

**GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
UNSTARRED QUESTION NO-3814**

TO BE ANSWERED ON-03.01.2019

FLEXIBLE ELECTRICITY GRID

3814. SHRI A.P. JITHENDER REDDY

Will the Minister of New & Renewable Energy be pleased to state:

- (a) whether the Government proposes to implement a flexible electricity grid, if so, the details thereof;
- (b) whether the Government intend to incentivize high consumption of electricity during lean consumption hours, if so, the details thereof along with the steps taken thereon;
- (c) the details of indigenous manufacturing base for the floatation devices used in floating solar plants, Statewise and the steps taken to promote manufacturing in this particular field;
- (d) the number of thermal power projects faced with stressed assets and the intention of the Government to help stressed thermal projects and the steps taken by the Government for ensuring fuel supply to these stressed thermal projects;
- (e) the effect of 25 percent safeguard duty on solar cells and modules imported from China and Malaysia on meeting energy requirements and the plan of installing 175 gigawatts of renewable capacity by 2022; and
- (f) the steps taken by the Government to mitigate the fallback?

ANSWER

THE MINISTER OF STATE FOR NEW & RENEWABLE ENERGY AND POWER (I/C)
(SHRI R.K. SINGH)

(a) The increasing renewable energy capacity in the country, requires flexibility in the conventional energy sources, especially the thermal power plants that acts as a base load, to respond as per electricity demand and corresponding renewable energy generation, to ensure a reliable and stable electricity grid. Apart from flexibility in the thermal power plants, integration of renewables in the grid also requires several other measures such as ancillary services, deployment of energy reserves (for example - pumped storage hydro power, Gas based power plants) and demand side management etc. As far as transmission is concerned, since power flows through transmission grid (consists of mainly AC system and few HVDC interconnections & lines) is as per load & generation, flexibility is already there for flow of power.

(b) Para 8.4 (1) of Tariff Policy,2016 inter-alia provides for time differentiated tariff on priority for large consumers (say, consumers with demand exceeding 1 MW) within one year and subsequently for all consumers within a period of five years or such period as may be specified. Further, the amendments proposed to the Tariff Policy provides for introduction of the time-of-the-day (ToD) tariffs not later than 1st April 2019 for consumers who are having suitable meters and it would be automatically extended to other consumers as and when they get suitable meters.

(c) The floating solar power plant is new technology in the country and therefore, there are no report regarding the indigenous manufacturing base for the floatation devices used in these plants.

(d) There are 34 coal based Thermal Power Projects for a total capacity of 40,130 MW (including 15 projects of 16085 MW capacity under construction) which were considered 'Stressed' as on March 22, 2017.

To deal with coal linkage related issues, Shakti Policy-2017 [Scheme for Harnessing and Allocating Koyala (Coal) Transparently in India] was introduced by the Government for ensuring that all projects with linkages are supplied coal as per their entitlement. Also, a High-Level Empowered Committee (HLEC), constituted by GoI to address the issues of Stressed Thermal Power Projects, has made following recommendations for ensuring fuel supply to these stressed thermal projects in its report submitted in November 2018:

- i. Linkage of coal may be allowed to be used against short-term PPAs and power be sold through Discovery of Efficient Energy Price (DEEP) portal following a transparent bidding process.
- ii. A generator should be able to terminate the PPA in case of default in payment from the DISCOM with the facility to use linkage coal for short-term PPAs for a period of maximum of 2 years or until they find another buyer of power under long/medium term PPA, whichever is earlier.
- iii. Ministry of Coal may earmark for power, at least 60 percent of the e-auction coal, and this should be in addition to meeting the regular coal requirement of the power sector.
- iv. The generator should be required to bid only once, for the procurement of PPA and linkage should be granted at the notified price without any further bidding, to the extent of incremental coal production.
- v. If there is a shortfall in the supply of coal and it is attributable to the Ministry of Coal or Railways; such shortfall need not lapse and be carried over to the subsequent months up to a maximum of three months.
- vi. Upper ceiling for the Annual Contract Quantity/MW may be prescribed by the CEA on the basis of efficiency parameters and irrespective of the capacity and actual consumption of that plant, the coal may be supplied on that basis.

In addition to this, it is mentioned that around 10000 MW capacity of old and inefficient plants have been identified for retirement, which may provide a benefit of opening PPA opportunity for stressed projects.

Further, Ministry of Power vide OM No. 4/2/2015–Th- I dated 27.03.2015 has identified 14305 MW of gas-based power generation capacity as stranded due to non-availability of domestic gas. The statewide list of stranded gas-based capacity is enclosed as **Annexure I**. To revive and improve utilization of gas-based capacity in the country, GoI had sanctioned a scheme for the years 2015 – 16 and 2016 – 17, which envisaged supply of imported spot RLNG to the stranded gas-based plants as well as plants receiving domestic gas, selected through a reverse e – bidding process and this scheme also envisaged sacrifices to be made collectively by all stockholders, support from Power System Development Fund. The scheme ended on 31.03.2017.

(e) and (f) There may be some impact on the Solar Power Developers due to imposition of safeguard duty on the solar cells/ modules depending on the extent of imported modules being used in any specific power project. However, the ‘Guidelines for Tariff Based Competitive Bidding Process for Procurement of Power from Grid Connected Solar PV Power Projects’ notified on 3rd August, 2017, provides that “In the event a Change in Law results in any adverse financial loss/ gain to the Solar Power Generator then, in order to ensure that the Solar Power Generator is placed in the same financial position as it would have been had it not been for the occurrence of the Change in Law, the Solar Power Generator/ Procurer shall be entitled to compensation by the other party”.

Further, Ministry of Power, on 27.08.2018 has issued directions to the Central Electricity Regulatory Commission (CERC) under section 107 of the Electricity Act, 2003, inter-alia, stating that:

- i. Any change in domestic duties, levies, cess and taxes imposed by Central Government, State Governments/Union Territories or by any Government instrumentality leading to corresponding changes in the cost, may be treated as “Change in Law” and may unless provided otherwise in the PPA, be allowed as pass through.
- ii. The order for pass through giving the calculation for per unit impact will be issued within 30 days of filing of petition.

Annex-I**List of stranded gas based capacity as per PSDF Scheme**

S. No	Name of Power Station	Sector	Developer	Installed Capacity (MW)	Name of the State
1	GAUTAMI CCPP	P	GVK Gautami Power Ltd	464	ANDHRA PRADESH
2	GMR - KAKINADA (Tanirvavi)	P	GMR Energy	220	ANDHRA PRADESH
3	JEGURUPADU CCPP	P	GVK Industries Ltd	220.5	ANDHRA PRADESH
4	KONASEEMA CCPP	P	Konaseema Power	445	ANDHRA PRADESH
5	KONDAPALLI EXTN CCPP .	P	Lanco Power	366	ANDHRA PRADESH
6	VEMAGIRI CCPP	P	GMR Energy	370	ANDHRA PRADESH
7	SRIBA INDUSTRIES	P	PCIL Power & Holdings Limited	30	ANDHRA PRADESH
8	RVK ENERGY	P	RVK Energy	28	ANDHRA PRADESH
9	SILK ROAD SUGAR	P	SILK ROAD SUGAR	35	ANDHRA PRADESH
10	LVS POWER	P	LVS Power	55	ANDHRA PRADESH
11	GMR VEMAGIRI EXP	P	GMR Energy	768	ANDHRA PRADESH
12	KONDAPALLI EXP ST-III	P	Lanco Power	742	ANDHRA PRADESH
13	SAMALKOT EXP	P	Reliance Infra	2400	ANDHRA PRADESH
14	CCGT BY PANDURANGA	P	Panduranga Energy	116	ANDHRA PRADESH
15	PRAGATI CCGT-III	S	Pragati Power Corporation Ltd	750	DELHI
16	RITHALA CCPP	P	NDPL	108	DELHI
17	DHUVRAN CCPP (GSECL)	S	Gujarat State Electricity Corporation Ltd	112	GUJARAT
18	UTRAN CCPP (GSECL)	S	Gujarat State Electricity Corporation Ltd	374	GUJARAT
19	PIPAVAV CCPP	S	GSPC Pipavav Power Company Ltd	702	GUJARAT
20	DHUVRAN CCPP	S	Gujarat State Electricity Corporation Ltd	376.3	GUJARAT
21	HAZIRA CCPP EXT	S	Gujarat State Energy Generation Ltd	351	GUJARAT
22	VATWA CCPP*	P	Torrent Power	100	GUJARAT
23	ESSAR CCPP	P	Essar Power	300	GUJARAT
24	UNOSUGEN CCPP	P	Torrent Power	382.5	GUJARAT
25	DGEN Mega CCPP	P	Torrent Power	1200	GUJARAT
26	RATNAGIRI (RGPP - DHABHOL)	C	NTPC	1967	MAHARASHTRA
27	CCGT BY PIONEER GAS POWER LTD	P	Pioneer Gas Power Ltd	388	MAHARASHTRA
28	GAS ENGINE BY ASTHA	P	Astha Power	35	TELENGANA
29	KASHIPUR SRAVANTHI ST-I&II	P	Sravanthi Energy	450	UTTARKHAND
30	BETA INFRATECH CCGT	P	Beta Infratech	225	UTTARKHAND
31	GAMA INFRAPROP CCGT	P	Gama Infraprop	225	UTTARKHAND
TOTAL				14305.3	
C: Central Sector; S: State Sector; P: Private Sector;					
* Vatwa CCPP was retired in 2015-16					
	Central	State	Private	Total	
	1967	2665.3	9673	14305.3	