

## **MINISTRY OF NEW AND RENEWABLE ENERGY**

### **Implementation of Development of Solar Parks and Ultra Mega Solar Power Projects - A review**

[Action taken by the Government on the recommendations contained in the 31<sup>st</sup> Report (Seventeenth Lok Sabha) of the Committee on Estimates]

### **COMMITTEE ON ESTIMATES (2024-25)**

#### **FIRST REPORT**

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**(EIGHTEENTH LOK SABHA)**



**LOK SABHA SECRETARIAT  
NEW DELHI**

**FIRST REPORT**

**COMMITTEE ON ESTIMATES**

**(2024-25)**

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Power Projects - A review**

**[Action taken by the Government on the recommendations contained  
in the 31<sup>st</sup> Report (Seventeenth Lok Sabha) of the Committee on  
Estimates]**

**(Presented to Lok Sabha on 18.12.2024)**



**LOK SABHA SECRETARIAT**

**NEW DELHI**

**.....December 2024/..... Agrahayana 1946 (Saka)**

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## **COMPOSITION OF THE COMMITTEE ON ESTIMATES (2024-25)**

1. **Dr. Sanjay Jaiswal- Chairperson**
2. Shri Brijmohan Agrawal
3. Shri M. Mallesh Babu
4. Shri Kalyan Banjerjee
5. Shri Pradan Baruah
6. Shri Charanjit Singh Channi
7. Shri P.P. Chaudhary
8. Shri Devusinh Chauhan
9. Ms. Iqra Choudhary
10. Smt. Sangeeta Kumari Singh Deo
11. Shri Sudheer Gupta
12. Shri Deepender Singh Hooda
13. Shri Manish Jaiswal
14. Shri Naveen Jindal
15. Shri Jugal Kishore
16. Thiru Dayanidhi Maran
17. Shri P.C. Mohan
18. Shri B.K. Parthasarathi
19. Shri Awadhesh Prasad
20. Shri M.K. Raghavan
21. Shri Bishnu Pada Ray
22. Shri Y.S. Avinash Reddy
23. Shri Pratap Rudy
24. Dr. Rajkumar Sangwan
25. Shri Arvind Ganpat Sawant
26. Kumari Selja
27. Dr. Bhola Singh
28. Dr. Indra Hang Subba
29. Shri Manoj Tiwari
30. Shri Ve Vaithilingam

## Secretariat

- |    |                       |                             |
|----|-----------------------|-----------------------------|
| 1. | Shri Y.M. Kandpal     | Joint Secretary             |
| 2. | Shri Lalkithang       | Director                    |
| 3. | Shri Srikanth Singh R | Assistant Executive Officer |

## **INTRODUCTION**

I, the Chairperson of the Committee on Estimates (2024-25) having been authorized by the Committee to present the Report on their behalf, do present this First Report on action taken by the Government on the recommendations contained in the 31<sup>st</sup> Report of the Committee (2023-24) on the subject 'Implementation of Development of Solar Parks and Ultra Mega Solar Power Projects - A review'.

2. The Thirty-First Report of the Committee on Estimates (2023-24) was presented to Lok Sabha on 12<sup>th</sup> December, 2023. The Government furnished their replies indicating action taken on the recommendations contained in the Thirty-First Report on 12<sup>th</sup> July, 2024. The draft report was considered and approved on 16<sup>th</sup> December, 2024 by the Committee.

3. An analysis of action taken by the Government on the Observations/Recommendations contained in the 31<sup>st</sup> Report of the Committee on Estimates is given in Appendix-II.

4. For ease of reference, Observations/Recommendations of the Committee have been presented in bold letters in the Report.

**NEW DELHI;**  
**16 December, 2024**  
**Agrahayana 25, 1946(Saka)**

**Dr. SANJAY JAISWAL**  
**CHAIRPERSON**  
**COMMITTEE ON ESTIMATES**

## CHAPTER - I

### REPORT

This Report of the Committee deals with the action taken by the Government on the Observations/Recommendations of the Committee contained in the Thirty First Report (Seventeenth Lok Sabha) on the subject "Implementation of Development of Solar Parks and Ultra Mega Solar Power Projects - A review" pertaining to the Ministry of New and Renewable Energy.

2. The Thirty-First Report was presented to Lok Sabha on 12.12.2023. It contained 12 Observations/Recommendations. Action Taken Replies of the Government in respect to all the Observations/Recommendations have been received from the Ministry of New and Renewable Energy.

3. Replies to the Observations/Recommendations contained in the Report have broadly been categorised as under:-

(i) Observations/Recommendations which have been accepted by the Government:  
Recommendation. Para No. 1,2,3,4,5,6,7,10 and 11

**Total 09  
(Chapter-II)**

(ii) Observations/Recommendations which the Committee do not desire to pursue in view of Government's reply:  
Recommendation. Para No. 8,9 and 12

**Total: 03  
(Chapter-III)**

(iii) Observations/Recommendations in respect of which Government's replies have not been accepted by the Committee:  
Recommendation. Nos. NIL

**Total-00  
(Chapter-IV)**

(iv) Observations/Recommendations in respect of which final reply of Government is still awaited:  
Recommendation. No. NIL

**Total: 00  
(Chapter-V)**

4. **The Committee desire that Action Taken Notes in respect of the Observations/Recommendations contained in Chapter-I of this Report may be furnished to the Committee within 06 months of the Presentation of the Report to the House.**

5. The Committee will now deal with the Observations/Recommendations which require reiteration or merit further comments.

**(Recommendations Para No. 1)**

6. In their Thirty-First Report, the Committee had noted that India, endowed with a huge solar energy potential, could be a game changer in mitigating the ill-effects of fossil fuel use. The Scheme to establish Solar Parks and Ultra Mega Solar Power Projects by Ministry is a critical step in right direction. The MNRE, being nodal Ministry, has to put in concerted efforts so that solar energy surges as the main renewable energy source in the times to come. The Committee observed that there is significant potential for Solar Energy generation under Mode 8 of the Scheme which entails collaboration with CPSU/State PSUs/Government organizations/their subsidiaries or the Joint Ventures. The Committee noted that out of 29 approved Solar Parks having aggregate capacity of over 24 GW, only 9.3 GW had been actually commissioned. Taking cognizance of the gap between actual and approved capacity, the Committee urged the Ministry to devise a stringent mechanism through which delays are minimized/eliminated at the first place itself. The Ministry should keep periodic check (say quarterly or so) on different stages of development of solar parks so that the time lapse of setting up and commissioning of solar parks are minimized. The Committee would like to be apprised of the previous interventions, the Ministry made in the past and the ways and means through which it would continue to strengthen the process of setting up of solar parks. Therefore, the Committee stressed upon to have effective monitoring and review mechanism at senior level so that the targeted capacity could be achieved within the timeline.



7. The Ministry of New and Renewable Energy in their Action Taken Reply furnished to the Committee, stated as follows:

“The Ministry issued the guidelines for development of the Solar Parks and Ultra Mega Solar Power Projects for setting up 20,000 MW capacity in December’2014. This was later enhanced to 40 GW in March’2017. To address the issues faced during the implementation of the scheme, Ministry had modified the guidelines from time to time to ensure better implementation. In-line with this, the guidelines for Mode-8 of the scheme were issued by this Ministry to engage CPSUs/State PSUs/Government Organisations and their Joint Ventures for development of Solar Parks.

Further, to address various issues arising during Park development, Ministry has been conducting regular meetings with all the stakeholders like the Solar Power Park Developers (SPPDs), Central Transmission Utility (CTU)/ State Transmission Utility (STU), concerned State Government agencies etc. under the Chairmanship of Joint Secretary/Secretary/Hon’ble Minister. Ministry also obtains the periodic (monthly) progress reports for tracking the progress of the Solar Parks.

As per the recommendation of the Hon’ble Committee, Ministry has constituted a Solar Park monitoring unit under the chairmanship of concerned Joint Secretary and with senior level representatives from Ministry of Power, SECI, IREDA, CTU, and Grid India. The monitoring unit will periodically review the progress of the Solar Parks. The members of the unit will also take note of the issues being faced by the park developers in developing the Solar Parks and take pro-active measures for mitigating the same.

In addition, Ministry is also developing a portal for tracking and effective monitoring of the progress of Solar Parks. This portal is under final stages of development”.

8. Taking cognizance of the gap between actual and approved capacity in the development Solar Parks and Ultra Mega Solar Power Projects, the Committee had urged the Ministry to devise a stringent mechanism through which delays are minimized/eliminated and had suggested that the Ministry should establish periodic checks (quarterly reviews) to ensure setting up and commissioning of solar parks are completed in a timely manner. Further, the Committee had stressed the importance of effective senior level monitoring and review mechanism to ensure that the set targets are met within the timeline. In their action taken reply, the Ministry have outlined several steps being taken to address various issues arising during Solar Park development such as issuance of guidelines to develop Solar Parks, enhancing targets to 40 GW, updating guidelines from time to time, development of Portal for tracking Solar Parks' progress and conducting regular meetings with all the stakeholders under the Chairmanship of Joint Secretary/Secretary/Hon'ble Minister etc. The Committee are pleased to note that the Ministry, acting on the recommendations of the Committee has constituted a Solar Park monitoring unit under the chairmanship of concerned Joint Secretary and with senior level representatives from Ministry of Power, SECI, IREDA, CTU, and Grid India. However, despite these efforts, the Committee remain concerned about the persistent gap between the approved capacity (24 GW) and the actual commissioned capacity (9.3 GW). While the Committee acknowledge the Ministry's efforts, the Committee feel that the Ministry's reply lacks clarity on steps to address the root causes of the delays and the timeline for taking action. There is also no clarity on how the new measures, such as monitoring unit and tracking portal, will directly impact and accelerate development of solar projects. Therefore, the Committee feel that more concrete steps with strict timelines are needed to address the ongoing delays and challenges in Solar Park development. Hence, the Committee strongly reiterate their Original Recommendation and urge the Ministry to make all out efforts to address the systemic challenges and ensuring that the mechanism in place have a direct and measurable impact on the solar park development project. The Committee would like to be apprised about the latest progress made

**in development of Portal for tracking and effective monitoring of the progress of Solar Parks.**

**(Recommendations Para No. 3)**

9. The Committee, in their Thirty-First Report, had noted that, under the solar park scheme, CPSUs/SECs were primarily the implementing agencies, designated to establish 7 solar parks of a combined installed capacity of 5.97 GW. Taking cognizance of the fact that generation/transmissions were yet to begin from these 7 solar parks, the Committee felt that MNRE being the nodal Ministry had to take up the responsibility of dedicated leadership in a way to sensitize/ motivate CPSUs like NTPC, NHPC, SECI etc. so that the latter gear up their operations. The Committee firmly believed that with combined efforts the timeline for setting up of solar parks shall be achieved without any further delays. The Committee would like to be apprised of the steps taken in this regard.

10. The Ministry of New and Renewable Energy in their Action Taken Reply, stated as follows:

“Out of the 7 Solar Parks being developed by CPSUs like NTPC, SECI & NHPC as referred by the Hon’ble Committee, one Solar Park of 100 MW has been commissioned by SECI in Chhattisgarh. The remaining 6 Solar Parks are under implementation. The progress is being monitored regularly and the issues related to them are addressed from time to time.”

**11. Noting the delays in the establishment of Solar Parks by concerned CPSUs/SECs, which were primarily responsible for establishing 7 solar parks, the Committee felt that the Ministry of New and Renewable Energy being the nodal Ministry had to play a more active leadership role in sensitizing/ motivating the CPSUs like NTPC, NHPC, SECI etc. so that they expedite their efforts and meet the timelines without further delays. The Committee note from the Action taken reply received from the Ministry that out of the 7 Solar Parks being developed by CPSUs like NTPC, SECI & NHPC, only one Solar Park of 100 MW has been commissioned by SECI in Chhattisgarh, while the remaining 6 Solar Parks are**

**under implementation and the progress is being monitored regularly and the issues related to them are addressed from time to time. The Committee are not satisfied with the reply of the Ministry, as it lacked clarity on the specific steps being taken to motivate or sensitize the CPSUs, and did not highlight any clear leadership initiatives or action plans to overcome delays. The Committee, therefore, reiterate their original recommendation and would also like to be apprised about the latest progress in the form of a detailed statement indicating the various reasons for delay in the implementation of each of the 7 Solar Parks, steps being taken to expedite the completion of the Solar Parks and timelines for the commissioning of the remaining Parks.**

**(Recommendations Para No. 6)**

12. The Committee in their Thirty-First Report had noted that one of the challenges to meet the target of 40 GW by 2023-24 is delay in finalizing Power Purchase Agreements (PPAs) between SPPDs and States/DISCOMS after finalization of tenders. This delay can be attributed to several factors, including lack clear directions from parent Ministry, a protracted internal approval process, involvement of multiple Ministries, lack of prior experience within the Government Departments etc. The potential consequences of this situation are multifaceted including delay in project implementation, changes in scheme regulations, costs and incentives, developers withdrawing from projects and financial losses for the entities involved. Taking a serious view of this situation, the Committee recommended the Ministry to establish a single window system which would minimize the complexities of internal approval process reducing the involvement of multiple Ministries. The Committee firmly held that the Ministry should collaborate with specialized agencies to develop standardized model formats for PPAs and fix definite time period for different levels of approval. These models can serve as templates, simplifying the negotiation process and expediting the overall execution of Solar Power Projects.

13. The Ministry of New and Renewable Energy in their Action Taken Reply, stated as follows:

“The Power Purchase Agreements (PPAs) are signed between Solar Project Developers and States/DISCOMs in cases of tenders being issued by State Agencies. For tenders issued by Renewable Energy Implementing Agencies (REIAs), the Power Sale Agreements (PSAs) are signed between the REIAs & the States/DISCOMs and the PPAs are signed back-to-back between the REIAs and the Solar Project Developers.

These PPAs are bi-lateral agreements between the two entities and this Ministry or any other Central Government Ministries have no direct involvement in execution of such PPAs.

However, Ministry of Power has issued standard bidding guidelines under section 63 of the Electricity Act, 2003, for procurement of power from solar, wind, wind-solar hybrid, and Firm & Dispatchable Power. These standard bidding guidelines also provides indicative timeline for bid process. The PPAs are framed broadly in accordance with these guidelines”.

**14. The Committee in their original report had highlighted that delays in finalizing Power Purchase Agreements (PPAs) between Solar Power Parks Developers (SPPDs) and States/DISCOMS as one of the significant challenges in achieving the target of 40 GW target by 2023-24. The Committee had attributed these delays to factors such as lack of clear directions from the Ministry, prolonged internal approval process, involvement of multiple Ministries after finalization of tenders. To address this, the Committee had recommended the Ministry to establish a single window system to minimize the complexities of internal approval process reducing the involvement of multiple Ministries. Further, the Committee had also suggested the Ministry to collaborate with specialized agencies to develop standardized model formats for PPAs and fix definite time period for various levels of approval. The Ministry of New and Renewable energy, in their action taken reply furnished to the Committee, stated that PPAs are bi-lateral agreements signed between Solar Project Developers and States/DISCOMs and that Ministry or any other Central Government Ministries have no direct involvement in their execution. Further, the Ministry pointed out that Ministry of**

**Power has already issued standard bidding guidelines under section 63 of the Electricity Act, 2003, which provide indicative timeline for bidding process. The Committee are not satisfied with the reply of the Ministry, as it does not address the Committee's recommendations for simplifying the process and reducing bureaucratic bottlenecks. The Committee, therefore, reiterate their earlier recommendation for establishment of a single window system and develop standardized PPA templates to set definite timelines for the approval process at each level within the Ministry. The Committee expect the Ministry to take immediate action in implementing these recommendations and apprise them on the progress made.**

**(Recommendations Para No. 7)**

15. In their Thirty-First Report, the Committee had noted that several Solar Projects are stalled due to refusal by State Electricity Regulatory Commissions (SERCs) to approve tariffs, even when such tariffs have been determined through tariff based competitive bidding.

Additionally, certain Solar Parks like Dholera Solar Park (1000 MW) in Gujarat and Kadapa Solar Park (1000 MW) in Andhra Pradesh are currently under litigation in the Appellate Tribunal for Electricity (APTEL), leading to further delays in completion of Solar Projects. While Ministry had statedly tried to resolve the matter through various communication and review meetings at the highest level but the matter is yet to be resolved. In light of these challenges, the Committee felt that the Ministry needed to find a permanent solution to this problem and explore the possibility of implementing alternative dispute resolution mechanisms, such as arbitration and reconciliation forum to enable the stakeholders to reach at mutually agreed solution; in a bid to avoid project delays.

16. The Ministry of New and Renewable Energy in their Action Taken Reply, stated as follows:

“Ministry had taken up the matter with the Forum of Regulators (FoR) and also during the review meetings held with the concerned States on various occasions. Similar matter was discussed in a meeting jointly chaired by Secretary, MNRE and Secretary, Ministry of Power (MoP) wherein it was inter alia discussed that, in order to avoid delays in adoption:

i. Ministry of Power would take up the matter with CERC for not insisting on the signed copy of the PPA and signed copy of the PSA for adoption of tariffs under Section 63 of the Electricity Act, 2003.

ii. Ministry of Power may also examine on whether advisory can be issued to SERCs for not insisting on approval by CERC under Section 63 of the Electricity Act, 2003, as an ab-initio pre-requisite for process for approval by SERCs under Section 86(1)(b) of the Electricity Act, 2003 and starting the process of approval under Section 86(1)(b) of the Electricity Act, 2003, in parallel, while the decision of CERC on tariff adoption under Section 63 of the Electricity Act, 2003, is ongoing.

The Ministry has set up a Dispute Resolution Mechanism, which provides for an independent, transparent and unbiased Dispute Resolution Committee (DRC), for resolving the unforeseen disputes that may arise in implementation of contractual agreements and also for dealing with issues which are beyond the scope of Contractual Agreements between Renewable Energy (RE) Power Developers/ EPC Contractors and SECI/ NTPC/ NHPC/ SJVN/ any other Renewable Energy Implementing Agency (REIA), designated by MNRE. The aforesaid Dispute Resolution Mechanism is also applicable for the PPAs between entities under State Governments/ UT Govts. /Administration and RE Power Developers, provided the concerned State/UT Government/ entity, undertake to incur the sitting fee of the DRC Members and associated expenditure in respect of these cases before the DRC and also abide by the decision coming out of this mechanism.”

17. The Committee, in their Original Report, had noted that several Solar Projects were stalled due to refusal by State Electricity Regulatory Commissions (SERCs) to approve tariffs, despite these tariffs being determined through tariff based competitive bidding. The Committee had also pointed out that certain Solar Parks like Dholera Solar Park (1000 MW) in Gujarat and Kadapa Solar Park (1000 MW) in Andhra Pradesh were currently under litigation in the Appellate Tribunal for Electricity (APTEL), leading to further delays in completion of Solar Projects. The Committee had recommended the Ministry to find a permanent solution to these challenges by exploring alternate dispute resolution mechanism to help stakeholders reach mutually agreeable solutions and avoid project delays. The Ministry, in their Action taken Reply, have stated that, they have taken up the matter of stalled Solar Projects with the Forum of Regulators (FoR) and Ministry of Power to address the tariff adoption issue. The Ministry also stated that they have set up a Dispute Resolution Mechanism (DRM) to resolve the disputes during the implementation of Solar Projects. The Committee are not satisfied with the reply of the Ministry, as it only addresses the dispute resolution process and tariff adoption through adjustments such as engaging with Central Electricity Regulatory Commission(CERC) and providing advisories to SERCs. While these efforts are valuable, the Committee feel the Ministry's reply does not fully address the permanent solution of issues leading to delays, particularly the ongoing litigation and tariff approval blockages. The Committee, therefore, reiterate their earlier recommendation and once again urge the Ministry to develop a clear and actionable strategy. Further, the Committee urge the Ministry to furnish details in the form of a detailed Statement about the Dispute Resolution Committee (DRC) setup by the Ministry for dealing with issues which are beyond the scope of Contractual Agreements between Renewable Energy (RE), Power Developers/ EPC Contractors and SECI/ NTPC/ NHPC/ SJVN/ any other Renewable Energy Implementing Agency (REIA), designated by MNRE at the earliest.



### **(Recommendations Para No. 10)**

18. In their Thirty- First Report, the Committee noted the challenges being faced by several Solar Parks in Rajasthan such as Phalodi-Pokaran Solar Park (750 MW) and the Nokh Solar Park (925 MW) in relation to the endangered Great Indian Bustard(GIB) issue. These majestic birds are on the brink of extinction, with less than 100 remaining in the natural habitat. Given their size, any collision with the power lines proves fatal for such birds, and the network of power lines stemming from solar plants have also formed a deadly web around the GIB habitat. As a result their population has significantly dwindled over the last few years. Furthermore, it has been learnt that on 19.04.2021, Hon'ble Supreme Court has passed an order in M. K. Ranjitsinh &Ors. V. Union of India &Ors., outlining direction and measures to be taken particularly regarding the conversion of over-head power transmission lines into underground power lines in the areas identified as Priority and Potential habitats for the Great Indian Bustard (GIB). In this regard, Hon'ble Supreme Court had also constituted a three member Committee comprising of wildlife experts and Scientists for the purpose of assessing the feasibility of laying underground power lines. Acknowledging the gravity of the issue, the Committee felt the need to strike a rightful balance between wildlife conservation, especially Great Indian Bustard and development of Green Energy initiatives. The Committee urged the Ministry to explore advanced technological methods like microwaves for wireless transmission of solar power from solar parks in such critical locations to protect these endangered species.

19. The Ministry of New and Renewable Energy in their Action Taken Note, stated as follows:

“The last hearing on the GIB issue was held on 21.03.2024. Vide Order dated 21.03.2024, Hon'ble Supreme Court has constituted an Expert Committee. The remit of the committee inter-alia include determining the scope, feasibility and extent of overhead and underground electric lines in the area identified as priority area in the reports of the Wild Life Institute of India in the States of Rajasthan and Gujarat. Further, Hon'ble Supreme Court has stated that the injunction which has been imposed in the Hon'ble Supreme Court order dated 19th April 2021 in

respect of the area described as the potential area shall accordingly stand relaxed subject to the condition that the Expert Committee appointed by this Court may lay down suitable parameters covering both the priority and potential areas. The Committee shall be at liberty to impose any additional measures both in regard to the priority and potential areas, if it considers appropriate including considering the efficacy and suitability of installing bird diverters on existing and future power lines. The Committee has been directed by the Hon'ble Supreme Court to complete its task and submit a report to the Court through the Union Government on or before 31st July 2024.

As regards advanced technological methods like wireless power transmission, it is submitted that this technology is currently in its early or nascent stages and presents certain challenges like overall efficiency degradation. The wireless power transmission technology is commercially not available for large power transfer.”

**20. The Committee, in their Original Report, had highlighted the challenges posed to the Great Indian Bustard (GIB) by power transmission lines in solar parks in Rajasthan and emphasized the need to strike a rightful balance between wildlife conservation and development of Green Energy initiatives. Further, the Committee had urged the Ministry to explore advanced technological methods like microwaves for wireless transmission of solar power from solar parks in such critical locations to protect these endangered species. The Ministry, in their Action taken Reply, have informed that vide Order dated 21.03.2024, Hon’ble Supreme Court has constituted an Expert Committee for determining the scope, feasibility and extent of overhead and underground electric lines in the area identified as priority area in the reports of the Wild Life Institute of India in the States of Rajasthan and Gujarat and that the Expert Committee has been directed by the Hon'ble Supreme Court to complete its task and submit a report to the Court through the Union Government on or before 31st July 2024. The Committee feel that the Ministry should not just await the implementation of the expert Committee report but also actively explore and implement interim mitigation**

measures, such as installation of bird diverters on existing power lines, to minimize risks to the Great Indian Bustard(GIB) population. Further, the Committee would like to be apprised about the latest status of Report of the Expert Committee which was due on 31<sup>st</sup> July, 2024 and the steps being taken for Great Indian Bustard conservation.

## **Chapter – II**

### **OBSERVATIONS/RECOMMENDATIONS WHICH HAVE BEEN ACCEPTED BY THE GOVERNMENT**

#### **Observations/Recommendations(No. 1)**

The Committee note that India, endowed with a huge solar energy potential, could be a game changer in mitigating the ill-effects of fossil fuel use. The Scheme to establish Solar Parks and Ultra Mega Solar Power Projects by Ministry is a critical step in right direction. The MNRE, being nodal Ministry, has to put in concerted efforts so that solar energy surges as the main renewable energy source in the times to come. The Committee observe that there is significant potential for Solar Energy generation under Mode 8 of the Scheme which entails collaboration with CPSU/State PSUs/Government organizations/their subsidiaries or the Joint Ventures. The Committee note with the approval of total of 29 Solar Parks having aggregate capacity of over 24 GW, only 9.3 GW has been actually commissioned. Taking cognizance of the gap between actual and approved capacity, the Committee urge the Ministry to devise a stringent mechanism through which delays are minimized/eliminated at the first place itself. The Ministry should keep periodic check (say quarterly or so) on different stages of development of solar parks so that the time lapse of setting up and commissioning of solar parks are minimized. The Committee would like to be apprised of the previous interventions, the Ministry made in the past and the ways and means through which it would continue to strengthen the process of setting up of solar parks. Therefore, the Committee stress upon to have effective monitoring and review mechanism at senior level so that the targeted capacity could be achieved within the timeline.

#### **Reply of the Government**

The Ministry issued the guidelines for development of the Solar Parks and Ultra Mega Solar Power Projects for setting up 20,000 MW capacity in December'2014. This was later enhanced to 40,000 MW in March'2017. To address the issues faced during the implementation of the scheme, Ministry had modified the guidelines from time to time to

ensure better implementation. In-line with this, the guidelines for Mode-8 of the scheme were issued by this Ministry to engage CPSUs/State PSUs/Government Organisations and their Joint Ventures for development of Solar Parks.

Further, to address various issues arising during Park development, Ministry has been conducting regular meetings with all the stakeholders like the Solar Power Park Developers (SPPDs), Central Transmission Utility (CTU)/ State Transmission Utility (STU), concerned State Government agencies etc. under the Chairmanship of Joint Secretary/Secretary/Hon'ble Minister. Ministry also obtains the periodic (monthly) progress reports for tracking the progress of the Solar Parks.

As per the recommendation of the Hon'ble Committee, Ministry has constituted a Solar Park monitoring unit under the chairmanship of concerned Joint Secretary and with senior level representatives from Ministry of Power, SECI, IREDA, CTU, and Grid India. The monitoring unit will periodically review the progress of the Solar Parks. The members of the unit will also take note of the issues being faced by the park developers in developing the Solar Parks and take pro-active measures for mitigating the same.

In addition, Ministry is also developing a portal for tracking and effective monitoring of the progress of Solar Parks. This portal is under final stages of development.

### **Comments of the Committee**

**[Please see Para 08 of Chapter-I of the Report]**

#### **Observations/Recommendations(No. 2)**

The Committee observe that the land constitutes the crux in the development of Solar Parks. The requirement of land is approximately 4-5 acres per Megawatt (MW) for setting up of Solar Parks. Land for the setting up of Solar Park is generally identified by the State/UT Government unless the SPPD has its own land. The Ministry in their written submission has stated that out of 2.2 Lakh acres identified, around 1.73 lakh acres have already been acquired/ allotted for approved Solar Parks. Further, the Committee have

been informed that a total of 19 Solar Parks with an approved capacity of 9596 MW are facing several challenges in acquirement of land including issues such as legal disputes and delay in land allocation by State Governments. The Committee strongly feel that assisting State Governments in providing fair and timely compensation to land owners would provide a great boost to the solar park developers along with ensuring ease in getting environmental clearances. The Committee, therefore, urge the Ministry to take up the matter with the State Governments so as to ensure acquisition of land in a time bound manner. The Committee also suggest the Ministry to set up a monitoring Unit/Cell at the highest level for having issues of stakeholders and keeping a regular check on Solar Park Developers.

### **Reply of the Government**

Under Mode-8 of the Solar Park Scheme, in order to encourage the State Governments to provide necessary assistance to the park developers in identification & acquisition of land, to facilitate in obtaining all required statutory clearances etc., a facilitation charge of ₹0.05/unit of power being generated from the projects in the parks, is provided to them.

The issues w.r.t land are also taken up in the review meetings conducted with various stakeholders including the State Governments. Ministry has also written to the various State Governments for identifying suitable government land for the installation of RE projects, fixing fair compensation and its timely payment for private lands and easing out land-related rules (changing the land use and making exemptions from the land ceiling limit) for RE projects.

Based on the suggestion of the Hon'ble Committee, Ministry has constituted a Solar Park Monitoring Unit comprising of representatives from MNRE, Ministry of Power, SECI, IREDA, CTU and Grid India to monitor the progress of Solar Parks and take measures to mitigate the issues while implementation.

### **Observations/Recommendations(Para No. 3)**

The Committee note that, under the solar park scheme, CPSUs/SECs are primarily the implementing agencies, designated to establish 7 solar parks of a combined

installed capacity of 5970 MW. Taking cognizance of the fact that generation/transmissions are yet to begin from these 7 solar parks, the Committee feel that MNRE being the nodal Ministry has to take up the responsibility of dedicated leadership in a way to sensitize/ motivate CPSUs like NTPC, NHPC, SECI etc. so that the latter gear up their operations. The Committee firmly believe that with combined efforts the timeline for setting up of solar parks shall be achieved without any further delays. The Committee would like to be apprised of the steps taken in this regard.

### **Reply of the Government**

“Out of the 7 Solar Parks being developed by CPSUs like NTPC, SECI & NHPC as referred by the Hon’ble Committee, one Solar Park of 100 MW has been commissioned by SECI in Chhattisgarh. The remaining 6 Solar Parks are under implementation. The progress is being monitored regularly and the issues related to them are addressed from time to time.”

### **Comments of the Committee**

**[Please see Para 11 of Chapter-I of the Report]**

#### **Observations/Recommendations(No. 4)**

The Committee note that the total amount for CFA is estimated to be ₹ 4,050 crore, yet only ₹ 1803.79 crore have actually been disbursed till date. The Committee find such low disbursement as one of the major bottlenecks in the development of solar parks. For the setting up of solar parks, Central Financial Assistance (CFA) up to ₹ 25 lakh per Solar Park for the preparation of Detailed Project Report (DPR) is provided by the Ministry. Additionally, CFA upto ₹ 20.00 lakh per Megawatt or 30% of the project cost, including Grid-connectivity expenses, whichever is lower, upon achieving the specified project milestones is also prescribed in the Scheme. Further, Solar Energy Corporation of India Ltd. (SECI) disburses the approved grant in line with these milestones. The Committee would like to urge the Ministry to analyse the reasons associated with lower disbursements. A strong fund flow is imperative for successful development of any project and the Committee would like the Ministry to put in place an

inherent system of audit wherein reasons for low disbursements are highlighted and the Ministry is in a position to take timely remedial measures for the same. They would like to be apprised of the steps taken in this regard.

### **Reply of the Government**

The total outlay of the scheme was initially Rs. 4050 Crore when the capacity was 20,000 MW. Subsequently, the scheme capacity was enhanced to 40,000 MW and correspondingly, the CFA was revised to Rs. 8100 Crore.

The funds are released to the concerned Solar Power Park Developer (SPPD) after they achieve the milestone stipulated in the guidelines of the Solar Park Scheme and subsequent verification of the same by the Implementing agencies i.e. SECI & IREDA. The first milestone under the scheme for release of CFA is acquisition of 50% of the required land by the park developer. Since land acquisition takes time, the release of CFA also gets delayed.

However, the release of fund under the scheme has increased from ~Rs. 1842 Crore from introduction of the scheme (2014-15) till 2021-22 to ~Rs. 3410 Crore as on date. Hence, this indicates that the fund flow has accelerated due to the progress being made under the scheme. Ministry is reviewing the progress on regular basis and ensures that the funds are released in a time bound manner as and when the milestones are achieved by the Solar Power Park Developers.

At the beginning of the financial year, Ministry along with the scheme implementing agencies (SECI & IREDA) and the Solar Power Park Developers (SPPDs), prepares an estimate of the funds to be released along with the tentative milestones. Subsequently, the Ministry monitors the achievement of those milestones and addresses any impediments faced by the SPPDs for timely release of the CFA.

### **Observations/Recommendations(No. 5)**

The Committee further find that one of the major constraints in timely commissioning of Solar Parks is the difference in gestation period between development



of Solar Parks and transmission infrastructure. The gestation period of development of Solar Park is 24 months, whereas the construction activities of transmission infrastructure require 36 to 48 months. This incongruity results in delays in the development of Solar Parks. The Committee are informed that the Ministry is taking several steps such as identification of Renewable Energy (RE) potential zones, planning for transmission infrastructure accordingly etc. Additionally, MNRE in collaboration with the Ministry of Power, Central Electricity Agency (CEA), Central Transmission Utility (CTU) and the States has initiated steps to complete the Green Energy Corridor (GEC) and other transmission projects on time. The objective is to ensure that Solar Parks do not have to suffer from lack of reliable evacuation and transmission Infrastructure. The Committee desire to be informed about the latest progress made in development of transmission infrastructure like Green Energy Corridor etc. Furthermore, the Committee strongly recommend the speedy construction of Intra-State and Inter-State transmission systems to facilitate the efficient transfer of power generated from Solar Parks. The Committee also urge for setting up of Solar Energy Management Centers (SEMCs) to enhance forecasting of Solar Power generated from Solar Parks. These centres would also support grid operators in managing the variability and intermittency inherent in renewable power sources.

### **Reply of the Government**

The Government of India has taken several crucial steps to ensure the timely, effective, and efficient evacuation of renewable energy across the country. These steps are listed below: (i) Establishment of Green Energy Corridor (GEC): To facilitate the integration of large-scale renewable generation capacity in eight resource rich states—Rajasthan, Gujarat, Tamil Nadu, Maharashtra, Karnataka, Andhra Pradesh, Himachal Pradesh, and Madhya Pradesh- a comprehensive plan was developed under the “Green Energy Corridors” initiative. This plan involves strengthening the transmission infrastructure at both intra-state and inter-state levels to integrate renewable energy sources into the grid. Additionally, it encompassed the establishment of control infrastructure, such as Renewable Energy Management Centers (REMCs), which handle forecasting and

scheduling of renewable generation to manage the intermittency and variability of RE capacity at the SLDC/RLDC/NLDC levels.

Under the scheme, an Inter-State Transmission system has been developed, comprising 6 numbers of 765kV / 400kV substations, 3200 ckm of high-capacity lines, and a transformation capacity of 17,000 MVA facilitating integration of 6 GW of renewable energy generation capacity.

Under the Intra-State Transmission System GEC Phase-I scheme, 9135ckm of transmission lines have been constructed and 21313 MVA capacity substations have been charged as on 30.06.2024 out of target of 9767 ckm lines and 22689 MVA substations.

The projects under Intra-State GEC Phase-II scheme are currently under the tender stage. Out of 92 packages, 68 have been tendered. Of these, 45 have been awarded as on 30.06.2024.

The project under Inter-State GEC Phase-II shall enable evacuation and grid integration of 13 GW renewable power projects in| Ladhak through VSC based +350 kV HVDC transmission line from Pang (Leh) to Kaithal (Haryana) which is first of its kind system in world in such topography. It is expected to be completed by FY 2029-30.

(ii) Transmission Scheme for Solar Power Parks: Under this initiative, POWERGRID has developed transmission systems totalling 1,870 ckm of transmission lines and established 5 pooling stations with a transformation capacity of approximately 13,500 MVA. These systems connect seven solar parks with a combined capacity of approximately 6500 MW, namely Ananthapur (1500 MW), Pavagada (2050 MW), Rewa (750 MW), Bhadla-III (500 MW), Bhadla-IV (250 MW), Essel (750 MW), and Banaskantha (700 MW). The transmission systems for remaining parks are developed/being developed by STU/CTU.

(iii) Status of Transmission System Development to achieve GOI target of 500GW by 2030: India aims to integrate 50% non-fossil fuel-based power generation into its installed capacity mix by 2030, with a target of establishing 500 GW capacity from non-

fossil energy sources. To achieve this, the Government of India has published a Transmission Plan in December 2022. This plan outlines the need for 50,890 ckm of additional transmission lines and 4,33,575 MVA of transformation capacity under ISTS to integrate planned RE capacity. Currently, 200 GW of non-fossil energy capacity is already connected to the grid. Out of the remaining 300 GW, approximately 199 GW will be connected through ISTS. Implementation of the ISTS network for this 199 GW is progressing with 89 GW under construction, 47 GW under bidding, 63 GW under approval, and the remainder in planning stages. The phased implementation of transmission systems aligns with the commissioning schedules of RE projects and solar parks.

(iv) Renewable Energy Management Centers (REMCs): To address the challenges of forecasting and scheduling Renewable Energy generation integrated with the existing Supervisory Control and Data Acquisition System (SCADA), the Government has established 12 Renewable Energy Management Centres and 1 Energy Management Centre co-located at SLDC/RLDC/NLDC locations across Tamil Nadu, Andhra Pradesh, Karnataka, Gujarat, Maharashtra, Madhya Pradesh, Rajasthan, Telangana, South Andaman, SRLDC, WRLDC, and NRLDC. These centers are instrumental in forecasting, scheduling, and monitoring wind and solar Variable Renewable Energy (VRE) resources.

#### **Observations/Recommendations(No. 6)**

The Committee have been informed that one of the challenges to meet the target of 40 GW by 2023-24 is delay in finalizing Power Purchase Agreements (PPAs) between SPPDs and States/DISCOMS after finalization of tenders. This delay can be attributed to several factors, including lack clear directions from parent Ministry, a protracted internal approval process, involvement of multiple Ministries, lack of prior experience within the Government Departments etc. The potential consequences of this situation are multifaceted including delay in project implementation, changes in scheme regulations, costs and incentives, developers withdrawing from projects and financial losses for the entities involved. Taking a serious view of this situation, the Committee recommend the

Ministry to establish a single window system which would minimize the complexities of internal approval process reducing the involvement of multiple Ministries. The Committee firmly hold that the Ministry should collaborate with specialized agencies to develop standardized model formats for PPAs and fix definite time period for different levels of approval. These models can serve as templates, simplifying the negotiation process and expediting the overall execution of Solar Power Projects.

### **Reply of the Government**

The Power Purchase Agreements (PPAs) are signed between Solar Project Developers and States/DISCOMs in cases of tenders being issued by State Agencies. For tenders issued by Renewable Energy Implementing Agencies (REIAs), the Power Sale Agreements (PSAs) are signed between the REIAs & the States/DISCOMs and the PPAs are signed back-to-back between the REIAs and the Solar Project Developers.

These PPAs are bi-lateral agreements between the two entities and this Ministry or any other Central Government Ministries have no direct involvement in execution of such PPAs.

However, Ministry of Power has issued standard bidding guidelines under section 63 of the Electricity Act, 2003, for procurement of power from solar, wind, wind-solar hybrid, and Firm & Dispatchable Power. These standard bidding guidelines also provides indicative timeline for bid process. The PPAs are framed broadly in accordance with these guidelines.

### **Comments of the Committee**

**[Please see Para 14 of Chapter-I of the Report]**

#### **Observations/Recommendations(No. 7)**

The Committee note that several Solar Projects are stalled due to refusal by State Electricity Regulatory Commissions (SERCs) to approve tariffs, even when such tariffs have been determined through tariff based competitive bidding. Additionally, certain Solar Parks like Dholera Solar Park (1000 MW) in Gujarat and Kadapa Solar Park (1000 MW)

in Andhra Pradesh are currently under litigation in the Appellate Tribunal for Electricity (APTEL), leading to further delays in completion of Solar Projects. While Ministry have statedly tried to resolve the matter through various communication and review meetings at the highest level but the matter is yet to be resolved. In light of these challenges, the Committee feel that the Ministry need to find a permanent solution to this problem and explore the possibility of implementing alternative dispute resolution mechanisms, such as arbitration and reconciliation forum to enable the stakeholders to reach at mutually agreed solution; in a bid to avoid project delays.

### **Reply of the Government**

Ministry had taken up the matter with the Forum of Regulators (FoR) and also during the review meetings held with the concerned States on various occasions. Similar matter was discussed in a meeting jointly chaired by Secretary, MNRE and Secretary, Ministry of Power (MoP) wherein it was inter alia discussed that, in order to avoid delays in adoption:

- i. Ministry of Power would take up the matter with CERC for not insisting on the signed copy of the PPA and signed copy of the PSA for adoption of tariffs under Section 63 of the Electricity Act, 2003.
- ii. Ministry of Power may also examine on whether advisory can be issued to SERCs for not insisting on approval by CERC under Section 63 of the Electricity Act, 2003, as an ab-initio pre-requisite for process for approval by SERCs under Section 86(1)(b) of the Electricity Act, 2003 and starting the process of approval under Section 86(1)(b) of the Electricity Act, 2003, in parallel, while the decision of CERC on tariff adoption under Section 63 of the Electricity Act, 2003, is ongoing.

The Ministry has set up a Dispute Resolution Mechanism, which provides for an independent, transparent and unbiased Dispute Resolution Committee (DRC), for resolving the unforeseen disputes that may arise in implementation of contractual agreements and also for dealing with issues which are beyond the scope of Contractual Agreements between Renewable Energy (RE) Power Developers/ EPC Contractors and SECI/ NTPC/ NHPC/ SJVN/ any other Renewable Energy Implementing Agency

(REIA), designated by MNRE. The aforesaid Dispute Resolution Mechanism is also applicable for the PPAs between entities under State Governments/ UT Govts. Administration and RE Power Developers, provided the concerned State/UT Government/ entity, undertake to incur the sitting fee of the DRC Members and associated expenditure in respect of these cases before the DRC and also abide by the decision coming out of this mechanism.

### **Comments of the Committee**

**[Please see Para 17 of Chapter-I of the Report]**

#### **Observations/Recommendations(No. 10)**

The Committee are well aware of the challenges being faced by several Solar Parks in Rajasthan such as Phalodi-Pokaran Solar Park (750 MW) and the Nokh Solar Park (925 MW) in relation to the endangered Great Indian Bustard(GIB) issue. These majestic birds are on the brink of extinction, with less than 100 remaining in the natural habitat. Given their size, any collision with the power lines proves fatal for such birds, and the network of power lines stemming from solar plants have also formed a deadly web around the GIB habitat. As a result their population has significantly dwindled over the last few years. Furthermore, it has been learnt that on 19.04.2021, Hon'ble Supreme Court has passed an order in M. K. Ranjitsinh & Ors. V. Union of India & Ors., outlining direction and measures to be taken particularly regarding the conversion of over-head power transmission lines into underground power lines in the areas identified as Priority and Potential habitats for the Great Indian Bustard (GIB). In this regard, Hon'ble Supreme Court had also constituted a three member Committee comprising of wildlife experts and Scientists for the purpose of assessing the feasibility of laying underground power lines. Acknowledging the gravity of the issue, the Committee feel the need to strike a rightful balance between wildlife conservation, especially Great Indian Bustard and development of Green Energy initiatives. The Committee urge the Ministry to explore advanced technological methods like microwaves for wireless transmission of solar power from solar parks in such critical locations to protect these endangered species.

## **Reply of the Government**

The last hearing on the GIB issue was held on 21.03.2024. Vide Order dated 21.03.2024, Hon'ble Supreme Court has constituted an Expert Committee. The remit of the committee inter-alia include determining the scope, feasibility and extent of overhead and underground electric lines in the area identified as priority area in the reports of the Wild Life Institute of India in the States of Rajasthan and Gujarat. Further, Hon'ble Supreme Court has stated that the injunction which has been imposed in the Hon'ble Supreme Court order dated 19th April 2021 in respect of the area described as the potential area shall accordingly stand relaxed subject to the condition that the Expert Committee appointed by this Court may lay down suitable parameters covering both the priority and potential areas. The Committee shall be at liberty to impose any additional measures both in regard to the priority and potential areas, if it considers appropriate including considering the efficacy and suitability of installing bird diverters on existing and future power lines. The Committee has been directed by the Hon'ble Supreme Court to complete its task and submit a report to the Court through the Union Government on or before 31st July 2024.

As regards advanced technological methods like wireless power transmission, it is submitted that this technology is currently in its early or nascent stages and presents certain challenges like overall efficiency degradation. The wireless power transmission technology is commercially not available for large power transfer.

### **Observations/Recommendations(No. 11)**

The Committee note that several Solar Projects are experiencing delays in finalization of their external power evacuation systems and transmission infrastructure primarily because these projects are located in forest areas. This situation has apparently caused delay in implementation of projects like Barethi Solar Park (630 MW) and Chhatarpur Solar Park (950 MW), which are situated within Panna Tiger reserve. The Committee feel that the Ministry Should collaborate with all relevant stakeholders viz. Ministry of Environment Forest and Climate Change, Central Electricity Authority (CEA), Central Transmission Unit (CTU)/State Transmission Unit (STU), Solar Power Park

Developers (SSPDs) and other concerned Ministries/Departments of the Union and the States, to evolve a comprehensive action plan, to ensure hassle free and time bound external power evacuation systems and transmission infrastructure for solar parks, especially for those located in forest areas.

### **Reply of the Government**

Ministry had earlier cancelled some parks, as the land identified for development of the Solar Parks was falling under forest land. The Chhatarpur Solar Park (450 MW, previously 950 MW) was also falling under this category which led to its cancellation subsequently.

Ministry has taken up such issues (Kaza and Kinnaur Solar Parks in Himachal Pradesh) with Ministry of Environment Forest and Climate Change to provide relaxations, which subsequently did not materialize leading to cancellation of the Solar Parks.

Accordingly, Ministry in subsequent proposals under the Solar Park Scheme, requests the concerned agencies to ensure that the land is free from all encumbrances or any constraints, including forest clearance, which may impede the development. Only after the same is ensured, proposals were considered for sanctioning of capacity under the Solar Park Scheme. The Ministry keeps the CTU & CEA apprised of the approvals under the Solar Park Scheme, so that the transmission planning can be started in advance and minimize the delay.



## CHAPTER III

### **OBSERVATIONS/RECOMMENDATIONS WHICH THE COMMITTEE DO NOT DESIRE TO PURSUE IN VIEW OF GOVERNMENT'S REPLIES**

#### **Observations/Recommendations(No.8)**

The Committee have observed that several Solar Projects like Kalpi Solar Park (65 MW) have been delayed because Solar Power Project Developers (SPPDs) are facing difficulties in acquiring Solar modules and Solar photovoltaic with a capacity of (PV) Cells due to levy of Basic Customs Duty(BCD). Further, on 09.03.2021, Ministry issued an Office Memorandum announcing the imposition of Basic Customs Duty on solar cells and modules. As per this announcement, w.e.f. 1 April, 2022, any import of solar PV modules would attract 40% basic Customs Duty (BCD), while the import of solar PV cells would have a 25% BCD. The Committee understand that these high import duties were imposed to reduce the influx of cheaper Solar components from China and to promote the domestic production of those items. To encourage the growth of the domestic Solar module industry, the Government also introduced a Production-Linked Incentive (PLI) scheme. However, despite these measures, the domestic industry has not yet reached its full potential, and the combination of high import duties and the Approved List of Modules and Manufacturers (ALMM) has led to a shortage of modules in the country, impacting ongoing solar projects. The Committee strongly hope that the matter should be taken up with the Ministry of Finance on an urgent basis. Since the BCD rates need to be reevaluated, and a more balanced approach has to be taken to ensure that stalled Solar Projects are completed according to their planned timelines, the Committee would like to be apprised of the progress made in this regard.

#### **Reply of the Government**

It is submitted that the 65 MW Kalpi Solar Park in Uttar Pradesh is complete and the projects inside the park are also commissioned.

This Ministry has taken various policy measures and schemes such as imposition of Domestic Content Requirement (DCR) in certain schemes, Production-Linked Incentive

(PLI) scheme etc. to boost the domestic manufacturing of solar cells and modules in the country. As of June, 2024, the installed manufacturing capacity of solar module in the country is around 58 GW, which is more than 3.5 times the solar power capacity installed in the country in FY 2023-24. Hence, there is sufficient manufacturing capacity for solar PV modules in the country.

### **Observations/Recommendations(No 9)**

The Committee observe that India has made significant progress in its Solar (PV) manufacturing capacity with 6 GW for solar PV Cells and approximately 38 GW for solar PV modules. This represents a substantial increase from 2020 when India had the solar cell capacity of 3 GW, which has doubled to 6 GW as of March 2023. Similarly the solar PV module capacity, meanwhile, has grown from 15 GW to 38 GW during the same period of time. The Committee appreciate that Ministry has taken significant steps such as creating “favorable” policy environment by introducing the PLI scheme, and establishing a list of approved modules and manufacturers. These measures have played a pivotal role in doubling India’s solar cell and PV module capacity since 2020. These measures are expected for prospering domestic Solar manufacturing industry towards achieving 110 GW of solar PV module capacity by fiscal 2026, with an additional 72 GW of new manufacturing capacity set to come up within the next three years. This substantial expansion will establish self-sufficiency and make India the second-largest PV manufacturing country globally following China. Nevertheless, to further strengthen domestic manufacturing, the Committee feel that additional steps are required to be initiated and therefore recommend that Government should consider extending the existing PLI scheme to cover other ancillary components, such as glass and ethylene vinyl acetate which are used in Solar panel lamination. There need to be sufficient incentives to encourage electricity consumption among solar PV manufacturers, alongwith subsidies to support the initial capital costs involved in setting up production facilities. The Committee also desire that the exemptions from excise duty and Zero import duty on raw materials should be implemented to reduce the manufacturing costs. The Ministry should also work on providing Viability Gap Funding (VGF) and low interest rate loans to domestic manufacturers to enhance their financial viability.

## **Reply of the Government**

The Government is implementing PLI Scheme for high efficiency solar PV modules, which has inherent provision for incentivizing local value addition in the country by providing higher PLI for higher local value addition. This in-turn incentivizes local sourcing of ancillary components, such as glass and ethylene vinyl acetate.

The Government has incentivizes in the form of policy initiatives like announcement of 'Green Energy Open Access' Rules which inter-alia allow consumer to purchase renewable power through open access. Further, the said rule has put a cap on increasing of cross-subsidy surcharge as well as the removal of additional surcharge, encouraging the consumers to go green.

The Ministry regularly interacts with domestic solar PV manufacturers through monthly meeting under the chairmanship of Secretary, MNRE to review the issues of Solar manufacturers, including the ancillary manufacturers. The issues of customs duty/GST which are highlighted are taken up with Ministry of Finance.

Due to various efforts taken by the Government, the solar module manufacturing capacity has reached around 58 GW as of June 2024.

### **Observations/Recommendations(No. 12)**

The Committee note that the floating Solar Parks are facing maintenance issues. The SECI and MNRE are reportedly deliberating highly automated solutions to address those. The Committee desire to be furnished the action taken on this issue.

## **Reply of the Government**

The floating solar projects which are already developed are mostly setup outside the Solar Park Scheme. One project of 100 MW has been installed in the 600 MW Omkareswar Floating Solar Park under the Solar Park Scheme and no issues in maintenance were reported.

However, the Ministry and SECI will monitor the progress of the floating parks, in collaboration with the park developers.

**CHAPTER IV**

**OBSERVATIONS/RECOMMENDATIONS IN RESPECT OF WHICH GOVERNMENT'S  
REPLIES HAVE NOT BEEN ACCEPTED BY THE COMMITTEE**

**NIL**

**CHAPTER V**

**Observations/ Recommendations in respect of which final replies of Government  
are still awaited**

**NIL**

**NEW DELHI;  
16 December, 2024  
Agrahayana 25, 1946(Saka)**

**Dr. SANJAY JAISWAL  
CHAIRPERSON  
COMMITTEE ON ESTIMATES**

**MINUTES OF THE NINTH SITTING OF THE COMMITTEE ON ESTIMATES (2024-2025)**

The Committee sat on Monday, the 16<sup>th</sup> December, 2024 from 1600 hrs. to ..... hrs. in Room No. '52-B', First Floor, Samvidhan Sadan, New Delhi.

**PRESENT**

**Dr. Sanjay Jaiswal - Chairperson**

**Members**

2. Shri Brijmohan Agrawal
3. Shri M. Mallesh Babu
4. Shri Pradan Baruah
5. Shri Kalyan Banerjee
6. Shri P. P. Chaudhary
7. Smt. Sangeeta Kumari Singh Deo
8. Shri Deepender Singh Hooda
9. Shri Manish Jaiswal
10. Thiru Dayanidhi Maran
11. Shri P. C. Mohan
12. Shri B.K. Parthasarathi
13. Shri Rajiv Pratap Rudy
14. Dr. Rajkumar Sangwan
15. Shri Arvind Ganpat Sawant
16. Kumari Selja
17. Dr. Indra Hang Subba
18. Shri Manoj Tiwari
19. Shri Ve vaithilingam

**SECRETARIAT**

1. Shri Y. M. Kandpal - Joint Secretary
2. Shri Lalkithang - Director

2. At the outset, the Chairperson welcomed the Members to the sitting of the Committee. The Committee then took up for consideration and adoption of the following draft Reports:

(i) Draft Report on Action Taken by the Government on the Observations/Recommendations contained in the 31st Report (17th Lok Sabha) of the Committee on the subject "Implementation of Development of Solar Parks and Ultra Mega Solar Power Projects - A review";

(ii) XXX XXX XXX

(iii) XXX XXX XXX

(iv) XXX XXX XXX and

(v) XXX XXX XXX

3. Thereafter, the Committee adopted the Draft Reports without any modifications. The Committee, then, authorised the Chairperson to finalize the draft Reports and present the same to Lok Sabha.

***The Committee, then, adjourned.***

## APPENDIX II

### Analysis of action taken by the Government on the Observations/Recommendations of the Committee contained in the Thirty-First Report (Seventeenth Lok Sabha)

(i)	Total number of recommendations/observations	12
(ii)	Recommendations/Observations which have been accepted by the Government: (Sl. NO. 1,2,3,4,5,6,7,10 and 11)	09
	Percentage of total recommendations	75%
(iii)	Observations/Recommendations which the Committee do not desire to pursue in view of Government's reply: (Sl. NO. 8,9 and 12)	03
	Percentage of total recommendations	25%
(iv)	Observations/Recommendations in respect of which Government's replies have not been accepted by the Committee: (NIL)	00
	Percentage of total recommendations	00%
(v)	Observations/Recommendations in respect of which final reply of Government is still awaited: (NIL)	00
	Percentage of total recommendations	00%