Standing Committee Report Summary

Tidal Power Development in India

- The Standing Committee on Energy (Chair: Mr. Rajiv Ranjan Singh) submitted its report on the subject "Tidal Power Development in India", in August 2021. Tidal energy refers to energy produced from the movement of ocean tides. Key observations and recommendations of the Committee include:
- **Assessing the potential of tidal energy:** The Committee noted that there are three main types of ocean energy: (i) wave, (ii) tidal, and (iii) ocean-thermal. The theoretical potential of tidal and wave energy is 12.5 gigawatts and 41.3 gigawatts, respectively. The potential for ocean-thermal has not been estimated till date. The committee noted that the above potential does not necessarily constitute practically exploitable potential. Hence, the Committee recommended that the central government should reassess the exploitable potential tidal, wave, and ocean energy.
- **Cost of tidal power plant:** The Committee noted that two tidal power plants were shut down in the past because of high cost. These are: (i) 3.75 megawatt (MW) plant in West Bengal (had cost of Rs 63.5 crore per MW), and (ii) 50 MW plant in Gujarat (had cost of Rs 15 crore per MW). It recommended that the central government should reassess the current cost of tidal power to determine its economic viability and benefits in long term.
- **Setting up a pilot tidal power project:** Tidal energy is not included in the 2022 renewable energy target (175 gigawatts) of India. However, the Committee noted the submission by the Ministry of New and Renewable Energy that all renewable sources of energy will be eligible for the 2030 target. The Committee recommended that the central government should set up a pilot tidal power project. The project should be set up at a cost-effective location such as the Gulf of Kutch.
- **Environmental impact of tidal power plant:** The Committee observed that there is no study on the assessment of the environmental and ecological impact of a tidal power plant. The power plants may environmentally impact a large area upstream and downstream. It recommended that the central government should assess the environmental impact and ecological sustainability of a tidal power plant.
- **Research and development:** The Committee noted that no funds have been spent by the central government on the development of tidal power. Further, it observed that the fund allocated to the Ministry of New and Renewable Energy or research and development have been reduced significantly at the revised stage in the last few years. The Ministry could not completely utilise even the reduced amount in these years (2017-20). The Committee recommended that the central government should not reduce the funds for research. The central government should provide significant support for un-harnessed sources such as tidal energy.

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