

India and Nuclear Power

Examining Socio-Political Challenges to Energy Security

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Energy Security for India

- Global energy politics and oil supply security for India
- Political volatility in producing regions, price volatility, threats from non-state actors threatens secure oil supply to India
- Increasing oil and natural gas consumption and growing demand for electricity are major concerns
- Trans-national natural gas pipelines (IPI, TAPI, MBI) are yet to materialise
- Coal consumption and related emission- threat to environmental health

Role of Nuclear Power in India's Energy Security

- Nuclear power is important
 - To achieve the socio-economic targets (economic growth, eradicating poverty)
 - To achieve the long-term energy needs of various sectors
 - To preserve the environment for the future generations
 - Meet the growing demand for electricity

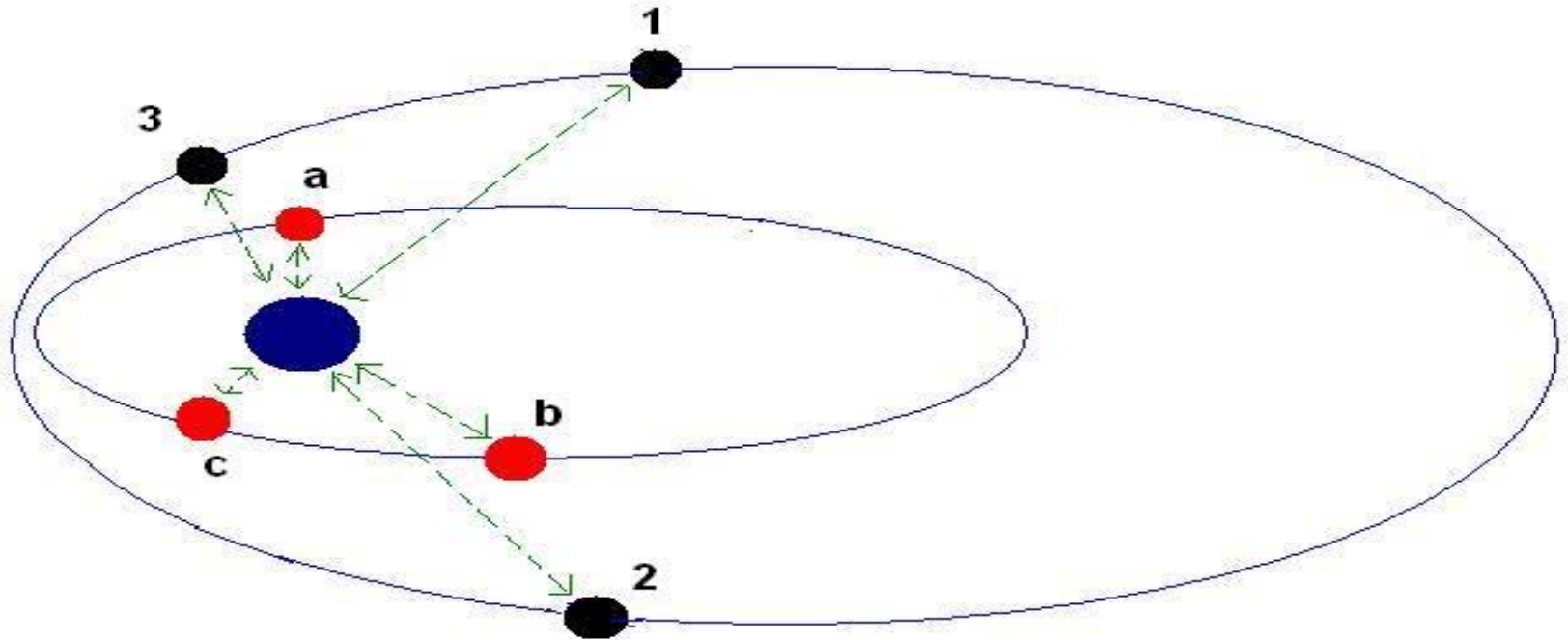
Nuclear chronology of India

- Pre-1964:- Nuclear development in rudimentary stage, progressed under Bhaba's guidance.
- 1964 and after:- following China's nuclear test India evinced a shift to weponisation, leading to peaceful test in 1974.
- Post 1974: Worldwide nuclear energy development following 1973 Arab oil embargo, India faced nuclear embargo
- 1998: Budha smiles again. Sanctions on India and widespread criticism on nuclear program
- 2005: India US energy cooperation deal of July 18.

Challenges to Nuclear Power Development in India

- External
 - Sanctions
 - Lack of Advanced Technology
 - Lack of overseas supply of Uranium
- Domestic
 - Domestic political consensus
 - Public opinion
 - Radiation and waste management issues

Orbits of Energy Security



Conclusion

- The development of nuclear energy faces complex socio-political challenges in India.
- To avoid these challenges a strong foundation for the development of nuclear energy in the country should be built on transparency, efficient technology and trust of the public.
- India's current nuclear technology base is largely indigenous, and like many other strategic sectors it lacks a vibrant private sector or foreign participation—a lacuna intended to be redressed by the India-US nuclear deal.
- This requires promotion of nuclear energy debate in public, generation of awareness about nuclear energy, and creating conducive environment for global transfer of nuclear technologies and investments in the nuclear energy sector.

Thank You

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