

Gas based Power Plants

†3370. SHRI DHARMENDRA PRADHAN : Will the Minister of POWER be pleased to state :

(a) the details of present capacity of gas based power generating stations in the country, State-wise;

(b) the details of the requirement and supply of gas for different power projects in the country during each year of the last three years and the current year, State/ Union Territory-wise;

(c) whether the power generation of many gas based power projects has suffered due to shortage of gas supply;

(d) if so, the details thereof, State-wise;

(e) whether Government proposes to allocate more natural gas for gas based power generation in the country; and

(f) if so, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF POWER (SHRI K.C. VENUGOPAL) : (a) The details of present capacity of gas based power generating stations monitored by CEA in the country indicating its state is given in Statement-I (*See below*).

(b) The details of the requirement and supply of gas for different power projects in the country during each year of the last three years and the current year, State/ Union Territory-wise is as under :

| Sl. No. | Years | Capacity at the end of year (MW) | Gas Requirement at 90% PLF (MMSCMD) | Average Gas Supplied (MMSCMD) |
|---------|---------|----------------------------------|-------------------------------------|-------------------------------|
| 1. | 2009-10 | 15,769.27 | 78.09 | 55.45 |
| 2. | 2010-11 | 16,639.77 | 81.42 | 59.31 |
| 3. | 2011-12 | 16,926.27 | 81.44 | 56.28 |

(c) Yes, Sir. The power generation of many gas based power projects has suffered due to shortage of gas supply.

(d) The generation loss during the year 2011-12, project wise mentioning the state in which it is located, due to short supply of gas as reported to CEA is given in Statement-II (*See below*).

† Original notice of the question was received in Hindi.

(e) and (f) Domestic gas will be allocated as per the gas allocation priority as and when additional domestic gas is available.

Statement I

Details of Present Gas based Capacity being monitored by CEA

| Sl.No. | Name of Power Station | Located in the State | Installed Capacity @ (MW) |
|-----------------------|-----------------------|----------------------|---------------------------|
| 1 | 2 | 3 | 4 |
| Central Sector | | | |
| 1. | Faridabad CCPP | Haryana | 431.59 |
| 2. | Anta CCPP | Rajashtan | 419.33 |
| 3. | Auraiya CCPP | Uttar Pradesh | 663.36 |
| 4. | Dadri CCPP | Uttar Pradesh | 829.78 |
| SUB TOTAL (NR) | | | 2344.06 |
| 5. | Gandhar CCPP | Gujarat | 657.39 |
| 6. | Kawas CCPP | Gujarat | 656.2 |
| 7. | Ratnagiri CCPP I | Maharashtra | 740 |
| 8. | Ratnagiri CCPP II | Maharashtra | 740 |
| 9. | Ratnagiri CCPP III | Maharashtra | 740 |
| SUB TOTAL (WR) | | | 3533.59 |
| 10. | Kathalguri CCPP | Assam | 291 |
| 11. | Agartala GT | Tripura | 84 |
| SUB TOTAL (NER) | | | 375 |
| TOTAL (CS) | | | 6252.65 |
| State Sector | | | |
| 12. | I.P. CCPP | Delhi | 270 |
| 13. | Pragati CCGT-III | Delhi | 750 |
| 14. | Pragati CCPP | Delhi | 330.4 |
| 15. | Dholpur CCPP | Rajasthan | 330 |
| 16. | Ramgarh CCPP | Rajasthan | 113.8 |
| SUB TOTAL (NR) | | | 1794.2 |

| 1 | 2 | 3 | 4 |
|-----------------------|-----------------|-------------|---------|
| 17. | Dhuvaran CCPP | Gujarat | 218.62 |
| 18. | Hazira CCPP | Gujarat | 156.1 |
| 19. | Utran CCPP | Gujarat | 518 |
| 20. | Uran CCPP | Maharashtra | 672 |
| SUB TOTAL (WR) | | | 1564.72 |
| 21. | Karaikal CCPP | Puducherry | 32.5 |
| 22. | Kovikalpal CCPP | Tamil Nadu | 107 |
| 23. | Kuttalam CCPP | Tamil Nadu | 100 |
| 24. | Narimanam GPS | Tamil Nadu | 10 |
| 25. | Valuthur CCPP | Tamil Nadu | 186.2 |
| SUB TOTAL (SR) | | | 435.7 |
| 26. | Lakwa GT | Assam | 120 |
| 27. | Namrup CCPP | Assam | 95 |
| 28. | Namrup ST | Assam | 24 |
| 29. | Baramura GT | Tripura | 58.5 |
| 30. | Rokhia GT | Tripura | 90 |
| SUB TOTAL (NER) | | | 387.5 |
| TOTAL (SS) | | | 4182.12 |
| Pvt Sector | | | |
| 31. | Vatwa CCPP | Gujarat | 100 |
| 32. | Trombay CCPP | Maharashtra | 180 |
| SUB TOTAL (WR) | | | 280 |
| TOTAL (PVT S) | | | 280 |
| Pvt IPP Sector | | | |
| 33. | Rithala CCPP | Delhi | 108 |
| SUB TOTAL (NR) | | | 108 |

| 1 | 2 | 3 | 4 |
|--------------------|------------------------------|----------------|----------|
| 34. | Baroda CCPP | Gujarat | 160 |
| 35. | Essar CCPP | Gujarat | 515 |
| 36. | Peguthan CCPP | Gujarat | 655 |
| 37. | Sugen CCPP | Gujarat | 1147.5 |
| SUB TOTAL (WR) | | | 2477.5 |
| 38. | Gautami CCPP | Andhra Pradesh | 464 |
| 39. | GMR Energy Ltd - Kakinada | Andhra Pradesh | 220 |
| 40. | Godavari CCPP | Andhra Pradesh | 208 |
| 41. | Jegurupadu CCPP | Andhra Pradesh | 455.4 |
| 42. | Konaseema CCPP | Andhra Pradesh | 445 |
| 43. | Kondapalli Extn. CCPP | Andhra Pradesh | 366 |
| 44. | Kondapalli CCPP | Andhra Pradesh | 350 |
| 45. | Peddapuram CCPP | Andhra Pradesh | 220 |
| 46. | Vemagiri CCPP | Andhra Pradesh | 370 |
| 47. | Karuppur CCPP | Tamil Nadu | 119.8 |
| 48. | P. Nallur CCPP | Tamil Nadu | 330.5 |
| 49. | Valantarvy CCPP | Tamil Nadu | 52.8 |
| SUB TOTAL (SR) | | | 3601.5 |
| 50. | DLF Assam GT | Assam | 24.5 |
| SUB TOTAL (NER) | | | 24.5 |
| TOTAL (PVT. IPP S) | | | 6211.5 |
| GRAND TOTAL | | | 16926.27 |

@ Installed capacity is as on last day of the year.

Statement II*Generation Loss during the Year 2011-12.*

| Sl. No. | Name of Power Station | Installed Capacity @ (MW) | Located in the State | Gen (MUs) | Gen Loss due to short supply of Gas as reported (MUs) |
|-----------------------|-----------------------|---------------------------|----------------------|-----------|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| Central Sector | | | | | |
| 1. | Faridabad CCPP | 431.59 | Haryana | 3067.72 | 0 |
| 2. | Anta CCPP | 419.33 | Rajasthan | 2674.6 | 0 |
| 3. | Auraiya CCPP | 663.36 | Uttar Pradesh | 3878.62 | 0 |
| 4. | Dadri CCPP | 829.78 | Uttar Pradesh | 5376.07 | 0 |
| SUB TOTAL (NR) | | 2344.06 | | 15017.01 | 0 |
| 5. | Gandhar CCPP | 657.39 | Gujarat | 3684.07 | 3.09 |
| 6. | Kawas CCPP | 656.2 | Gujarat | 3638.4 | 0 |
| 7. | Ratnagiri CCPP I | 740 | Maharashtra | 2950.5 | 714.49 |
| 8. | Ratnagiri CCPP II | 740 | Maharashtra | 4846.46 | 593.33 |
| 9. | Ratnagiri CCPP III | 740 | Maharashtra | 3822.12 | 1661.26 |
| SUB TOTAL (WR) | | 3533.59 | | 18941.55 | 2971.17 |
| 10. | Kathalguri CCPP | 291 | Assam | 1765.17 | 194.02 |
| 11. | Agartala GT | 84 | Tripura | 666.12 | 0 |
| SUB TOTAL (NER) | | 375 | | 2431.29 | 194.02 |
| TOTAL (CS) | | 6252.65 | | 3639.85 | 3165.2 |
| State Sector | | | | | |
| 12. | I.P. CCPP | 270 | Delhi | 1243.72 | 0 |
| 13. | Pragati CCGT-III | 750 | Delhi | 331.38 | 141.14 |
| 14. | Pragati CCPP | 330.4 | Delhi | 2560.05 | 0 |
| 15. | Dholpur CCPP | 330 | Rajasthan | 2253.77 | 249.42 |

| 1 | 2 | 3 | 4 | 5 | 6 |
|--------------------|-----------------|---------|-------------|----------|---------|
| 16. | Ramgarh CCPP | 113.8 | Rajasthan | 536.79 | 0 |
| | SUB TOTAL (NR) | 1794.2 | | 6925.71 | 390.56 |
| 17. | Dhuvaran CCPP | 218.62 | Gujarat | 1008.7 | 0 |
| 18. | Hazira CCPP | 156.1 | Gujarat | 907.62 | 0.52 |
| 19. | Utran CCPP | 518 | Gujarat | 2987.98 | 21.84 |
| 20. | Uran CCPP | 672 | Maharashtra | 4668.789 | 224.45 |
| | SUB TOTAL (WR) | 1564.72 | | 9573.08 | 246.81 |
| 21. | Karaikal CCPP | 32.5 | Puducherry | 251.46 | 0 |
| 22. | Kovikalpal CCPP | 107 | Tamil Nadu | 705.75 | 155.23 |
| 23. | Kuttalam CCPP | 100 | Tamil Nadu | 413.29 | 137 |
| 24. | Narimanam GPS | 10 | Tamil Nadu | 0 | 0 |
| 25. | Valuthur CCPP | 186.2 | Tamil Nadu | 1114.56 | 0 |
| | SUB TOTAL (SR) | 435.7 | | 2485.06 | 292.23 |
| 26. | Lakwa GT | 120 | Assam | 771.99 | 77.56 |
| 27. | Namrup CCPP | 95 | Assam | 565.73 | 27 |
| 28. | Namrup ST | 24 | Assam | 0 | 0 |
| 29. | Baramura GT | 58.5 | Tripura | 357.62 | 0 |
| 30. | Rokhia GT | 90 | Tripura | 419.1 | 0 |
| | SUB TOTAL (NER) | 387.5 | | 2114.44 | 104.55 |
| | TOTAL (SS) | 4182.12 | | 21098.29 | 1034.15 |
| Pvt. Sector | | | | | |
| 31. | Vatwa CCPP | 100 | Gujarat | 459.26 | 403.16 |
| 32. | Trombay CCPP | 180 | Maharashtra | 1567.9 | 29 |
| | SUB TOTAL (WR) | 280 | | 2027.16 | 432.16 |
| | TOTAL (PVT. S) | 280 | | 2027.16 | 432.16 |

| 1 | 2 | 3 | 4 | 5 | 6 |
|------------------------|----------------------------|----------|----------------|----------|----------|
| Pvt. IPP Sector | | | | | |
| 33. | Rithala CCPP | 108 | Delhi | 241.83 | 141.7 |
| | SUB TOTAL (NR) | 108 | | 241.83 | 141.7 |
| 34. | Baroda CCPP | 160 | Gujarat | 668.74 | 549.77 |
| 35. | Essar CCPP | 515 | Gujarat | 135.89 | 0 |
| 36. | Peguthan CCPP | 655 | Gujarat | 3037.07 | 0 |
| 37. | Sugen CCPP | 1147.5 | Gujarat | 7592.16 | 921.26 |
| | SUB TOTAL (WR) | 2477.5 | | 11463.86 | 1471.73 |
| 38. | Gautami CCPP | 464 | Andhra Pradesh | 2898.67 | 960.34 |
| 39. | GMR Energy Ltd. - Kakinada | 220 | Andhra Pradesh | 1200.03 | 0 |
| 40. | Godavari CCPP | 208 | Andhra Pradesh | 1282.46 | 435.39 |
| 41. | Jegurupadu CCPP | 455.4 | Andhra Pradesh | 2833.49 | 860.97 |
| 42. | Konaseema CCPP | 445 | Andhra Pradesh | 2266.22 | 488.09 |
| 43. | Kondapalli Extn. CCPP | 366 | Andhra Pradesh | 2203.54 | 0 |
| 44. | Kondapalli CCPP | 350 | Andhra Pradesh | 2030.94 | 757.77 |
| 45. | Peddapuram CCPP | 220 | Andhra Pradesh | 1318.82 | 565.38 |
| 46. | Vemagiri CCPP | 370 | Andhra Pradesh | 2066.81 | 409.07 |
| 47. | Karuppur CCPP | 119.8 | Tamil Nadu | 797.1 | 0 |
| 48. | P. Nallur CCPP | 330.5 | Tamil Nadu | 1526.19 | 0 |
| 49. | Valantarvy CCPP | 52.8 | Tamil Nadu | 377.51 | 9.14 |
| | SUB TOTAL (SR) | 3601.5 | | 20801.78 | 4486.15 |
| 50. | DLF Assam GT | 24.5 | Assam | 0 | 124.76 |
| | SUB TOTAL (NER) | 24.5 | | 0 | 124.76 |
| | TOTAL (PVT. IPPS) | 6211.5 | | 32507.47 | 6224.34 |
| | GRAND TOTAL | 16926.27 | | 92022.77 | 10855.84 |

@ Installed capacity is as on last day of the year.

* Normative gas requirement at 90% PLF taking GCV of gas = 9000 k. Cal./SCM (except for Ramgarh CCGT for which GCV is 4150 kCal/SCM), station heat rate - 2900 k. Cal/kWh for open cycle and 2000 k. Cal/kWh for combined cycle and is as on last day of the year.

MUs - Million Units MMSCMD - Million Standard Cubic Meters per Day HSD - High Speed Diesel