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LOCALIZATION AND QUALIFICATION OF SUPPLIERS - SOME OPENING REMARKS

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- Prime Minister Modi, 25th September 2014: "Make in India"
- Indian Union Cabinet Decision, 17th May 2017: 10 New Indigenous Reactors: \$11B, 33000 jobs
- India has 22 operating Nuclear Power Plants: 6780 MWe
- India has 9 Plants under construction: 6700 MWE
- India has given approval to 10+2 New Plants (in 2017): 9000 MWE
- India expects nuclear capacity at the end of 15th Plan (2037): 22,480 MWe
- NPCIL has an active outsourcing program:
 - OUTSOURCING TO 2,000 SUPPLIER FIRMS IN 10 WORK PACKAGES
- SOME NPCIL PROCUREMENTS RELATED TO NEW PLANT CONSTRUCTION:
 - Multiple contracts worth \$500M+ for Gorakpur, HR, NPP
 - MULTIPLE CONTRACTS WORTH \$300M+ FOR KUDANKULAM, TN, NPP
 - EXAMPLES OF RECENT PROCUREMENT WINNERS: BGR ENERGY SYSTEMS, BHEL, CROMPTON GREAVES POWER, GODREJ & BOYCE, KSB PUMPS, LARSON & TOUBRO, RELIANCE INFRASTRUCTURE
- However, there are some disturbing trends
 - In the $11^{\rm TH}$ Plan (2007-2012), the electricity generation by nuclear power was only 109,642 million units (MU) as against the plan of 163,395 MU, a reduction of 30 %
 - In the $12^{\rm th}$ Plan (2012-2017), comparable figures are 183,488 MU versus 241,348 MU, a drop of 24 %
 - Some of the plants under construction are slipping on their schedule
 - Government publicly attributed it to lack of adequate fuel supply, and delay in supply of parts being manufactured by the private sector, especially for Kakrapur 3/4 and Rajasthan 7/8 reactors
- But other troubling signs abound: fbr delayed until 2020 and possibly until 2022, Kundankulum 3/4 payments to procure hardware in Russia momentarily held back.
- SOME DOMESTIC NUCLEAR SUPPLIERS COMPLAIN OF BEING UNDER STRESS DUE TO UNDERUTILIZATION OF THEIR FACILITIES
- OVERCOMING BARRIERS TO SUPPLY CHAIN GROWTH (VIF REPORT, 2019:
 - ASSURED DEMAND SCHEDULE AND CONTINUITY OF WORK (BACKLOG)
 - SUSTAINING COMPETITION
 - TRANSPARENCY
 - BALANCING SUPPLY CHAIN INFRASTRUCTURE TO ENSURE FULL LOADING
 - TRAINED HUMAN RESOURCES, NUCLEAR SAFETY CULTURE
 - IMPROVEMENT IN MANAGEMENT SYSTEMS
- Some questions for domestic nuclear suppliers:
 - STRESS CREATED BY UNDER-UTILIZATION OF DOMESTIC FACILITIES?
 - WHAT ARE PERCEIVED TO BE THE MOST PUNITIVE BARRIERS TO HEALTHY BALANCE SHEETS?
 - WHAT IS NEEDED FOR EXPANDING VENDOR CAPABILITIES IN ADVANCED MANUFACTURING ESPECIALLY IN AREAS LIKE PV, PIPING, NUCLEAR ISLAND STRUCTURES, 1&c, RTC?
 - FOREIGN COLLABORATION WILL THAT HELP?
 - FOREIGN ACQUISITION (BHEL-SKODA, 2009) WILL THAT HELP?
 - NPCIL JV'S WITH PSU'S ANY IMPACT ON MANUFACTURING SUPPLY CHAIN?
 - DOVETAILING EXISTING SUPPLY CHAIN TO SUPPORT LOCALIZATION OF FOREIGN REACTORS CONSTRUCTION:
 - PROGRESSES TO DATE SUCCESSES AND FAILURES?
 - PROGNOSIS FOR THE FUTURE?

THANK YOU.