

**GOVERNMENT OF INDIA  
MINISTRY OF POWER**

**LOK SABHA  
UNSTARRED QUESTION NO.1725  
TO BE ANSWERED ON 11.02.2021**

**ONGOING INTEGRATION OF GRIDS**

**1725. SHRI P.P. CHAUDHARY:  
SHRI KAUSHAL KISHORE:**

**Will the Minister of POWER  
be pleased to state:**

- (a) the details of One Nation-One Grid-One Frequency policy;**
- (b) whether the One Nation-One Grid-One Frequency helps power sector and consumers and if so, the details thereof;**
- (c) the details of inter-regional transmission capacity as of now; and**
- (d) the details of update on the ongoing integration of grids?**

**A N S W E R**

**THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER, NEW & RENEWABLE ENERGY AND THE MINISTER OF STATE FOR SKILL DEVELOPMENT & ENTREPRENEURSHIP**

**( SHRI R.K. SINGH)**

**(a) : The National Electricity Policy 2005 recognized that Transmission System requires coordinated action to develop a robust and integrated power system for the country. Keeping in view the massive increase planned in generation and also for development of power market, the policy emphasized that the Central Government would facilitate the continued development of the National Grid for providing adequate infrastructure for inter-State transmission of power and to ensure that underutilized generation capacity is facilitated to generate electricity for its transmission from surplus regions to deficit regions.**

**Towards this, development of National Grid was undertaken on continuous basis for optimal utilisation of unevenly distributed resources as well as to facilitate power transfer from surplus to deficit regions across the country. In the process, five regional grids namely Eastern Region (ER), North Eastern Region (NER), Western Region (WR), Northern Region (NR) and Southern Region (SR) were integrated in a progressive manner through high capacity High Voltage Direct Current (HVDC), 765 kV/400 kV inter-regional links. Integration of regional grids resulted in formation of One Nation – One Grid – One Frequency.**

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**(b) : Yes Sir. One Nation – One Grid – One Frequency helps power sector and consumers to a great extent. It has facilitated power transfer from the resource rich areas to major load centers with reliability, security and economy. In addition, it has enabled access to low cost power as well as development of vibrant electricity market with significant reduction in price of electricity to the consumer. Besides above, it is also facilitating integration of large scale variable renewable generation capacity in the grid.**

**(c) : The present cumulative Inter-Regional transmission capacity is about 1,03,550 MW.**

**(d) : Strengthening/Augmentation of the National grid is a continuous process to meet the growing demand with reliability and security. In this direction, the Inter-Regional transmission capacity is also being enhanced. The cumulative inter-regional transmission capacity shall be enhanced to about 1,18,740 MW in next 2-3 years. Details of Inter-Regional links of about 15000 MW under implementation are as follows:**

**(i) Raigarh - Pugalur  $\pm$ 800 kV, 6000 MW HVDC Bipole**

**(ii) Vindhyachal - Varanasi 765 kV D/c line**

**(iii) Warora Pool - Warangal (New) 765 kV D/c line**

**(iv) Loop In Loop Out (LILO) of Narendra - Narendra (New) 400kV (Quad) line at Xeldam (Goa)**

**(v) Reconductoring of Siliguri - Bongaigaon 400kV D/c and Alipurduar - Salakati 220 kV D/c lines with high capacity conductor.**

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