting complement to the uranium option to strengthen the sustainability of nuclear energy."

On receiving the report, Norway's minister of petroleum and energy, Åslaug Haga, said: "I register that the report neither provides grounds for a complete rejection of thorium as a fuel source for energy production, nor does it offer enough reason for embracing it as such. The government's viewpoint has not changed, meaning that there exist no plans to allow construction of nuclear power plants in Norway."

She added, "The government wishes to prioritise the development and deployment of renewable energy sources like bioenergy and wind power, in particular offshore wind turbines. I want as many as possible to have the opportunity to have their say in this matter, and have therefore decided that we will consult the broader public through a hearing."

#### India must pass by July key India-US nuclear deal AFP February 20, 2008

NEW DELHI (AFP) — India must complete by July all steps needed to conclude a nuclear technology deal with Washington to ensure the US Congress approves it before the presidential polls, three US senators said.

The India-US civilian nuclear energy deal has been held up due to stiff opposition from Prime Minister Manmohan Singh's Communist allies who prop up the minority Congress-led government.

"Time is of the essence," said Joseph Biden, one of three Democratic senators who were on a one-day visit to New Delhi after monitoring Pakistan's parliamentary elections earlier this week.

The pact still needs approval from the International Atomic Energy Agency to place India's civilian nuclear reactors under UN safeguards as well as from the 45-nation Nuclear Suppliers Group, which regulates global civilian nuclear trade.

The agreement, which would give New Delhi crucial access to civilian atomic technology, requires final approval by the US Congress where it currently enjoys bipartisan support.

But Washington officials say the deal is running out of time with a tight 2008 legislative calendar ahead of November's US presidential elections.

"If we don't have the deal back with us clearly prior to the month of July it will be very difficult to ratify the deal -- not on the merits (of the deal) but on the mechanics on which our system functions," Biden told a news conference.

He warned that if the deal did not reach the US Congress in time, "it is highly unlikely the next president will be able to present the same deal.

"It will be renegotiated," he said.

Biden's warning came a week after India's most prominent Marxist politician Prakash Karat said his party wanted to see India and the United States hold fresh talks on the nuclear pact under a new US administration.

India tested nuclear weapons in 1974 and 1998 and, as a result, is banned from buying fuel for atomic reactors and related equipment.

India's government, which says the deal is vital to keep its energy-hungry economy growing, has agreed to open 14 of India's 22 reactors to international inspections in return for technology and atomic plants.

But the Communists oppose the deal, saying it threatens India's nuclear weapons programme and allies the country too closely with the United States.

The deal, first agreed to by US President George W. Bush and Singh in 2005, is regarded by the governments of the two nations as a cornerstone of new, warmer Indo-US ties.

Former US presidential candidate John Kerry, who accompanied Biden along with US Senator Chuck Hagel, said New Delhi should clear the decks for the deal as soon as possible. "July is the end -- it's only an even chance even then" that the deal will be cleared by the US Congress, Kerry said.

According to Biden, Singh "appeared to be still optimistic" about the bill's clearance by India despite opposition from the left parties.

#### India-IAEA talks progress; consultations to continue The Hindu February 29, 2008

Mumbai (PTI): India and IAEA have moved a step closer to finalising the 'agreed text' on Indiaspecific safeguards agreement, a key requirement under the Indo-US deal.

Considerable progress was made during their fifth round of talks that ended in Vienna on Thursday night, International Atomic Energy Agency spokesperson said. Consultations would continue, he said.

"Considerable progress has been achieved during the round of negotiations about a safeguards agreement between the IAEA and India held this week in Vienna. Consultations between India and the Agency will continue," the IAEA spokesperson told PTI in an e-mail response.

The consultations originally scheduled to conclude on Wednesday were extended by a day, IAEA sources said.

Ravi Grover, Director, Strategic Planning in the Department of Atomic Energy, and India's Ambassador to Austria Saurabh Kumar led the Indian delegation at the talks.

Articulating India's position, Foreign Secretary Shivshankar Menon has made it clear that India was "not looking at a deadline" but was trying to wrap it up as soon as possible.

Earlier, Atomic Energy Commission Chairman Anil Kakodkar had said that India had to finalise the agreement with IAEA at the earliest. "It has to be correctly done and it has to meet all the requirements and so it's a long technical process," he had said.

"There are several steps involved. We have to move step by step," according to Kakodkar.

#### U.S. Plans to Work with India to Implement Nuclear Agreement By Archana Chaudhary and Bibhudatta Pradhan Bloomberg News February 13, 2008

Feb. 13 (Bloomberg) -- The U.S. says it will work with the Indian government to implement a stalled nuclear energy accord between the two nations, a key element of President George W. Bush's foreign policy.

``This agreement is one that we have done very carefully," Dana Perino, White House spokeswoman, said at a press briefing yesterday. ``We are trying to work with India and will continue to work with them to make it happen."

The agreement, first presented in 2005, has been delayed by opposition from India's communist parties, key allies of Prime Minister Manmohan Singh's government. The Bush government is trying to expedite the deal before the U.S. presidential election scheduled for later this year.

The accord will allow India to receive nuclear material and technology for its power plants, ending three decades of isolation since the nation conducted its nuclear tests. The communists say the agreement will tie India, which hasn't signed the Nuclear Non-Proliferation Treaty, to U.S. interests for four decades, the tenure of the agreement.

Under the proposed agreement, the U.S. would accept that India, which exploded nuclear devices in 1974 and 1998, operates its civilian and military programs outside the Nuclear Non-Proliferation Treaty.

Leftist opposition has delayed negotiations with the United Nation's International Atomic Energy Agency, or IAEA, and the Nuclear Suppliers Group, an informal alliance of 45 countries that supply fissile material and technology.

Singh's allies don't believe there is enough time to pass the deal before the U.S. election in November and the Indian national election, which needs to be called before May 2009.

# **IAEA Negotiations**

"The government is still negotiating with the IAEA," said Madhukar Pandhe, a politburo member of the Communist Party of India (Marxist). "After that, they will place the views of the IAEA before us. If the left parties reject the proposal, the government will not pursue it. This is the understanding between us and the Congress Party."

The IAEA must approve a safeguards agreement allowing for international inspection of India's civilian nuclear plants. After endorsement by the IAEA and the Nuclear Suppliers Group, the agreement would be subject to ratification by the U.S. Congress.

``My opinion is that if this is not processed in the present Congress, it is unlikely this deal will be offered again to India," David Mulford, U.S. ambassador to India, said in an interview with the CNN-IBN television news network on Feb. 10. ``It certainly would not be revived and offered by any administration, Democrat or Republican, before 2010, which is after the life of this particular administration in India."

# Parliamentary Support

Prime Minister Singh's multiparty grouping has 226 seats in the 545-seat lower house of parliament and relies on the 59 Communist members for a majority.

Singh is pushing ahead with the agreement so that India can plug an energy shortfall, acquiring reactors from companies such as Areva SA, the world's largest maker of nuclear power stations, and General Electric Co. India plans to build 40,000 megawatts of nuclear power capacity by 2020, equivalent to one-third of current generation.

The agreement legitimizes India's status as a nuclear power, while opening up the market for suppliers of fissile material, technology and equipment.