LOK SABHA STARRED QUESTION NO.142 ANSWERED ON 05.12.2024

ELECTRIFICATION UNDER DDUGJY

*142. SHRI SELVAM G: SHRI C N ANNADURAI:

Will the Minister of POWER be pleased to state:

- (a) the objectives and salient features of the Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) and its contribution to rural electrification;
- (b) the details of the number of villages and households electrified under the scheme and the current status of electrification coverage, State/UT-wise;
- (c) the details of the number of Below Poverty Line (BPL) households provided electricity connections under DDUGJY;
- (d) the details of any special provisions for providing free or subsidized electricity connections to BPL households;
- (e) the target year for achieving 100% rural electrification under DDUGJY;
- (f) the measures taken/being taken to ensure the reliability and quality of rural electricity supply under the scheme;
- (g) the challenges faced in implementing the scheme in remote and difficult terrain along with the steps taken/being taken to address them; and
- (h) whether the Government has reviewed the impact of DDUGJY on rural development and economic activities and if so, the details thereof?

ANSWER

THE MINISTER OF POWER

(SHRI MANOHAR LAL)

(a) to (h): A Statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (h) IN RESPECT OF LOK SABHA STARRED QUESTION NO.142 FOR REPLY ON 05.12.2024 REGARDING ELECTRIFICATION UNDER DDUGJY ASKED BY SHRI SELVAM G AND SHRI C N ANNADURAL.

- (a) to (e): Government of India (GoI) launched Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) in 2014. The salient features of the scheme were as under:
- Separation of agriculture and non-agriculture feeders facilitating judicious rostering of supply to agricultural & non-agricultural consumers in the rural areas;
- ii. Strengthening and augmentation of sub-transmission &distribution (ST&D) infrastructure in rural areas, including metering of distribution transformers/feeders/ consumers end;
- iii. Rural electrification including the balance works of erstwhile Rural Electrification schemes were subsumed under DDUGJY.

As reported by the States, all the inhabited un-electrified census villages in the country were electrified by 28th April, 2018. A total of 18,374 villages were electrified during DDUGJY. The state wise details are placed at Annexure-I.

Under DDUGJY, free electricity connections were to be provided to Below Poverty Line (BPL) households. The details of BPL households electrified from FY 2015-16 till September, 2017 under DDUGJY is placed at Annexure-II.

Gol launched the Pradhan Mantri Sahaj Bijli Har Ghar Yojana (SAUBHAGYA) in October, 2017 with the objective of providing electricity connections to all willing un-electrified households in rural areas and all willing poor households in urban areas in the country. The details of households electrified since the launch of SAUBHAGYA including additional households sanctioned under DDUGJY (till 31.03.2022) is enclosed at Annexure-III.

Revamped Distribution Sector Scheme (RDSS) was launched by the Gol, in July 2021 to support Distribution utilities i.e. DISCOMs/Power Departments to improve the operational efficiencies and financial sustainability of distribution sector so as to provide quality and reliable supply of power. The household electrification works sanctioned under RDSS including Pradhan Mantri Janjati Adivasi Nyayay Maha Abhiyan (PM-JANMAN) and Dharti Aaba Janjatiya Gram Utkarsh Abhiyan (DA-JGUA) is placed at Annexure-IV.

- (f): Distribution infrastructure works worth Rs 1.17 lakh Cr. were undertaken under DDUGJY to provide quality and reliable supply of power which include works for sub-station augmentation, creation of new sub-station, feeder segregation, laying of 33kV/11kV/LT lines, new Distribution Transformers, etc. All the rural electrification works sanctioned under the scheme were completed and the scheme stands closed as on 31.03.2022.
- (g): The challenges faced include difficult topography like remote hilly regions and forests, extreme weather conditions and availability of skilled manpower for execution of the project. The steps taken to address the challenges include engineering solutions like portable substations and pre-fabricated structures. Technologies including Geographical Information System (GIS) mapping, drones and remote supervision tools enhanced project execution. Specialized training programs were conducted which equipped workers and contractors to work effectively and safely in hilly and forested areas.
- (h): Ministry conducted a third party impact assessment of DDUGJY in 2022 through M/s Ernst & Young LLP which highlighted significant positive effect that the scheme has had on business growth, education, healthcare, community safety and banking.

ANNEXURE-I

ANNEXURE REFERRED TO IN PARTS (a) TO (e) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 142 ANSWERED IN THE LOK SABHA ON 05.12.2024 REGARDING ELECTRIFICATION UNDER DDUGJY

State-wise electrification of inhabited census villages under DDUGJY from 2015-16 till 28.04.2018

| S. No. | Name of the States | Number of villages electrified |
|--------|--------------------|--------------------------------|
| 1 | Arunachal Pradesh | 1,483 |
| 2 | Assam | 2,732 |
| 3 | Bihar | 2,906 |
| 4 | Chhattisgarh | 1,078 |
| 5 | Himachal Pradesh | 28 |
| 6 | J&K | 129 |
| 7 | Jharkhand | 2,583 |
| 8 | Karnataka | 39 |
| 9 | Madhya Pradesh | 422 |
| 10 | Maharashtra | 80 |
| 11 | Manipur | 366 |
| 12 | Meghalaya | 1,051 |
| 13 | Mizoram | 54 |
| 14 | Nagaland | 78 |
| 15 | Odisha | 3,281 |
| 16 | Rajasthan | 427 |
| 17 | Tripura | 26 |
| 18 | Uttar Pradesh | 1,498 |
| 19 | Uttarakhand | 91 |
| 20 | West Bengal | 22 |
| | Total | 18,374 |

ANNEXURE REFERRED TO IN PARTS (a) TO (e) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 142 ANSWERED IN THE LOK SABHA ON 05.12.2024 REGARDING ELECTRIFICATION UNDER DDUGJY

State wise Achievement of total Below Poverty Line (BPL) Households electrified from FY 2015 till September 2017 under DDUGJY

| SI. No. | State | Total BPL Households electrified |
|---------|----------------|----------------------------------|
| 1 | Andhra Pradesh | 6,64,851 |
| 2 | Assam | 1,01,537 |
| 3 | Bihar | 19,76,832 |
| 4 | Chhattisgarh | 63,756 |
| 5 | Gujarat | 813 |
| 6 | J&K | 1,133 |
| 7 | Jharkhand | 12,391 |
| 8 | Karnataka | 98,821 |
| 9 | Kerala | 24,993 |
| 10 | Madhya Pradesh | 5,61,262 |
| 11 | Maharashtra | 59 |
| 12 | Meghalaya | 95 |
| 13 | Mizoram | 447 |
| 14 | Nagaland | 507 |
| 15 | Odisha | 1,03,857 |
| 16 | Rajasthan | 1,49,854 |
| 17 | Sikkim | 1,850 |
| 18 | Tamil Nadu | 1,976 |
| 19 | Telangana | 849 |
| 20 | Tripura | 41,759 |
| 21 | Uttar Pradesh | 10,82,986 |
| 22 | Uttarakhand | 46 |
| 23 | West Bengal | 34,450 |
| | Total | 49,25,124 |

ANNEXURE REFERRED TO IN PARTS (a) TO (e) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 142 ANSWERED IN THE LOK SABHA ON 05.12.2024 REGARDING ELECTRIFICATION UNDER DDUGJY

Number of Households electrified since the launch of SAUBHAGYA scheme including Additional Households achievement under DDUGJY

| SI. No. | Name of the States | No of Households electrified |
|---------|--------------------|------------------------------|
| 1 | Andhra Pradesh* | 1,81,930 |
| 2 | Arunachal Pradesh | 47,089 |
| 3 | Assam | 23,26,656 |
| 4 | Bihar | 32,59,041 |
| 5 | Chhattisgarh | 7,92,368 |
| 6 | Gujarat* | 41,317 |
| 7 | Haryana | 54,681 |
| 8 | Himachal Pradesh | 12,891 |
| 9 | Jammu & Kashmir | 3,77,045 |
| 10 | Jharkhand | 17,30,708 |
| 11 | Karnataka | 3,83,798 |
| 12 | Ladakh | 10,456 |
| 13 | Madhya Pradesh | 19,84,264 |
| 14 | Maharashtra | 15,17,922 |
| 15 | Manipur | 1,08,115 |
| 16 | Meghalaya | 2,00,240 |
| 17 | Mizoram | 27,970 |
| 18 | Nagaland | 1,39,516 |
| 19 | Odisha | 24,52,444 |
| 20 | Puducherry* | 912 |
| 21 | Punjab | 3,477 |
| 22 | Rajasthan | 21,27,728 |
| 23 | Sikkim | 14,900 |
| 24 | Tamil Nadu* | 2,170 |
| 25 | Telangana | 5,15,084 |
| 26 | Tripura | 1,39,090 |
| 27 | Uttar Pradesh | 91,80,571 |
| 28 | Uttarakhand | 2,48,751 |
| 29 | West Bengal | 7,32,290 |
| | Total | 2,86,13,424 |

^{*}Not funded under SAUBHAGYA Scheme

ANNEXURE REFERRED TO IN PARTS (a) TO (e) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 142 ANSWERED IN THE LOK SABHA ON 05.12.2024 REGARDING ELECTRIFICATION UNDER DDUGJY

Household Electrification sanctioned under RDSS

| SI. No. | Name of State | Sanctioned Outlay (Rs. Crores) | Sanctioned GBS (Rs. Crores) | Total Households Sanctioned | Households Electrified as on 22.11.2024 | | | | | | |
|------------|---------------------------|--------------------------------------|-----------------------------------|-----------------------------------|--|--|--|--|--|--|--|
| A. | Additional Households | | | | | | | | | | |
| 1 | Rajasthan | 459.18 | 275.51 | 1,90,959 | 64,368 | | | | | | |
| 2 | Meghalaya | 435.70 | 392.13 | 50,501 | 0 | | | | | | |
| 3 | Mizoram | 79.90 | 71.91 | 15,167 | 0 | | | | | | |
| 4 | Nagaland | 69.55 | 62.59 | 10,004 | 0 | | | | | | |
| 5 | Uttar Pradesh | 931.04 | 558.62 | 2,51,487 | 0 | | | | | | |
| 6 | Andhra Pradesh | 49.24 | 29.54 | 15,475 | 12,740 | | | | | | |
| 7 | Jharkhand | 7.47 | 4.48 | 872 | 0 | | | | | | |
| 8 | Jammu & Kashmir | 77.10 | 69.39 | 10,730 | 0 | | | | | | |
| 9 | Bihar | 238.86 | 143.31 | 35,467 | 0 | | | | | | |
| 10 | Assam | 785.55 | 706.99 | 1,27,111 | 0 | | | | | | |
| 11 | Arunachal Pradesh | 47.11 | 42.40 | 6,506 | 0 | | | | | | |
| 12 | Manipur | 214.44 | 193.00 | 36,972 | 0 | | | | | | |
| 13 | Chhattisgarh | 316.51 | 189.90 | 63,161 | 0 | | | | | | |
| | Total (A) | 3,711.65 | 2,739.79 | 8,14,412 | 77,108 | | | | | | |
| B. | Under Vibrant Vill | ages Programn | 1e | | | | | | | | |
| 1 | Himachal Pradesh* | 6.08 | 5.47 | - | - | | | | | | |
| 2 | Arunachal Pradesh | 20.18 | 18.16 | 1,683 | 0 | | | | | | |
| 3 | Uttarakhand | 13.08 | 11.77 | 1,154 | 0 | | | | | | |
| | Total (B) | 39.34 | 35.41 | 2,837 | 0 | | | | | | |
| C. | Under Pradhan Ma | antri Janjati Ad | ivasi N <mark>yaya</mark> y I | Naha Abhiyan | (PM-JANMAN) | | | | | | |
| C1 | Sanctioned under | RDSS | | | | | | | | | |
| 1 | Andhra Pradesh | 88.71 | 53.23 | 25,054 | 24,057 | | | | | | |
| 2 | Bihar | 0.28 | 0.17 | 51 | 0 | | | | | | |
| 3 | Chhattisgarh | 38.17 | 22.90 | 7,077 | 4,323 | | | | | | |
| 4 | Jharkhand | 74.13 | 44.47 | 12,442 | 62 | | | | | | |
| | | | | | | | | | | | |

| 5 | Madhya Pradesh | 143.39 | 86.02 | 29,290 | 9,445 |
|----|-------------------------|----------------|--------------|---------------|----------|
| 6 | Maharashtra | 26.61 | 15.96 | 8,556 | 9,216 |
| 7 | Rajasthan | 40.34 | 24.20 | 17,633 | 15,667 |
| 8 | Karnataka | 3.77 | 2.26 | 1,615 | 921 |
| 9 | Kerala | 0.86 | 0.52 | 345 | 309 |
| 10 | Tamil Nadu | 29.89 | 17.94 | 10,673 | 4,851 |
| 11 | Telangana | 6.79 | 4.07 | 3,884 | 3,884 |
| 12 | Tripura | 61.52 | 55.37 | 11,664 | 5,329 |
| 13 | Uttarakhand | 0.60 | 0.54 | 669 | 669 |
| 14 | Uttar Pradesh | 1.10 | 0.66 | 316 | 195 |
| | Sub Total (C1) | 516.15 | 328.31 | 1,29,269 | 78,928 |
| C2 | Under State Plan | , | | | |
| 1 | Gujarat | 0 | 0 | 0 | 6,626 |
| 2 | Odisha | 0 | 0 | 0 | 1,326 |
| 3 | West Bengal | 0 | 0 | 0 | 3,372 |
| | Sub Total (C2) | 0 | 0 | 0 | 11,324 |
| | Total (C=C1+C2) | 516.15 | 328.31 | 1,29,269 | 90,252 |
| D. | Under Dharti Aaba | a Janjatiya Gr | am Utkarsh A | bhiyan (DA-JG | UA) |
| 1 | Chhattisgarh | 11.98 | 7.19 | 2,550 | 0 |
| 2 | Maharashtra | 2.07 | 1.24 | 480 | 0 |
| | Total (D) | 14.05 | 8.43 | 3,030 | 0 |
| | GrandTotal (A+B+C+D) | 4,281.19 | 3,111.93 | 9,49,548 | 1,67,360 |

^{*} Works sanctioned for strengthening of distribution infrastructure

LOK SABHA UNSTARRED QUESTION NO.1643 ANSWERED ON 05.12.2024

CENTRAL ELECTRICITY REGULATORY COMMISSION

1643. SHRI SELVAGANAPATHI T.M.:

Will the Minister of POWER be pleased to state:

- (a) whether it is a fact that the Central Electricity Regulatory Commission has appointed a single-member bench to look into aspects relating to the preparedness of power managers and other stakeholders to meet the challenges arising on account of the sudden surge in power demand and if so, the details thereof;
- (b) whether it is also a fact that the peak power demand is expected to be 232.2 GW and if so, the steps taken/being taken by the Government in this regard;
- (c) whether it is also true that there is an additional requirement of generating resources of about 12.60 GW with a reserve requirement of 3% to meet contingency and if so, the details thereof along with the steps taken by the Government;
- (d) whether it is also true that the said Commission directed the National Load Dispatch Centre, Regional Load Dispatch Centres (RLDCs), and State Load Dispatch Centres (SLDCs) to submit a report on the implementation of steps as per the provisions of the Grid Code; and
- (e) if so, the details thereof?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

- (a): Yes. Central Electricity Regulatory Commission (CERC) in Suo Motu Petition No. 9/SM/2024 has appointed a Single Member Bench on 07.10.2024 to look into aspects relating to the preparedness of system operators and other stakeholders to meet the challenges arising on account of the sudden surge in demand for power due to seasonal variations and give recommendations with regard to the remedial measures to be taken for the future.
- (b) & (c): As per the submission made by NLDC/Grid-India to CERC in the Petition No. 9/SM/2024, the peak power demand was forecasted to reach 232.2 GW in October 2024 with the additional generation requirement of about 12.60 GW (with 3% reserve).

The following major steps have been taken by Govt. of India for meeting the increasing electricity demand in the country: -

- (a) Directions under Section 11 of Electricity Act have been issued to imported coal based plants to operate and generate power to their full capacity.
- (b) Gas based power plants of NTPC as well as gas-based generation procured through NVVN are being scheduled during high power demand period.
- (c) Steady supply of coal to all the thermal power plants is being ensured to prevent fuel shortages.
- (d) All the GENCOs including IPPs and Central generating stations have been advised to generate and maintain full availability on daily basis excluding the period of planned maintenance or forced outage.
- (e) Hydro based generation is being scheduled in a manner so as to conserve water for meeting demand during peak period.
- (f) Planned maintenance of generating units is being minimized during period of high demand.
- (g) To meet the growing electricity demand, new power generation capacity was monitored closely for timely addition.
- (h) All the States/ plants were instructed to offer any surplus generation into the market for better availability for the deficit States.

However, All India Maximum Demand in the month of October, 2024 was 219 GW which was met without any shortages.

(d) & (e): Yes. Under directions of CERC, the NLDC and RLDCs have submitted reports highlighting the activities in various time horizons as per detail at Annexure.

ANNEXURE REFERRED IN REPLY TO PARTS (d) & (e) OF UNSTARRED QUESTION NO. 1643 ANSWERED IN THE LOK SABHA ON 05.12.2024

| Activity |
|--|
| Resource Adequacy (RA) Study was conducted to assess India's generation resource adequacy amidst uncertainties such as load variations, renewable energy integration, and thermal unit outages. |
| Generation Outage Planning for maintaining adequate thermal generation capacity in respect of Annual Resource Adequacy exercise. |
| |
| <u>Comprehensive Reserves Estimation</u> of all States for assessment of the reserves needed to maintain grid stability, manage peak demand periods, and accommodate the variability associated with renewable energy sources. |
| Network Adequacy (TTC/ATC): Assessment and publication of the Total Transfer Capability (TTC) and Available Transfer Capability (ATC) for inter-regional, Intra Regional and Cross border corridors, 11 months in advance in consultation/inputs with RLDC & NLDC. |
| Resource Adequacy (RA) Study on Month ahead basis is also being carried out using same tool as being done for year ahead considering updated input. |
| <u>Transmission Outage Planning</u> for elements under NLDC purview to ensure adequate network capacity and grid security through monthly Operation Coordination Committee. |
| Network Adequacy (TTC/ATC): Review of the Total Transfer Capability (TTC) and Available Transfer Capability (ATC) for interregional, Intra Regional and Cross border corridors on month-onmonth basis, if required. |
| All India weekly demand forecast is also being carried out by NLDC/RLDCs. |
| Operational Planning: Based on weekly demand forecast with anticipated generation and weather patterns, an analysis for upcoming week is being carried out, and operational planning advisories are being issued from NLDC to all RLDCs. |
| |

| Time Horizon | Activity |
|--------------|---|
| | <u>Transmission Outage Planning</u> to ensure adequate network capacity and grid security. |
| Day ahead | Exhaustive Resource Adequacy (RA) exercise and report on errors in demand forecast are being done. Network Adequacy (TTC/ATC) and Transmission Outage: Finalization of transmission outage in D-1 ensuring N-1 compliance and based upon this TTC/ATC are being revised, if required. Reserves Estimation & Procurement: NLDC performs Secondary/Tertiary reserve assessment based on historical Area Control Error (ACE) on day-ahead basis. Market-based procurement of tertiary reserves is being effected on day-ahead basis through Day-ahead Market (DAM) and balance reserve through Real-Time Market (RTM). Security Constrain Unit Commitment (SCUC): NLDC ensures adequate generation availability through running of day-ahead security constrained unit commitment (SCUC) module as per the CERC approved procedure. |
| Intra day | Intraday Resources Adequacy is being monitored for operational planning in real time. Network Adequacy (TTC/ATC) and Transmission Outage: In case of any emergency outage or tripping of element, network adequacy is being reassessed and TTC/ATC are being revised, if required to ensure the same. Reserves Procurement: Intra-day tertiary reserve (balance required, if any) procurement is being done through Real-Time Market (RTM). Security Constrained Economic Despatch (SCED) for National level generation optimization is being carried out for economic desptach to ensure minimum generation cost adhering to all system constraints. Real-time contingency analysis through SCADA Energy Management System (EMS) is done. |

LOK SABHA UNSTARRED QUESTION NO.1655 ANSWERED ON 05.12.2024

DEMAND AND SUPPLY OF ELECTRICITY

†1655. DR. RAJKUMAR SANGWAN:

Will the Minister of POWER be pleased to state:

- (a) whether there is a huge gap between the demand and supply of electricity in Uttar Pradesh particularly in Baghpat district;
- (b) if so, the reasons therefor;
- (c) whether any proposal for expansion of power projects in Baghpat is under consideration of the Government; and
- (d) if so, the decision taken by the Government thereon?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) & (b): The details of Power Supply Position in the State of Uttar Pradesh in terms of Energy for the last three years and the current year till October, 2024 are given at Annexure-I. Power Supply Position indicates that Energy Supplied has been commensurate to the Energy Requirement and the Energy deficit has decreased from 0.9% in FY 2022 to 0.3% in FY 2025 (till October, 2024).

Electricity, being a concurrent subject, supply and distribution of electricity to the consumers in a State/ UT is within the purview of respective State Government/Power Utility. Power supply to various districts including Baghpat districts of Uttar Pradesh is under the jurisdictional purview of the respective State Government/power utility.

(c) & (d): The details of under construction new power projects in the State of Uttar Pradesh are given at Annexure-II.

ANNEXURE-I

ANNEXURE REFERRED IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 1655 ANSWERED IN THE LOK SABHA ON 05.12.2024

The details of Power Supply Position in the State of Uttar Pradesh in terms of Energy for the last three years and the current year till October, 2024

| | Energy [in Million Units (MU)] | | | | | | | |
|----------------------------------|--------------------------------|--------------------|---------------------|-----|--|--|--|--|
| Years | Energy Requirement | Energy Supplied | Energy not Supplied | | | | | |
| | (MU) | (MU) | (MU) | (%) | | | | |
| 2021-22 | 1,29,448 | 1,28,310 | 1,138 | 0.9 | | | | |
| 2022-23 | 1,44,251 | 1,43,050 | 1,201 | 0.8 | | | | |
| 2023-24 | 1,48,791 | 1,48,287 | 504 | 0.3 | | | | |
| 2024-25 (upto October, 2024)* | 1,11,367 | 1,11,071 | 296 | 0.3 | | | | |

^{*}Figures for October, 2024 are provisional

ANNEXURE-II

ANNEXURE REFERRED IN REPLY TO PARTS (c) & (d) OF UNSTARRED QUESTION NO. 1655 ANSWERED IN THE LOK SABHA ON 05.12.2024

The details of under construction new power projects in the State of Uttar Pradesh

| SI.No | Project Name/ Impl. Agency | District | Sector | Unit No. | Capacity (MW) | | |
|-------------|--|-------------|---------|------------|------------------|--|--|
| 1 | Ghatampur TPP (NUPPL) | Kanpur | CENTRAL | U-1, 2 & 3 | 1980 | | |
| 2 | Jawaharpur STPP (UPRVUNL) | Etah | STATE | U-2 | 660 | | |
| 4 | Khurja SCTPP (THDC) | Bulandshahr | CENTRAL | U-1 & 2 | 1320 | | |
| 3 | Obra-C STPP (UPRVUNL) | Sonbhadra | STATE | U-2 | 660 | | |
| 5 | 5 Panki TPS Extn. (UPRVUNL) Kanpur STATE U-1 | | | | | | |
| Grand Total | | | | | | | |

LOK SABHA UNSTARRED QUESTION NO.1656 ANSWERED ON 05.12.2024

ELECTRIFICATION OF REMOTE AND TRIBAL AREAS

1656. SHRI DEVUSINH CHAUHAN:

Will the Minister of POWER be pleased to state:

- (a) the details of the progress made by the Government in electrification of remote and tribal areas in Gujarat; and
- (b) the details of its impact on local economies?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) & (b): As reported by the State of Gujarat, all inhabited villages and eligible households of remote and tribal areas of Gujarat are electrified.

Electricity serves as a crucial input to many business and household activities. State has reported that electrification has had a positive impact on the standard of living for residents in remote and tribal areas, employment opportunities, agricultural activities and educational outcomes.

LOK SABHA UNSTARRED QUESTION NO.1664 ANSWERED ON 05.12.2024

ELECTRICITY INFRASTRUCTURE IN RURAL AREAS OF MAHARASHTRA

1664. MS. PRANITI SUSHILKUMAR SHINDE:

Will the Minister of POWER be pleased to state:

- (a) whether the Government has taken steps to expedite the approval for commencement of work under the Revamped Distribution Sector Scheme (RDSS) in Maharashtra, considering the difficulties faced by rural farmers due to outdated electrical infrastructure;
- (b) if so, the details thereof along with the expected timeline for the same and if not, the reasons therefor;
- (c) whether the Government has a plan to address the safety concerns related to night electricity distribution for farming;
- (d) if so, the details thereof along with the measures taken/being taken to reduce the risk of incidents that endanger farmers lives and if not, the reasons therefor; and
- (e) whether the Government is taking immediate measures to address the hazards posed by old electric conductors, especially in light of the recent tragic incident occurred in Gulvanchi village and if so, the details thereof?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) to (d): Under Revamped Distribution Sector Scheme (RDSS), projects worth Rs. 30,755 Cr. have been sanctioned for the loss reduction and smart metering works for Maharashtra State Electricity Distribution Company Limited (MSEDCL).

This includes agricultural feeder segregation works worth Rs. 7,010 Cr. for 4,712 mixed load feeders having agricultural load of more than 30%. It is expected that separation of agriculture and non-agriculture feeders will facilitate reliable three phase supply to non-agricultural consumers in the rural areas and support DISCOMs in providing day time supply of power to the farmers.

| | | | | | 2 |
|--|--|--|--|--|---|
| | | | | | Z |

State of Maharashtra has reported that, considering night time safety concerns related to farming and to provide day-time power to agriculture consumers, Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM) / Mukhyamantri Saur Krishi Vahini Yojna (MSKVY) is being implemented with a plan to install decentralized solar power projects of 16,000 MW. To support this, system strengthening works for augmenting back-end infrastructure, worth Rs. 2,978 Cr., have been sanctioned under RDSS. Further, solar pumps are being installed instead of conventional pumps under 'Magel Tyala Saur Pump Program' of State of Maharashtra.

The sanctioned works under RDSS have been awarded and are under implementation.

(e): State of Maharashtra has reported that in order to avoid the tragic incident that occurred in Gulvanchi village, old deteriorated Low Tension (LT) bare conductor lines have been identified and are being replaced with LT Aerial Bunched Cable. Also, the accident-prone areas are identified by MSEDCL and maintenance activities are carried out on priority.

LOK SABHA UNSTARRED QUESTION NO.1690 ANSWERED ON 05.12.2024

COMPENSATION FOR PRIVATE LAND USE IN POWER LINES

†1690. SHRI RADHESHYAM RATHIYA:

Will the Minister of POWER be pleased to state:

- (a) whether any compensation or rent is provided to land owner under the policies of Chhattisgarh Government for installation of electricity pole, wire and transformer by power companies on their private land in rural areas without the prior consent:
- (b) if so, the details thereof along with the criteria to decide the compensation, guidelines to ensure fair compensation to the affected land owners; and
- (c) whether the Government proposes to bring a policy to protect the rights of affected rural land owners?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

- (a) & (b): Government of Chhattisgarh has informed that there is no compensation or rent provided to land owner.
- (c): Ministry of Power has issued revised guidelines for payment of compensation in regard to Right of Way (RoW) for transmission lines (66 kV and above) on 14.06.2024. As per these guidelines, land rate has been linked to market rate. Further, compensation amount for the tower base area and RoW corridor has been increased to 200% and 30% respectively, of the land value.

LOK SABHA UNSTARRED QUESTION NO.1713 ANSWERED ON 05.12.2024

RISING DEPENDENCE ON COAL IMPORTS

1713. DR. C M RAMESH:

Will the Minister of POWER be pleased to state:

- (a) whether the Government is aware of the increased quantity of coal imports in 2024 to offset the shortfall in hydroelectric power generation due to inadequate rainfall;
- (b) if so, the details thereof along with the measures taken/being taken to mitigate the impact of reduced hydroelectric power including efforts to enhance the uptake of renewable energy sources in India's power generation mix; and
- (c) the steps taken/being taken to reduce reliance on coal, especially imported thermal coal as per commitment made by the Government to achieve carbon neutrality by 2070?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) & (b): The details of Hydro generation for the year 2022-23, 2023-24 and the current year till October, 2024 are given at Annexure.

The variable monsoon rains in FY 2023-24 resulted in depleted reservoir levels leading to sub-optimal hydro generation. There was corresponding increase in coal based generation, including generation from Imported Coal Based (ICB) plants. Consequently, the import of coal by power plants has increased from 55.6 MT in 2022-23 to 65.7 MT in 2023-24. This is mainly due to increase in import by ICB plants from 20.5 MT to 41.8 MT. However, during this period, the import of coal by domestic coal based (DCB) plants for blending has decreased from 35.1 MT to 23.9 MT.

Further, during the period from April to October, 2024, the import of coal by power plants has increased from 35.3 MT to 40.9 MT as compared to the same period last year, showing an increase of about 16%. This is mainly due to increase in generation from ICB plants from 45.363 BUs to 56.258 BUs during this period consequently resulting in increase in import from 21.7 MT to 30.0 MT. During the same period, the import of coal by domestic coal based (DCB) plants for blending has decreased from 13.6 MT to 10.9 MT.

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The Government has undertaken following measures to enhance the uptake of renewable energy sources:

- i. Waiver of ISTS charges on transmission of electricity generated/supplied from Solar, Wind, Pumped Storage Plants and Battery Energy Storage Systems.
- ii. Renewable Purchase Obligations (RPOs) and Energy Storage obligations Trajectory till 2029-30.
- iii. Construction of Green Energy Corridors and putting in place of 13 Renewable Energy Management Centres.
- iv. Setting up of Ultra Mega Renewable Energy Parks to provide land and transmission to Renewable Energy (RE) developers for installation of RE projects at large scale.
- (c): The Government has taken following capacity addition programme in Hydro, nuclear and Renewable sectors to reduce dependence on coal based generation:
 - i. 13,997.5 MW of Hydro Electric Projects and 6,050 MW of Pumped Storage Projects are under construction and 24,225.5 MW of Hydro Electric Projects and 50,760 MW of PSP are under various stage of planning.
 - ii. 7,300 MW of Nuclear Capacity is under construction and 7,000 MW is under various stages of planning/approval.
 - iii. 1,27,050 MW of Renewable Capacity is under construction and 89,690 MW is under various stages of tendering.
 - iv. India has committed to augment non fossil fuel based installed electric generation capacity to over 5,00,000 MW by 2030.
 - v. As per the extant policy regarding co-firing of biomass pellets with coal in Thermal Power Plants, all coal based thermal power plants of power generation utilities shall on annual basis mandatorily use 5% blend of biomass pellets made, primarily, of agro residue along with coal w.e.f. FY 2024-25. This obligation shall increase to 7% from FY 2025-26.

Further, the Government has taken following steps to increase production of domestic coal and thereby reducing reliance on imported coal:

- Regular reviews by Ministry of Coal to expedite the development of coal blocks.
- ii. Enactment of Mines and Minerals (Development and Regulation) Amendment Act, 2021 (MMDR Act) for enabling captive mines owners (other than atomic minerals) to sell up to 50% of their annual mineral (including coal) production in the open market after meeting the requirement of the end use plant linked with the mine in such manner as may be prescribed by the Central Government on payment of such additional amount.
- iii. Single Window Clearance portal for the coal sector to speed up the operationalization of coal mines

- iv. Project Monitoring Unit for hand-holding of coal block allottees for obtaining various approvals / clearances for early operationalization of coal mines.
- v. Auction of commercial mining on revenue sharing basis was launched in 2020. Under commercial mining scheme, rebate of 50 % on final offer has been allowed for the quantity of coal produced earlier than scheduled date of production. Further, incentives on coal gasification or liquefaction (rebate of 50 % on final offer) have been granted.
- vi. Terms and conditions of commercial coal mining are very liberal with no restriction on utilization of coal, allowing new companies to participate in the bidding process, reduced upfront amount, adjustment of upfront amount against monthly payment, liberal efficiency parameters to encourage flexibility to operationalize the coal mines, transparent bidding process, 100% Foreign Direct Investment (FDI) through automatic route and revenue sharing model based on the National Coal Index.
- vii. The Annual Contracted Quantity (ACQ) has been increased upto 100% of the normative requirement, in cases where the ACQ was either reduced to 90% of normative requirement (non-coastal) or where the ACQ was reduced to 70% of normative requirement (coastal power plants). Increase in the ACQ would result in more domestic coal supplies, thereby, reducing the import dependency.
- viii. Government has decided in 2022 that the coal to meet the full PPA requirement of all the existing linkage holders of Power Sector shall be made available by the coal companies irrespective of the trigger level and Annual Contracted Quantity levels. The decision of the Government of meeting the full PPA requirement of the linkage holders of the Power Sector shall reduce the dependence on the imports.
- ix. An Inter Ministerial Committee (IMC) has been constituted in the Ministry of Coal on 29.05.2020 for the purpose of coal import substitution. A strategy paper on coal import substitution has been launched by Ministry of Coal focusing on future roadmap on coal imports substitution

In addition, coal companies have also taken the following steps to increase the domestic coal production:

- i. Coal India Limited (CIL) has adopted number of measures to increase coal production. In its Underground (UG) mines, CIL is adopting Mass Production Technologies (MPT), mainly with Continuous Miners (CMs), wherever feasible. CIL has also planned High walls (HW) mines in view of the availability of Abandoned/Discontinued mines. CIL is also planning large capacity UG mines wherever feasible. In its Open cast (OC) mines, CIL already has State-of-the-Art technology in its high-capacity Excavators, Dumpers and Surface Miners.
- ii. Regular liaison is being undertaken by Singareni Collieries Company Limited (SCCL) for grounding of new projects and operation of existing projects. SCCL has initiated action for developing infrastructure for evacuation of coal like Coal Handling Plants (CHPs), Crushers, Mobile Crushers, Pre-weigh-bins etc.

ANNEXURE

ANNEXURE REFERRED IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 1713 ANSWERED IN THE LOK SABHA ON 05.12.2024

The details of Hydro generation for the year 2022-23, 2023-24 and the current year till October, 2024

| SI. No. | Year | Generation (MU) |
|---------|------------------------|-----------------|
| 1 | 2022-23 | 1,62,099 |
| 2 | 2023-24 | 1,34,054 |
| 3 | 2024-25 (Upto October) | 1,09,078 |

LOK SABHA UNSTARRED QUESTION NO.1725 ANSWERED ON 05.12.2024

FLUE GAS DESULFURIZATION SYSTEM

1725. SHRI VISHNU DATT SHARMA:

Will the Minister of POWER be pleased to state:

- (a) whether the Government is aware of the fact that as per study of the Centre for Research on Energy and Clean Air (CREA), India is largest emitter of sulphur dioxide and India's thermal power plants emit 240 times more sulphur dioxide than paddy stubble burning and if so, the steps taken/being taken by the Government in this regard;
- (b) whether the Government has conducted any survey to find out the impact of these thermal power plants on public health due to poor air quality and thereby loss of GDP and if so, the details thereof;
- (c) whether Flue Gas Desulfurization (FGD) systems have been operative only in 8 percent of total number of thermal power plants in the country; and
- (d) if so, the details thereof along with the efforts being made to address this issue and if not, the reasons therefor?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) to (d): All Thermal Power Plants (TPPs) are required to comply with the emission norms as notified by the Ministry of Environment, Forest and Climate Change (MoEF&CC) and directions given by Central Pollution Control Board (CPCB) from time to time. MoEF&CC notification dated 07.12.2015, 31.03.2021 and 05.09.2022 have stipulated stack emission norms [including for Sulfur Di-oxide (SO₂)] and timelines for compliance in respect of coal based TPPs, categorized as Category-A, B and C.

In order to meet the SO_2 emission norms, Flue Gas Desulphurization (FGD) systems are being installed in coal based TPPs. Total 537 units (2,04,160 MW) have been identified for installation of FGDs in TPPs. Out of these, FGD has been installed in 44 units (22,590 MW), contracts awarded/under implementation in 233 units (1,02,040 MW),138 units (43,987 MW) are under various stages of tendering process and 122 units (35,543 MW) are under pre-tendering process.

LOK SABHA UNSTARRED QUESTION NO.1744 ANSWERED ON 05.12.2024

UNELECTRIFIED VILLAGES

1744. SHRI ADHIKARI DEEPAK DEV:

Will the Minister of POWER be pleased to state:

- (a) the details of number of villages in the country that have no electrification till 31.10.2024;
- (b) the steps taken/being taken by the Government in this regard; and
- (c) the details of unelectrified villages in the country, State-wise?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) to (c): Government of India has supplemented the efforts of the States through schemes like Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY), Integrated Power Development Scheme (IPDS), Pradhan Mantri Sahaj Bijli Har Ghar Yojana (SAUBHAGYA) etc., to help them achieve the objective of providing quality and reliable power supply to all households.

As reported by the States, all the inhabited un-electrified census villages in the country were electrified by 28th April, 2018. A total of 18,374 villages were electrified during DDUGJY (State wise details enclosed as Annexure-I). Under DDUGJY and thereafter under SAUBHAGYA, as reported by all States, electrification of all willing households was completed by 31st March, 2019. A total of 2.86 crore households were electrified under the aegis of SAUBHAGYA (State wise details enclosed as Annexure-II). Both the schemes stand closed as on 31.03.2022.

Government of India is further supporting States for grid electrification of leftout households during SAUBHAGYA, under the ongoing scheme of Revamped
Distribution Sector Scheme (RDSS), launched in July,2021. In addition, all identified
households belonging to Particularly Vulnerable Tribal Group (PVTG) under PMJANMAN (Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan) and tribal households
under DA-JGUA (Dharti Aaba Janjatiya Gram Utkarsh Abhiyan) are being sanctioned
for on-grid electricity connection under RDSS as per the scheme guidelines. Till date,
works amounting to Rs. 4,281 Cr. have been sanctioned for electrification of 9,49,548
households including PVTG households identified under PM-JANMAN and tribal
households identified under DA-JGUA (State wise details enclosed as Annexure-III).
Further, under New Solar Power Scheme, works worth Rs. 49 Cr. have been
sanctioned for 9,863 households for off-grid solar based electrification (State wise
details enclosed as Annexure-IV).

ANNEXURE-I

ANNEXURE REFERRED IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO. 1744 ANSWERED IN THE LOK SABHA ON 05.12.2024

State-wise electrification of inhabited census villages under DDUGJY

| S. No. | Name of the States | Number of villages electrified |
|--------|--------------------|--------------------------------|
| 1 | Arunachal Pradesh | 1,483 |
| 2 | Assam | 2,732 |
| 3 | Bihar | 2,906 |
| 4 | Chhattisgarh | 1,078 |
| 5 | Himachal Pradesh | 28 |
| 6 | J&K | 129 |
| 7 | Jharkhand | 2,583 |
| 8 | Karnataka | 39 |
| 9 | Madhya Pradesh | 422 |
| 10 | Maharashtra | 80 |
| 11 | Manipur | 366 |
| 12 | Meghalaya | 1,051 |
| 13 | Mizoram | 54 |
| 14 | Nagaland | 78 |
| 15 | Odisha | 3,281 |
| 16 | Rajasthan | 427 |
| 17 | Tripura | 26 |
| 18 | Uttar Pradesh | 1,498 |
| 19 | Uttarakhand | 91 |
| 20 | West Bengal | 22 |
| | Total | 18,374 |

ANNEXURE REFERRED IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO. 1744 ANSWERED IN THE LOK SABHA ON 05.12.2024

Households electrified since the launch of SAUBHAGYA scheme including additional households under DDUGJY

| SI. No. | Name of the States | No of Households electrified |
|---------|--------------------|------------------------------|
| 1 | Andhra Pradesh* | 1,81,930 |
| 2 | Arunachal Pradesh | 47,089 |
| 3 | Assam | 23,26,656 |
| 4 | Bihar | 32,59,041 |
| 5 | Chhattisgarh | 7,92,368 |
| 6 | Gujarat* | 41,317 |
| 7 | Haryana | 54,681 |
| 8 | Himachal Pradesh | 12,891 |
| 9 | Jammu & Kashmir | 3,77,045 |
| 10 | Jharkhand | 17,30,708 |
| 11 | Karnataka | 3,83,798 |
| 12 | Ladakh | 10,456 |
| 13 | Madhya Pradesh | 19,84,264 |
| 14 | Maharashtra | 15,17,922 |
| 15 | Manipur | 1,08,115 |
| 16 | Meghalaya | 2,00,240 |
| 17 | Mizoram | 27,970 |
| 18 | Nagaland | 1,39,516 |
| 19 | Odisha | 24,52,444 |
| 20 | Puducherry* | 912 |
| 21 | Punjab | 3,477 |
| 22 | Rajasthan | 21,27,728 |
| 23 | Sikkim | 14,900 |
| 24 | Tamil Nadu* | 2,170 |
| 25 | Telangana | 5,15,084 |
| 26 | Tripura | 1,39,090 |
| 27 | Uttar Pradesh | 91,80,571 |
| 28 | Uttarakhand | 2,48,751 |
| 29 | West Bengal | 7,32,290 |
| _ | Total | 2,86,13,424 |

^{*}Not funded under SAUBHAGYA Scheme

ANNEXURE REFERRED IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO. 1744 ANSWERED IN THE LOK SABHA ON 05.12.2024

Household electrification sanctioned under RDSS

| SI. | | Sanctioned Outlay | No. of households | | | | |
|-----|--|-------------------------------|-------------------|--|--|--|--|
| No. | Name of the States | (Rs. Crores) | Sanctioned | | | | |
| A. | Additional Households | | | | | | |
| 1 | Rajasthan | 459 | 1,90,959 | | | | |
| 2 | Meghalaya | 436 | 50,501 | | | | |
| 3 | Mizoram | 80 | 15,167 | | | | |
| 4 | Nagaland | 70 | 10,004 | | | | |
| 5 | Uttar Pradesh | 931 | 2,51,487 | | | | |
| 6 | Andhra Pradesh | 49 | 15,475 | | | | |
| 7 | Jharkhand | 7 | 872 | | | | |
| 8 | Jammu & Kashmir | 77 | 10,730 | | | | |
| 9 | Bihar | 239 | 35,467 | | | | |
| 10 | Assam | 786 | 1,27,111 | | | | |
| 11 | Arunachal Pradesh | 47 | 6,506 | | | | |
| 12 | Manipur | 214 | 36,972 | | | | |
| 13 | Chhattisgarh | 317 | 63,161 | | | | |
| | Total (A) | 3,712 | 8,14,412 | | | | |
| B. | Under Vibrant Villages Programme | | | | | | |
| 1 | Himachal Pradesh* | 6 | - | | | | |
| 2 | Arunachal Pradesh | 20 | 1,683 | | | | |
| 3 | Uttarakhand | 13 | 1,154 | | | | |
| | Total (B) | 39 | 2,837 | | | | |
| C. | Under Pradhan Mantri Janjati Adivasi N | yayay MahaAbhiyan (PM-JANMAN) | | | | | |
| C1 | Sanctioned under RDSS | | | | | | |
| 1 | Andhra Pradesh | 89 | 25,054 | | | | |
| 2 | Bihar | 0.28 | 51 | | | | |
| 3 | Chhattisgarh | 38 | 7,077 | | | | |
| 4 | Jharkhand | 74 | 12,442 | | | | |
| 5 | Madhya Pradesh | 143 | 29,290 | | | | |
| 6 | Maharashtra | 27 | 8,556 | | | | |
| 7 | Rajasthan | 40 | 17,633 | | | | |
| 8 | Karnataka | 4 | 1,615 | | | | |
| 9 | Kerala | 1 | 345 | | | | |
| 10 | Tamil Nadu | 30 | 10,673 | | | | |
| 11 | Telangana | 7 | 3,884 | | | | |
| 12 | Tripura | 62 | 11,664 | | | | |
| 13 | Uttarakhand | 1 | 669 | | | | |
| 14 | Uttar Pradesh | 1 | 316 | | | | |
| | Sub Total (C1) | 516 | 1,29,269 | | | | |
| C2 | Under State Plan | | | | | | |
| 1 | Gujarat | 0 | 0 | | | | |
| 2 | Odisha | 0 | 0 | | | | |
| 3 | West Bengal | 0 | 0 | | | | |
| | Sub Total (C2) | 0 | 0 | | | | |
| | Total (C=C1+C2) | 516 | 1,29,269 | | | | |
| D. | Under Dharti Aaba Janjatiya Gram Utkarsh Abhiyan (DA-JGUA) | | | | | | |
| 1 | Chhattisgarh | 12 | 2,550 | | | | |
| 2 | Maharashtra | 2 | 480 | | | | |
| | Total (D) | 14 | 3,030 | | | | |
| | Grand Total (A+B+C+D) | 4,281 | 9,49,548 | | | | |

ANNEXURE-IV

ANNEXURE REFERRED IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO. 1744 ANSWERED IN THE LOK SABHA ON 05.12.2024

Off-grid solar based household electrification sanctioned under New Solar Power Scheme

| S. No. | Name of the States | No. of households Sanctioned | |
|--------|--------------------|------------------------------|--|
| 1 | Andhra Pradesh | 1,675 | |
| 2 | Chhattisgarh | 1,578 | |
| 3 | Jharkhand | 2,342 | |
| 4 | Karnataka | 179 | |
| 5 | Madhya Pradesh | 2,060 | |
| 6 | Telangana | 326 | |
| 7 | Tripura | 1,703 | |
| Total | | 9,863 | |

LOK SABHA UNSTARRED QUESTION NO.1753 ANSWERED ON 05.12.2024

COAL SUPPLY TO THERMAL PLANTS

1753. SHRI S JAGATHRATCHAKAN:

Will the Minister of POWER be pleased to state:

- (a) whether the Government has taken cognizance of the fact that all major metros like Delhi, Chennai, Mumbai, Kolkata and Bengaluru face electricity shortage due to lack of adequate coal supply to thermal plants, redevelopment and infrastructure projects and if so, the details thereof; and
- (b) the details of the steps taken/proposed to be taken by the Government to ensure the adequate electricity supply to meet the growing demand in the country?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

- (a): The coal stock available at coal based power plants in the country increased from 36.95 Million Tonnes (MT) (sufficient for about 13 days) as on 31.03.2023 to 50.69 MT (sufficient for about 18 days) as on 31.03.2024. The coal stock available at the power plants as on 30.11.2024 is about 39.9 MT, which is sufficient for about 14 days at 85% Plant Load Factor (PLF). There has been no reporting of electricity shortage in the country including the major metros like Delhi, Chennai, Kolkata and Bengaluru.
- (b): The following steps are being taken by Govt. of India to ensure Electricity supply to keep up with demand growth:
- (i) Installed generation capacity has increased from 2,48,554 MW in March 2014 to 4,54,452 MW in October 2024.

Ministry of Power, in consultation with States, has envisaged a plan to add thermal capacity of a minimum 80,000 MW by 2031-32. Against this target, 29,200 MW Thermal Capacity is already under construction while 51,520 MW is at various stages of planning & development. In addition, 13,997.5 MW of Hydro Electric Projects and 6,050 MW Pumped Storage Projects (PSP) are under construction. 24,225.5 MW of hydro electric projects and 50,760 MW of PSP are under various stage of planning and targeted to be completed by 2031-32. Also, 7,300 MW of Nuclear Capacity is under construction and 7,000 MW is under various stages of planning and approval.

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(ii) 1,98,970 circuit kilometer (ckm) of transmission lines, 7,53,799 MVA of Transformation capacity and 82,790 MW of Inter-Regional capacity has been added since 2014 with capability of transferring 1,18,740 MW from one corner of the country to another.

Further, As per the National Electricity Plan, about 1,91,474 ckm of transmission lines and 1274 GVA of transformation capacity is planned to be added (at 220 kV and above voltage level) during the ten year period from 2022-23 to 2031-32.

- (iii) Waiver of ISTS charges on transmission of electricity generated from Solar, Wind, Pumped Storage Plants and Battery Energy Storage Systems.
- (iv) Renewable Purchase Obligations (RPOs) and Energy Storage obligations Trajectory till 2029-30.
- (v) Construction of Green Energy Corridors and putting in place of 13 Renewable Energy Management Centres.
- (vi) Setting up of Ultra Mega Renewable Energy Parks to provide land and transmission to Renewable Energy (RE) developers for installation of RE projects at large scale.
- (vii) India has committed to augment non fossil fuel based installed electricity generation capacity to over 5,00,000 MW by 2031-32.
- (viii) Under RDSS, projects worth Rs. 2.77 lakh crore for distribution infrastructure works and smart metering works have been sanctioned at National level.
- (ix) Under Power System Development Fund (PSDF), a total of 188 projects have been approved for improvement of State, Regional and National Power System.
- (x) Introduction of Real Time Market (RTM), Green Day Ahead Market (GDAM), Green Term Ahead Market (GTAM), High Price Day Ahead Market (HP-DAM) in Power Exchanges. Also, DEEP Portal (Discovery of Efficient Electricity Price) for e-Bidding and e-Reverse for procurement of short-term power by DISCOMs was introduced.

LOK SABHA UNSTARRED QUESTION NO.1775 ANSWERED ON 05.12.2024

ADDRESSING POWER CRISIS IN ANDAMAN & NICOBAR ISLANDS

1775. SHRI BISHNU PADA RAY:

Will the Minister of POWER be pleased to state:

- (a) whether it is true that the Government of Andaman & Nicobar Islands submitted letters to the Union Government highlighting the issues related to power cuts and power shortages in the Islands and suggesting potential measures to address these challenges;
- (b) if so, the steps taken/being taken by the Government to address the power crisis in the Andaman & Nicobar Islands, specifically considering the suggestions provided by the Andamanand Nicobar Islands UT Administration;
- (c) the details of the proposed plan of action, both in the short term and long term, to mitigate and resolve the power crisis in the Andaman & Nicobar Islands permanently; and
- (d) whether there is a specific timeline established for resolving the power crisis in the Andaman & Nicobar Islands and if so, the details thereof along with expected completion or improvement dates?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

- (a): Yes.
- (b) to (d): The steps taken by Government of India, both in the short term and long term, to mitigate and address the power situation in the Andaman & Nicobar (A&N) Islands are:

Short Term Measures

- I. Augmentation of Existing Generation Capacity:
 - i. Extension of the operational period of 15 MW NTPC's Diesel Generator (DG) power plant.

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- ii. Further, the tender has also been finalized by Electricity Department of A&N Administration under PPA mode for additional DG power of 10 MW at Chatham, 5 MW at Ograbraj and 5 MW at Bambooflat.
- iii. Augmentation of in-house generation capacity to 7x2000 KVA DG sets at Chatham Power House and 5x2000 KVA DG sets at Phoenix Bay.
- iv. Installation of 20 MWh Battery Energy Storage System (BESS) by Solar Energy Corporation of India Ltd (SECI) is in the process of tendering and also 15 MWh BESS by Japan International Cooperation Agency (JICA) is proposed.

Long Term Measures

I. Establishment of 50 MW LNG power plant:

Ministry of Power has directed NTPC Ltd to re-initiate the process of installation of 50 MW Re-gasified Liquefied Natural Gas (RLNG) based power plant in Sri Vijaya Puram (Port Blair) for enhancing the reliability of power supply in South Andaman Islands and Notice Inviting Tender (NIT) has been published on 07.11.2024.

II. Strengthening of Distribution Infrastructure:

The smart metering works at an estimated cost of Rs 54 crores and distribution infrastructure works at an estimated cost of Rs 462 crores have been sanctioned under Revamped Distribution Sector Scheme (RDSS) to improve the distribution infrastructure in Andaman & Nicobar Islands.

III. Renewable Energy (RE) Plan

A comprehensive Renewable Energy (RE) plan has been envisaged by SECI to augment the generation capacity of the islands. It envisions a total capacity of 123.25 MW of solar power, 36 MW of wind energy, 316.2 MWh of BESS and other renewable sources across South Andaman, North & Middle Andaman, and Nicobar districts, which shall ensure an optimal energy mix for the islands.

LOK SABHA UNSTARRED QUESTION NO.1782 ANSWERED ON 05.12.2024

PURCHASE OF RENEWABLE ENERGY

†1782. SMT. DHANORKAR PRATIBHA SURESH:

Will the Minister of POWER be pleased to state:

- (a) whether the Government has made it mandatory for power distribution companies to purchase other renewable energy as per their power demand and if so, the details thereof;
- (b) whether the Government has made any amendment in the Tariff Policy, 2006;
- (c) if so, the details thereof; and
- (d) whether the Government has formulated any regulatory mechanism to ensure the purchase of renewable energy by the distribution companies of State Electricity Boards?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a): Ministry of Power vide gazette notification dated 20.10.2023 under Energy Conservation Act, 2001 has mandated the minimum share of non-fossil energy consumption for designated consumers. Distribution licensees and all other designated consumers who are open access consumers or captive users to the extent of consumption of electricity from sources other than distribution licensee have been mandated for utilizing a minimum percentage of energy consumption from different types of non-fossil sources as a percentage of their total share of electrical energy consumption, during the year 2024-25 to 2029-30, as per details given below:

| SI. No | Year | Wind renewable energy | Hydro renewable energy | Distributed Renewable Energy* | Other renewable energy | Total Renewable energy |
|--------|---------|-----------------------------|------------------------------|-------------------------------------|------------------------|------------------------------|
| 1. | 2024-25 | 0.67% | 0.38% | 1.50% | 27.35% | 29.91% |
| 2. | 2025-26 | 1.45% | 1.22% | 2.10% | 28.24% | 33.01% |
| 3. | 2026-27 | 1.97% | 1.34% | 2.70% | 29.94% | 35.95% |
| 4. | 2027-28 | 2.45% | 1.42% | 3.30% | 31.64% | 38.81% |
| 5. | 2028-29 | 2.95% | 1.42% | 3.90% | 33.10% | 41.36% |
| 6. | 2029-30 | 3.48% | 1.33% | 4.50% | 34.02% | 43.33% |

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- * For hilly and North-Eastern States/Union Territories, namely Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura, Jammu & Kashmir, Ladakh, Himachal Pradesh and Uttarakhand, the distributed renewable energy component shall be half of that given in the Table and the remaining component for these States shall be included in the other renewable energy sources.
- (b) & (c): Ministry of Power has made amendments to the Tariff Policy, 2006 on 31st March 2008 for aligning it with the Hydro Power Policy, 2008. Further, Amendments dated 20th January 2011 and 8th July 2011 have been issued in the Tariff policy, 2006 for fixing minimum percentage of solar energy in the total consumption and granting exemption to hydro projects and certain transmission projects from Tariff Based Competitive Bidding respectively.

Subsequently, Revised National Tariff Policy was issued on 28th January 2016, which inter-alia includes a provision mandating a long-term growth trajectory for Renewable Purchase Obligations (RPOs) by Ministry of Power in consultation with Ministry of New and Renewable Energy.

(d): Ministry of Power vide gazette notification dated 20.10.2023 has designated Bureau of Energy Efficiency (BEE) to monitor the compliance of renewable energy utilization by the designated consumer(s). In case of shortfall in the renewable energy consumption targets, penalty may be imposed as per provisions under sub-section (3) of section 26 of the Energy Conservation Act, 2001, for which adjudication is to be carried out by a Member of the concerned State Commission.