



Driving Climate Actions

# Project Verification Report

V3.1 - 2020



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<b>Draft Project Verification Report Form (PVR)</b>	
<b>BASIC INFORMATION</b>	
<b>Name of approved GCC Project Verifier / Reference No.</b> (Also provide weblink of approved GCC Certificate)	Carbon Check (India) Private Limited. /GCCV004/01  <a href="http://globalcarboncouncil.com/wp-content/uploads/2021/10/carbon-check-india-private-limited-ccipl.pdf">http://globalcarboncouncil.com/wp-content/uploads/2021/10/carbon-check-india-private-limited-ccipl.pdf</a>
<b>Type of Accreditation</b>	<input type="checkbox"/> Individual Track <sup>1</sup> <input checked="" type="checkbox"/> CDM Accreditation E-0052 Valid from 28/03/2019 until 01/06/2024 <a href="https://cdm.unfccc.int/DOE/list/DOE.html?entityCode=E-0052">https://cdm.unfccc.int/DOE/list/DOE.html?entityCode=E-0052</a> <input checked="" type="checkbox"/> ISO 14065 Accreditation <a href="http://nabcb.gci.org.in/accreditation/reg_bod_ghg.php">http://nabcb.gci.org.in/accreditation/reg_bod_ghg.php</a> Valid form 28/06/2021 until 27/06/2024
<b>Approved GCC Scopes and GHG Sectoral scopes for Project Verification</b>	<b>GCC Scope</b> <ul style="list-style-type: none"> <li>• Green House Gas (GHG# - ACC)</li> <li>• Environmental No-harm (E+)</li> <li>• Social No-harm (S+)</li> <li>• Sustainable Development Goals (SDG+)</li> </ul> <b>GHG Sectoral Scope</b> <ul style="list-style-type: none"> <li>• Energy (renewable/non-renewable sources)</li> </ul>
<b>Validity of GCC approval of Verifier</b>	08/03/2023 to 31/05/2024
<b>Title, completion date, and Version number of the PSF to which this report applies</b>	Zuka Power 133MW bundled Solar PV Power projects at Telangana and Andhra Pradesh, India  Version 1.2  Dated 05/12/2023
<b>Title of the project activity</b>	Zuka Power 133 MW bundled Solar PV Power projects at Telangana and Andhra Pradesh, India
<b>Project submission reference no.</b> (as provided by GCC Program during GSC)	S00729

<sup>1</sup> **Note:** GCC Verifier under Individual tack is not eligible to conduct verifications for the GCC project that intends to supply carbon credits (ACCs) for CORSIA requirements.

<p><b>Eligible GCC Project Type<sup>2</sup> as per the Project Standard</b> (Tick applicable project type)</p>	<p><input checked="" type="checkbox"/> <b>Type A:</b>  <input type="checkbox"/> Type A1  <input checked="" type="checkbox"/> Type A2  <input checked="" type="checkbox"/> Sub-Type 1  <input type="checkbox"/> Sub-Type 2  <input type="checkbox"/> Sub-Type 3  <input type="checkbox"/> Sub-Type 4</p> <p><input type="checkbox"/> <b>Type B – De-registered CDM Projects:</b>  <input type="checkbox"/> Type B1  <input type="checkbox"/> Type<sup>3</sup> B2</p>										
<p><b>Date of completion of Local stakeholder consultation</b></p>	<p>LSC dates for the 4 Project Activities forming the bundle are as follows:</p> <table border="1" data-bbox="687 898 1449 1171"> <thead> <tr> <th>Project Activity Developer</th> <th>LSC Completion Date</th> </tr> </thead> <tbody> <tr> <td>Jilesh Power Pvt. Ltd.</td> <td>03/02/2022</td> </tr> <tr> <td>Vishvarupa Solar Power Pvt. Limited</td> <td>03/02/2022</td> </tr> <tr> <td>Zuka Power Pvt. Ltd.</td> <td>03/02/2022</td> </tr> <tr> <td>SEI Green Flash Pvt. Ltd.</td> <td>03/02/2022</td> </tr> </tbody> </table>	Project Activity Developer	LSC Completion Date	Jilesh Power Pvt. Ltd.	03/02/2022	Vishvarupa Solar Power Pvt. Limited	03/02/2022	Zuka Power Pvt. Ltd.	03/02/2022	SEI Green Flash Pvt. Ltd.	03/02/2022
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Zuka Power Pvt. Ltd.	03/02/2022										
SEI Green Flash Pvt. Ltd.	03/02/2022										
<p><b>Date of completion and period of Global stakeholder consultation. Have the GSC comments been verified. Provide web-link.</b></p>	<p>14/12/2022 to 28/12/2022          No comments were received during GSC.  <a href="https://www.globalcarboncouncil.com/global-stakeholders-consultation.html">https://www.globalcarboncouncil.com/global-stakeholders-consultation.html</a></p>										
<p><b>Name of Entity requesting verification service</b> (can be Project Owners themselves or any Entity having authorization of Project Owners)</p>	<p>Zuka Power Private Limited</p>										
<p><b>Contact details of the representative of the Entity, requesting verification service</b> (Focal Point assigned for all communications)</p>	<p>M. Murali Krishnam Raju  <a href="mailto:muraliraju.m@greenkogroup.com">muraliraju.m@greenkogroup.com</a>          Greenko Energies Private Limited</p>										

<sup>2</sup> Project Types defined in Project Standard and Program Definitions on GCC website.

<sup>3</sup> GCC Project Verifier shall conduct Project Verification for all project types except B<sub>2</sub>.

<p><b>Country where project is located</b></p>	<p>India</p>																																							
<p><b>GPS coordinates of the Project site(s)</b></p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="width: 50%;">Latitude</th> <th colspan="2" style="width: 50%;">Longitude</th> </tr> </thead> <tbody> <tr> <td colspan="4" style="text-align: center;"> <p><b>Jilesh Power Pvt. Ltd.</b>  <b>Capacity: 45 MW</b>  Village: Kodakandla, District: Jangaon,  State: Telangana</p> </td> </tr> <tr> <td style="width: 25%;">17°31'19.2"N</td> <td style="width: 25%;">17.5220°N</td> <td style="width: 25%;">79°31'33.6"E</td> <td style="width: 25%;">79.5260°E</td> </tr> <tr> <td colspan="4" style="text-align: center;"> <p><b>Vishvarupa Solar Power Pvt. Ltd.</b>  <b>Capacity: 10 MW</b>  Village: Kodakandla, District: Jangaon,  State: Telangana</p> </td> </tr> <tr> <td>17°31'1.2"N</td> <td>17.5170°N</td> <td>79°31'12"E</td> <td>79.5200°E</td> </tr> <tr> <td colspan="4" style="text-align: center;"> <p><b>Zuka Power Pvt. Ltd.</b>  <b>Capacity: 48 MW</b>  Village: K. M. Pally, District: Nalgonda,  State: Telangana</p> </td> </tr> <tr> <td>16°47'24"N</td> <td>16.7900°N</td> <td>78°53'2.4"E</td> <td>78.8840°E</td> </tr> <tr> <td colspan="4" style="text-align: center;"> <p><b>SEI Green Flash Pvt. Ltd.</b>  <b>Capacity: 30 MW</b>  Village: Bodipadu panchayat, Chejerla Mandal, District:  Nellore,  State: Andhra Pradesh</p> </td> </tr> <tr> <td>14°29'16.8"N</td> <td>14.4880°N</td> <td>79°35'27.6"E</td> <td>79.5910°E</td> </tr> </tbody> </table>				Latitude		Longitude		<p><b>Jilesh Power Pvt. Ltd.</b>  <b>Capacity: 45 MW</b>  Village: Kodakandla, District: Jangaon,  State: Telangana</p>				17°31'19.2"N	17.5220°N	79°31'33.6"E	79.5260°E	<p><b>Vishvarupa Solar Power Pvt. Ltd.</b>  <b>Capacity: 10 MW</b>  Village: Kodakandla, District: Jangaon,  State: Telangana</p>				17°31'1.2"N	17.5170°N	79°31'12"E	79.5200°E	<p><b>Zuka Power Pvt. Ltd.</b>  <b>Capacity: 48 MW</b>  Village: K. M. Pally, District: Nalgonda,  State: Telangana</p>				16°47'24"N	16.7900°N	78°53'2.4"E	78.8840°E	<p><b>SEI Green Flash Pvt. Ltd.</b>  <b>Capacity: 30 MW</b>  Village: Bodipadu panchayat, Chejerla Mandal, District:  Nellore,  State: Andhra Pradesh</p>				14°29'16.8"N	14.4880°N	79°35'27.6"E	79.5910°E
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<p><b>Applied methodologies</b> (approved methodologies of GCC or CDM can be used)</p>	<p>GCCM001 - Methodology for Renewable Energy Generation Projects Supplying Electricity to Grid or Captive Consumers (Version 3.0 - 2022)</p>																																							
<p><b>GHG Sectoral scopes linked to the applied methodologies</b></p>	<p>GHG-SS 1: Energy (renewable/non-renewable sources)</p>																																							
<p><b>Project Verification Criteria:</b> Mandatory requirements to be assessed</p>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> ISO 14064-2, ISO 14064-3</li> <li><input checked="" type="checkbox"/> GCC Rules and Requirements</li> <li><input checked="" type="checkbox"/> Applicable Approved Methodology</li> <li><input checked="" type="checkbox"/> Applicable Legal requirements /rules of host country</li> <li><input checked="" type="checkbox"/> National Sustainable Development Criteria (if any)</li> <li><input checked="" type="checkbox"/> Eligibility of the Project Type</li> <li><input checked="" type="checkbox"/> Start date of the Project activity</li> </ul>																																							

	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Meet applicability conditions in the applied methodology</li> <li><input checked="" type="checkbox"/> Credible Baseline</li> <li><input checked="" type="checkbox"/> Additionality</li> <li><input checked="" type="checkbox"/> Emission Reduction calculations</li> <li><input checked="" type="checkbox"/> Monitoring Plan</li> <li><input checked="" type="checkbox"/> No GHG Double Counting</li> <li><input checked="" type="checkbox"/> Local Stakeholder Consultation Process</li> <li><input checked="" type="checkbox"/> Global Stakeholder Consultation Process</li> <li><input checked="" type="checkbox"/> United Nations Sustainable Development Goals (Goal No 13- Climate Change)</li> <li><input checked="" type="checkbox"/> Others - CORSIA requirements</li> </ul>
<p><b>Project Verification Criteria:</b> Optional requirements to be assessed</p>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Environmental Safeguards Standard and do-no-harm criteria</li> <li><input checked="" type="checkbox"/> Social Safeguards Standard do-no-harm criteria</li> <li><input checked="" type="checkbox"/> United Nations Sustainable Development Goals (in additional to SDG 13)</li> <li><input checked="" type="checkbox"/> CORSIA requirements</li> </ul>
<p><b>Project Verifier’s Confirmation:</b> The <i>GCC Project Verifier</i> has verified the GCC project activity and therefore confirms the following:</p>	<p>The GCC Project Verifier, Carbon Check (India) Private Limited, certifies the following with respect to the GCC Project Activity “Zuka Power 133MW bundled Solar PV Power projects at Telangana and Andhra Pradesh, India”</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> The Project Owner has correctly described the Project Activity in the Project Submission Form (version 1.2, dated 05/12/2023) including the applicability of the approved methodology [GCC methodology, GCCM001 version 3.0] and meets the methodology applicability conditions and is expected to achieve the forecasted real, measurable and additional GHG emission reductions, complies with the monitoring methodology, has appropriately conducted local and global stakeholder consultation processes and has calculated emission reductions estimates correctly and conservatively.</li> <li><input checked="" type="checkbox"/> The Project Activity is likely to generate GHG emission reductions amounting to the estimated 2,247,809 tCO<sub>2e</sub> over the crediting period, as indicated in the PSF, which are additional to the reductions that are likely to occur in absence of the Project Activity and complies with all applicable GCC rules, including ISO 14064-2 and ISO 14064-3.</li> <li><input checked="" type="checkbox"/> The Project Activity is not likely to cause any net-harm to the environment and/or society and complies with the Environmental and Social Safeguards Standard, and is likely to achieve the following labels: <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Environmental No-net-harm Label (<b>E<sup>+</sup></b>)</li> <li><input checked="" type="checkbox"/> Social No-net-harm Label (<b>S<sup>+</sup></b>)</li> </ul> </li> <li><input checked="" type="checkbox"/> The Project Activity is likely to contribute to the achievement of United Nations Sustainability Development Goals (SDGs),</li> </ul>

	<p>complies with the Project Sustainability Standard, and contributes to achieving a total of 6 SDGs (SDG 3,4,7,8,9 and 13), with the following<sup>4</sup> SDG certification label (<b>SDG*</b>):</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Bronze SDG Label</li> <li><input type="checkbox"/> Silver SDG Label</li> <li><input type="checkbox"/> Gold SDG Label</li> <li><input type="checkbox"/> Platinum SDG Label</li> <li><input checked="" type="checkbox"/> Diamond SDG Label</li> </ul> <p><input checked="" type="checkbox"/> The Project Activity complies with all the applicable requirement of the GCC Program and ICAO’s requirements on CORSIA Emissions Unit Eligibility Criteria and CORSIA Eligible Emissions Units, as per Clarification No 1., v1.3 paragraph 23-25, and the ACCs expected to be issued during the crediting period is likely to be CORSIA eligible and can be used by International Airlines for offsetting their emissions during all phases of CORSIA and therefore requests GCC Steering Committee to append CORSIA Certification label (C+) to this project</p> <p><input checked="" type="checkbox"/> The Project Activity complies with all the applicable GCC rules<sup>5</sup> and therefore recommends GCC Program to register the Project activity with above mentioned labels.</p>
<p><b>Project Verification Report, reference number and date of approval</b></p>	<p>Reference number: CCIPL1348/GCC/VAL/BSPTA/20220520</p> <p>Version 3.0</p> <p>Date: 13/12/2023</p>
<p><b>Name of the authorised personnel of GCC Project Verifier and his/her signature with date</b></p>	<p><i>Priya Suman</i></p> <p>Priya Suman, Compliance Officer</p> <p>Date:13/12/2023</p>

<sup>4</sup> SDG Certification labels: Bronze label (1 star): by achieving 2 out of 17 SDGs; Silver label (2 star): by achieving 3 out of 17 SDGs; Gold label (3 star): by achieving 4 out of 17 SDGs; Platinum label (4 star): by achieving 5 out of 17 SDGs; and Diamond label (5 star): by achieving more than 5 out of 17 SDGs.

<sup>5</sup> “GCC Rules” are defined in Project Definitions and refers to the rules and requirements set out by the GCC program related to GHG emission reductions and its voluntary certification labels and are available on the GCC Program’s public website: <https://www.globalcarboncouncil.com/resource-centre.html>

# 1. PROJECT VERIFICATION REPORT

## Section A. Executive summary

Zuka Power Private Limited has appointed the Project Verifier, Carbon Check (India) Private Ltd. (CC IPL), to perform an independent project verification of the project activity “Zuka Power 133MW bundled Solar PV Power projects at Telangana and Andhra Pradesh, India” (hereinafter referred to as “project activity”). This report summarizes the findings of verification of the project, performed on the basis of GCC rules and requirements as well as criteria given to provide for consistent project operations, monitoring and reporting. This report contains the findings and resolutions from the project verification and a verification opinion.

The project activity, 133 MW bundled solar power project, is jointly owned by Jilesh Power Private Limited, Vishvarupa Solar Power Private Limited, Zuka Power Private Limited and SEI Green Flash Private Limited /4/. Zuka Power Private Limited is authorized to act as the Project Owner /15/ in accordance with the requirements of the GCC program as stated under paragraph 18 of the GCC Clarification No.1 version 1.3 /B01/. The purpose of project activity is to utilize clean technology to generate electricity by harnessing solar radiation energy and supply the generated electricity to the Indian grid, which is predominantly fossil fuel based. The bundled project activity involves the installation of three solar photovoltaic power plants with capacities of 45 MW, 10 MW and 48 MW in the state of Telangana and one solar photovoltaic power plant with the capacity of 30 MW at Nellore District in the state of Andhra Pradesh, India. The average annual electricity supplied to grid will be of 241,567 MWh, translating into annual average emission reductions of around 224,781 tCO<sub>2</sub>e.

The project also contributes to Environmental No-net-harm Label (E+), Social No-net-harm Label (S+), CORSIA requirements (C+) and 6 United Nations Sustainable Development Goals (SDG+).

“The Project Activity complies with all the applicable requirement of the GCC Program and ICAO’s requirements on CORSIA Emissions Unit Eligibility Criteria and CORSIA Eligible Emissions Units, as per Clarification No 1., v1.3 paragraph 23-25, and the ACCs expected to be issued during the crediting period is likely to be CORSIA eligible and can be used by International Airlines for offsetting their emissions during all phases of CORSIA and therefore requests GCC Steering Committee to append CORSIA Certification label (C+) to this project”.

The purpose of the project verification is to have a thorough and independent assessment of the proposed Project Activity against the applicable GCC rules and requirements, including those specified in the Project Standard, applied methodology/methodological tools and any other requirements, in particular, the project's baseline, monitoring plan and the host Party criteria. These are verified to confirm that the project design, as documented, is sound and reasonable and meets the identified criteria. Verification requirement for all GCC projects activity is necessary to provide assurance to stakeholders of the quality of the Project Activity and its intended generation of Approved Carbon Credits (ACCs).

Location

The bundled project activity is implemented in the states of Telangana and Andhra Pradesh, India. Details of the same are as follows:

Latitude		Longitude	
<b>Jilesh Power Pvt. Ltd.</b> <b>Capacity: 45 MW</b> Village: Kodakandla, District: Jangaon, State: Telangana			
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Scope of Project Verification

The project verification scope is defined as the independent and objective review of the project submission form (PSF /1/). The PSF /1/ is reviewed against the relevant criteria and decisions by the GCC, including the applied GCC approved baseline and monitoring methodology, GCCM001, version 3.0 /B02/, and allied CDM tools. The verification team has, based on the recommendations in the GCC Project Standard, Version 3.1 /B01-1/, Project Verification Standard Version 3.1 /B01-2/, Project Sustainability Standard v 3.0 /B01/ and Environment & Social Safeguards Standard v 3.0 /B01/, employed a rule-based approach, focusing on the identification of significant risks for project implementation and the generation of ACCs.

The verification activity aims to establish that the proposed project activity meets the requirements set forth in the aforementioned frameworks and standards and also fulfils applicable Legal requirements/rules of host country, National Sustainable Development Criteria and CORSIA requirements and other GCC requirements related to aspects such as project design, applicable

conditions, project boundary, baseline scenarios, additionality, emission reduction, monitoring plan, local stakeholder consultation, global stakeholder consultation, GHG emission reductions (ACCs), environmental no-net harm label (E+), social no net harm label (S+), Dimond SDG label (SDG+), CORSIA+.

The verification is not meant to provide any consulting to the project owner. However, stated requests for clarifications and/or corrective actions may have provided input for improvement of the program design.

While carrying out the verification, CCIPL determines if the PSF complies with the requirements of the applicability conditions of the selected methodology /B02/, guidance issued by the GCC and also assess the claims and assumptions made in the PSF /1-b/ without limitation on the information provided by the project owner.

### Verification Process

#### Strategic risk Analysis and delineation of the Verification plan:

CC IPL employed the following Project Verification process:

1. Conflict of interest review at the time of contract review;
2. Selection of Audit Team at the time of contract review;
3. Kick-off meeting with the client;
4. Review of the draft PSF listed on GCC website for public consultation;
5. Development of the Verification plan;
6. Desktop review and evaluation of emission reduction calculations;
7. Follow-up interaction with the client; and final statement and report development.

The Verification process has utilized to gain an understanding of the:

- Project's design, GHG emission sources and reductions,
- Baseline determination and additionality,
- GHG monitoring plan,
- Environmental & Social impacts,
- Stakeholder's consultation,
- SD indicators integrated with the project and
- Verify the collection and handling of data, the calculations that lead to the results, and the means for reporting the associated data and results.

Development of the Verification Plan:

The Audit Team formally documented its Verification plan.

The Verification plan was developed based on discussion of key elements of the Verification process during the kick-off meeting and as per the criteria of engagement. Client had the opportunity to comment on key elements of this plan for Verification. Based on items discussed above and agreed upon with the client in the signed contract, the plan identified the CCIPL audit team members based on following:

- Reasonableness of the assumptions, limitations and methods used to forecast information as per GCC requirements, Project level of assurance (which is reasonable as per GCC requirements),

Standards of evaluation and reporting for the Verification.

It also provides an outline of the Verification process and established project deliverables. The project verification consists of the following four phases:

I. A desk review of the project submission form.

- A review of the data and information;
- Cross checks between information provided in the PSF /1/ and information from sources with all necessary means without limitations to the information provided by the project owner;

II. Follow-up interviews with project stakeholders

- Interviews with relevant stakeholders in host country with personnel having knowledge with the project development;
- Cross checking between information provided by interviewed personnel with all necessary means without limitations to the information provided by the project owner;

III. Reference to available information relating to projects or technologies similar projects under verification and review based on the approved methodology /B02/ being applied, of the appropriateness of formulae and accuracy of calculations.

IV. The resolution of outstanding issues and the issuance of the final verification report and opinion.

The Verification team confirms the contractual relationship between the Project Verifier, CCIPL and the Project Owner signed on 21/06/2022 /B22/. The team assigned to the Verification meets the CCIPL's internal procedures including the GCC requirements for the team composition and competence. The Verification team has conducted a thorough contract review as per GCC and CCIPL's procedures and requirements.

The report is based on the assessment of the PSF /1-b/ undertaken through stakeholder consultations, application of standard auditing techniques including but not limited to document reviews and stakeholder interviews, review of the applicable/applied methodology /B02/ and their underlying formulae and calculations.

This report contains the details of the resolution of findings from the project verification which are successfully resolved by the PO to confirm the program design in the documents is sound and reasonable and meets the stated requirements and identified criteria.

### Conclusion

Carbon Check (India) Private Ltd. is of the opinion that the project activity "Zuka Power 133MW bundled Solar PV Power projects at Telangana and Andhra Pradesh, India" in India as described in the final PSF (Version 1.2, dated 05/12/2023) /1-b/ meets all relevant requirements of GCC and has correctly applied the GCC baseline and monitoring methodology GCCM001 'Methodology for Renewable Energy Generation Projects Supplying Electricity to Grid or Captive Consumers' version 3.0 /B02/. The review of the PSF, supporting documentation and subsequent follow-up actions (onsite audit and interviews) have provided CCIPL with sufficient evidence to determine the fulfilment of the voluntary labels E+, S+ /B01-4/ and SDG+ with diamond rating /B01-5/.

The Project Activity complies with all the applicable requirement of the GCC Program and ICAO's requirements on CORSIA Emissions Unit Eligibility Criteria and CORSIA Eligible Emissions Units, as per Clarification No 1., v1.3 /B01-6/ paragraph 23-25, and the ACCs expected to be issued during the crediting period is likely to be CORSIA eligible and can be used by International Airlines for offsetting their emissions during all phases of CORSIA and therefore requests GCC Steering Committee to append CORSIA Certification label (C+) to this project".

Carbon Check (India) Private Ltd. therefore is able to recommend the project activity to the GCC Steering Committee with a request for registration.

## Section B. Project Verification team, technical reviewer and approver

### B.1. Project Verification team

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of GCC Project Verifier or outsourced entity)	Involvement in			
						Desk/document review	On-site inspection	Interviews	Project Verification findings
1.	Team Leader / Technical Expert / Local Expert/ Financial Expert	IR	Agarwalla	Sanjay Kumar	CCIPL	X	X	X	X
2.	Team Member	IR	Halder	Manas	CCIPL	X	X	X	X
3.	Team Member	ER	Nayak	Kiran <sup>6</sup>	-	X	-	-	X
4.	Trainee Assessor	IR	Nadkarni	Tanvi	CCIPL	X	-	-	X
5.	Trainee Assessor	IR	Tekapso	Leslie	CCIPL	X	-	-	X
6.	Trainee Assessor	IR	Shirke	Rishika <sup>7</sup>	CCIPL	X	-	-	X

### B.2. Technical reviewer and approver of the Project Verification report

No.	Role	Type of resource	Last name	First name	Affiliation (e.g., name of central or other office of GCC Project Verifier or outsourced entity)
1.	Technical reviewer / Financial Expert	IR	Seshan	Ranganathan	CCIPL
2.	Approver	IR	Suman	Priya	CCIPL

<sup>6</sup>Worked until 05/09/2023

<sup>7</sup> Worked until 31/08/2023

## Section C. Means of Project Verification

### C.1. Desk/document review

The report is based on the assessment of the initial PSF /1-a/ and final PSF /1-b/ undertaken through verification of information using the source provided by the project owner, stakeholder consultations, application of standard auditing techniques including but not limited to desk review, follow up actions (e.g., on site visit, interviews) and also the review of the applicable approved methodological and relevant tools, guidance and GCC decisions. Additionally, the cross checks were performed for information provided in the PSF using information from sources other than the verification sources, the verification team's sectoral or local expertise and, if necessary, independent background investigations.

List of all documents reviewed or referenced during the project verification is provided in Appendix-3.

## C.2. On-site inspection

Duration of on-site inspection: 10/02/2023, 11/02/2023 and 12/02/2023				
No.	Activity performed on-site	Site location	Date	Team member
1.	Discussions and review of: <ul style="list-style-type: none"> <li>• Project Design</li> <li>• Project Technology</li> <li>• Project boundary</li> <li>• Applicability of GCC methodology</li> <li>• Environmental Management Plan/ EIA</li> <li>• Local stakeholders meeting process</li> <li>• Management structure with Roles and Responsibilities</li> <li>• Project implementation schedule</li> <li>• Pre project (existing) scenario to meet the energy (heat and electricity) demand</li> <li>• Monitoring Plan</li> <li>• Socio-economic Impacts of the project activity</li> <li>• Sustainability aspects of the project (SDGs)</li> <li>• Baseline Scenarios and alternatives</li> <li>• Project additionality</li> <li>• Emission reduction calculations</li> </ul>	<p><b>Jilesh Power Pvt. Ltd.</b> Village: Kodakandla, District: Jangaon, State: Telangana</p> <p><b>Vishvarupa Solar Power Pvt. Ltd.</b> Village: Kodakandla, District: Jangaon, State: Telangana</p> <p><b>Zuka Power Pvt. Ltd.</b> Village: K. M. Pally, District: Nalgonda, State: Telangana</p> <p><b>SEI Green Flash Pvt. Ltd.</b> Village: Bodipadu, District: Nellore, State: Andhra Pradesh</p>	<p>11/02/2023</p> <p>11/02/2023</p> <p>10/02/2023</p> <p>12/02/2023</p>	Sanjay Kumar Agarwalla, Manas Halder

## C.3. Interviews

Project Verification Report

No.	Interview			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Tiruvuri	Saikrishna	Zenith Energy	10/02/2023, 11/02/2023 and 12/02/2023	Discussion on project implementation, monitoring, Environmental impact, Management structure with Roles and Responsibilities, Socio-economic Impacts of the project activity Sustainability aspects of the project, local stakeholders meeting, legal ownership of the project activity	Sanjay Kumar Agarwalla, Manas Halder
2.	Krishna	Siva Rama	Plant head – ZPPL	10/02/2023		
3.	Prasadu	B.	Site HR - ZPPL	10/02/2023		
4.	Bhnuaprakash	G.	Plant head - JPPL & VSPL	11/02/2023		
5.	Bhanu Chandar	P.	Accounts – JPPL & VSPL	11/02/2023		
6.	Subramaniyan	C.	Site in-charge – SGPL	12/02/2023		
7.	Nayar	B. Hanuman	Land seller (ZPPL)	10/02/2023	Environment and Social impacts of the project	
8.	Shiva	R.	Long-term job gainer (ZPPL)	10/02/2023	Environment and Social impacts of the project	
9.	Anjaneyulu	J.	Short-term job gainer (ZPPL)	10/02/2023	Environment and Social impacts of the project	
10.	Mallesha	G.	LSC attendee (ZPPL)	10/02/2023	Environment and Social impacts of the project	
11.	Ramu	D.	Land seller (VSPL)	11/02/2023	Environment and Social impacts of the project	
12.	Venkanna	S.	Land seller (JPPL)	11/02/2023	Environment and Social impacts of the project	
13.	Raju	S.	Short-term job gainer (VSPL & JPPL)	11/02/2023	Environment and Social impacts of the project	
14.	Uppendar	N.	Short-term job gainer (VSPL & JPPL)	11/02/2023	Environment and Social impacts of the project	
15.	Naresh	D.	Long-term job gainer (VSPL & JPPL)	11/02/2023	Environment and Social impacts of the project	
16.	Naresh	B.	LSC attendee (JPPL)	11/02/2023	Environment and Social impacts of the project	
17.	Rajinikanth	K.	LSC attendee (VSPPL)	11/02/2023	Environment and Social impacts of the project	

18.	Reddy	Obul	Land seller (SGPL)	12/02/2023	Environment and Social impacts of the project
19.	Anand	S.	Short-term job gainer (SGPL)	12/02/2023	Environment and Social impacts of the project
20.		Chandhu	Long-term job gainer (SGPL)	12/02/2023	Environment and Social impacts of the project
21.	Reddy	C.	LSC attendee (JPPL)	12/02/2023	Environment and Social impacts of the project

#### C.4. Sampling approach

No sampling approach has been used for this project activity verification.

#### C.5. Clarification request (CLs), corrective action request (CARs) and forward action request (FARs) raised

Areas of Project Verification findings	Applicable to Project Types	No. of CL	No. of CAR	No. of FAR
<b>Green House Gas (GHG)</b>				
Identification and Eligibility of project type	A <sub>1</sub> , A <sub>2</sub> , B <sub>1</sub> , B <sub>2</sub>	-	-	-
General description of project activity	A <sub>1</sub> , A <sub>2</sub> , B <sub>1</sub> , B <sub>2</sub>	2	2	-
Application and selection of methodologies and standardized baselines	A <sub>1</sub> , A <sub>2</sub> , B <sub>1</sub> , B <sub>2</sub>	-	-	-
- Application of methodologies and standardized baselines	A <sub>1</sub> , A <sub>2</sub> , B <sub>1</sub> , B <sub>2</sub>	-	2	-
- Deviation from methodology and/or methodological tool	A <sub>1</sub> , A <sub>2</sub> , B <sub>1</sub> , B <sub>2</sub>	-	-	-
- Clarification on applicability of methodology, tool and/or standardized baseline	A <sub>1</sub> , A <sub>2</sub> , B <sub>1</sub> , B <sub>2</sub>	-	-	-
- Project boundary, sources and GHGs	A <sub>1</sub> , A <sub>2</sub> , B <sub>1</sub> , B <sub>2</sub>	-	-	-
- Baseline scenario	A <sub>1</sub> , A <sub>2</sub> , B <sub>1</sub> , B <sub>2</sub>	-	-	-
- Demonstration of additionality including the Legal Requirements test	A <sub>1</sub> , A <sub>2</sub> , B <sub>1</sub> , B <sub>2</sub>	1	1	-
- Estimation of emission reductions or net anthropogenic removals	A <sub>1</sub> , A <sub>2</sub> , B <sub>1</sub> , B <sub>2</sub>	3	1	-
- Monitoring plan	A <sub>1</sub> , A <sub>2</sub> , B <sub>1</sub> , B <sub>2</sub>	2	-	-
Start date, crediting period and duration	A <sub>1</sub> , A <sub>2</sub> , B <sub>1</sub> , B <sub>2</sub>	-	-	-
Environmental impacts	A <sub>1</sub> , A <sub>2</sub> , B <sub>1</sub> , B <sub>2</sub>	-	-	-
Local stakeholder consultation	A <sub>1</sub> , A <sub>2</sub> , B <sub>1</sub>	1	1	-
Approval & Authorization- Host Country Clearance	A <sub>1</sub> , A <sub>2</sub> , B <sub>1</sub> , B <sub>2</sub>	-	-	-
Project Owner- Identification and communication	A <sub>1</sub> , A <sub>2</sub> , B <sub>1</sub> , B <sub>2</sub>	-	-	-
Global stakeholder consultation	A <sub>1</sub> , A <sub>2</sub> , B <sub>1</sub>	-	-	-
PSF Template	A <sub>1</sub> , A <sub>2</sub> , B <sub>1</sub> , B <sub>2</sub>	-	-	-
Others (Supporting Documents)	A <sub>1</sub> , A <sub>2</sub> , B <sub>1</sub> , B <sub>2</sub>	1	-	-
<b>VOLUNTARY CERTIFICATION LABELS</b>				
Environmental Safeguards (E <sup>+</sup> )	A <sub>1</sub> , A <sub>2</sub> , B <sub>1</sub>	1	-	-
Social Safeguards (S <sup>+</sup> )	A <sub>1</sub> , A <sub>2</sub> , B <sub>1</sub>	-	-	-
Sustainable development Goals (SDG <sup>+</sup> )	A <sub>1</sub> , A <sub>2</sub> , B <sub>1</sub>	1	-	-
Authorization on Double Counting from Host Country (only for CORSIA)	A <sub>1</sub> , A <sub>2</sub> , B <sub>1</sub>	-	-	-
CORSIA Eligibility (C <sup>+</sup> )		-	-	1

<b>Total</b>		12	7	1
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## Section D. Project Verification findings

### D.1. Identification and eligibility of project type

<b>Means of Project Verification</b>	DR, I																														
<b>Findings</b>	No findings pertaining to this section.																														
<b>Conclusion</b>	<p>The Verification team reviewed the PSF /1/ and confirms that the Project Owner determines the type of proposed GCC project activity as Type A2. As per §11 of GCC Project Standard (version 03.1) /B01-1/, “These types of projects are prompt-start and had already started their operations as of 5<sup>th</sup> July 2020. Their start date of operations shall be after 1<sup>st</sup> January 2016 but before 5<sup>th</sup> July 2022. The start date of the Crediting Period for such GCC Project Activities shall be on or after 1 Jan 2016 but not more than one year after the start date of the operations of the GCC Project Activity.” Furthermore, as per §03 (c), (iv) of GCC clarification no.01 “The deadline for submission of A2 projects has been extended. As per clarification, A2 type projects are required to make initial submission to GCC program, for uploading for global stakeholder consultation, prior to 5 July 2022” /B01/.</p> <p>The proposed bundle activity has started its operations on 27/10/2017 (earliest amongst all the project activities forming the bundle), the start date of crediting period is 23/04/2018 and it was published for global stakeholder consultation from 14/12/2022 to 28/12/2022. The bundled project activity was submitted to GCC on 23/06/2022.</p> <p>The project activities forming the bundle have the following start dates:</p> <table border="1" data-bbox="561 1211 1434 1700"> <thead> <tr> <th>Project Activity Location</th> <th>Total Capacity</th> <th>Capacity</th> <th>Start Date</th> </tr> </thead> <tbody> <tr> <td rowspan="4">Jilesh Power Private Limited</td> <td rowspan="4">45 MW</td> <td>13 MW</td> <td>28/10/2017</td> </tr> <tr> <td>5 MW</td> <td>27/11/ 2017</td> </tr> <tr> <td>5 MW</td> <td>01/12/2017</td> </tr> <tr> <td>22 MW</td> <td>23/04/2018</td> </tr> <tr> <td rowspan="3">Vishvarupa Solar Power Limited</td> <td rowspan="3">10 MW</td> <td>4 MW</td> <td>28/10/2017</td> </tr> <tr> <td>3 MW</td> <td>08/11/2017</td> </tr> <tr> <td>3 MW</td> <td>11/11/2017</td> </tr> <tr> <td>Zuka Power Private Limited</td> <td>48 MW</td> <td>48 MW</td> <td>30/11/2017</td> </tr> <tr> <td>SEI Green Flash Private Limited</td> <td>30 MW</td> <td>30 MW</td> <td>27/10/2017</td> </tr> </tbody> </table> <p>The start date of operation of the bundled activity is considered as the earliest start date amongst all of the involved homogenous project activities. The start date of the project activity has been duly verified against the commissioning reports /8/ and found to be acceptable by the verification team. This complies with the requirement of §11 of the GCC Project Standard (version 03.1) including GCC Clarification No. 01 /B01-6/ and § 25 (b) of GCC Project Verification Standard (version 03.1) /B01-1/ and hence the determined project activity type i.e. Type A2 is found to be acceptable by the verification team.</p> <p>Furthermore, the project verification team along with the help of local expert checked the other GHG programmes like, Clean Development Mechanism (CDM) Registry</p>	Project Activity Location	Total Capacity	Capacity	Start Date	Jilesh Power Private Limited	45 MW	13 MW	28/10/2017	5 MW	27/11/ 2017	5 MW	01/12/2017	22 MW	23/04/2018	Vishvarupa Solar Power Limited	10 MW	4 MW	28/10/2017	3 MW	08/11/2017	3 MW	11/11/2017	Zuka Power Private Limited	48 MW	48 MW	30/11/2017	SEI Green Flash Private Limited	30 MW	30 MW	27/10/2017
Project Activity Location	Total Capacity	Capacity	Start Date																												
Jilesh Power Private Limited	45 MW	13 MW	28/10/2017																												
		5 MW	27/11/ 2017																												
		5 MW	01/12/2017																												
		22 MW	23/04/2018																												
Vishvarupa Solar Power Limited	10 MW	4 MW	28/10/2017																												
		3 MW	08/11/2017																												
		3 MW	11/11/2017																												
Zuka Power Private Limited	48 MW	48 MW	30/11/2017																												
SEI Green Flash Private Limited	30 MW	30 MW	27/10/2017																												

	<p>/B08/, VERRA Registry /B09/, and Gold Standard Registry /B10/, for the information regarding the consistency of the title of the project activity, GPS coordinates, Legal Ownership of the Project activity to determine if the project was part of any other GHG Program prior to commencement of this verification. It was confirmed that the project owner has not submitted the said project activity under any other GHG program apart from GCC.</p>
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## D.2. General description of project activity

<b>Means of Project Verification</b>	DR, I
<b>Findings</b>	CL 09, CL 11, CAR 01 and CAR 02 were raised. Please refer to Appendix 4 for further details.
<b>Conclusion</b>	<p>The description of the project activity contained in the PSF /1-b/ can be considered transparent, detailed and provides a clear overview of the project. The same was confirmed by means of document review and interviews to verify the accuracy and completeness of the project description.</p> <p>‘Zuka Power 133MW bundled Solar PV Power projects at Telangana and Andhra Pradesh, India’ is a Solar Photovoltaic Bundled Power Project with total installed capacity of 133 MW. The bundled project activity involves the installation of three solar photovoltaic power plants with capacities of 45 MW, 10 MW and 48 MW in the state of Telangana and one solar photovoltaic power plant with the capacity of 30 MW at Nellore District in the state of Andhra Pradesh, India.</p> <p>The purpose of this project activity is to generate electricity by harnessing solar radiation energy and supply the generated electricity to the connected Indian grid. The project verification team has confirmed the same by cross verifying the commissioning reports /8/, power purchase agreement /5/ and physical verification of project site /30/.</p> <p>The project activity by Jilesh Power Private Limited uses Poly crystalline modules of Risen Make with a rated maximum power of 315Wp, 320Wp and 325Wp. While the activity by Vishvarupa Solar Power Private Limited employs Polycrystalline modules of Renesola make with a rated maximum power of 315 Wp and 320 Wp; the project activity by Zuka Power Private Limited uses Polycrystalline modules of Risen make with a rated maximum power of 320Wp.</p> <p>Furthermore, the project activity by SEI Green Flash Private Limited uses Polycrystalline modules of Jinko make with a rated maximum power of 310Wp, modules of Jinko Risen make with a rated maximum power of 315 Wp, modules of Risen make with a rated maximum power of 320 Wp, modules of Sun Edison make with a rated maximum power of 325Wp, modules of Sun Edison make with a rated maximum power of 330Wp, modules of Flex/Sun Edison make with a rated maximum power of 335Wp.</p> <p>The solar PV Modules along with associated connection boxes, Transformers, Inverters, other field equipment in all the project premises produce the total project capacity of 133 MW with an expected lifetime of 25 years. The same has also been confirmed from the technical specifications provided by the manufacturers /6/.</p> <p>The power generation from the project activity replaces the equal amount of power which would otherwise have been supplied from the fossil fuel dominated grid. Thus, project activity helps in an average annual emission reduction of 224,781 tCO<sub>2</sub>e/year for a period of 10 years with an annual electricity generation estimated at 241,567 MWh. The same has been crosschecked from the actual generation records /11/ during the physical onsite visit/30/ and is found to be acceptable.</p>

In the baseline scenario the equivalent amount of electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid connected power plants and by the addition of new generation sources into the grid. The main emission source in the baseline scenario is the power plants connected to the grid and main greenhouse gas involved is CO<sub>2</sub>.

The bundled project activity is implemented in the states of Telangana and Andhra Pradesh in India. The geographic co-ordinates for the project activity are:

Latitude		Longitude	
<b>Jilesh Power Pvt. Ltd.</b> <b>Capacity: 45 MW</b> Village: Kodakandla, District: Jangaon, State: Telangana			
17°31'19.2"N	17.5220°N	79°31'33.6"E	79.5260°E
<b>Vishvarupa Solar Power Pvt. Ltd.</b> <b>Capacity: 10 MW</b> Village: Kodakandla, District: Jangaon, State: Telangana			
17°31'1.2"N	17.5170°N	79°31'12"E	79.5200°E
<b>Zuka Power Pvt. Ltd.</b> <b>Capacity: 48 MW</b> Village: K.M. Pally , District: Nalgonda, State: Telangana			
16°47'24"N	16.7900°N	78°53'2.4"E	78.8840°E
<b>SEI Green Flash Pvt. Ltd.</b> <b>Capacity: 30 MW</b> Village: Bodipadu panchayat, Chejarla Mandal, SPSR , District: Nellore, State: Andhra Pradesh			
14°29'16.8"N	14.4880°N	79°35'27.6"E	79.5910°E

The same was confirmed by the measurement of co-ordinates using google earth software and GPS at the project site and were found appropriate.

The verification team confirms that project owner has described the GHG emission-reduction activity, including schematics, specifications and a description of how the project reduces GHG emissions. The same is in accordance with §36 of Project Standard Version 03.1 and cross checked with PSF /1/. Furthermore, the Project Activity is a voluntary action by the project owner as confirmed by the verification team upon review of the PSF /1/ and on-site visit interviews /30/.

As stated in the PSF /1/, the project activity also voluntarily contributes to Environmental No-net-harm Label (E+), Social No-net-harm Label (S+) and 6 United Nations Sustainable Development Goals (SDG+).

	<p>As per the PSF /1/, the start date of the Project Activity is 27/10/2017 (earliest start date of operations amongst all of the project activities forming the bundle). The same is in accordance with requirements of §38 of Project Standard (version 03.1) /B01-1/ as well as §13 of the GCC Clarification No. 1 version 1.3 /B01/. The project verification team confirmed the same during the physical onsite visit /30/ as well as from the commissioning certificates /8/.</p> <p>The homogeneity of the bundle is ascertained on the basis of the two-level analysis formulated in the GCC Clarification No.1, version 1.3/B01/. The same can be summarized as follows:</p> <p><b><u>Level-1 Analysis - Consideration of key aspects for developing Homogeneous Bundles:</u></b></p> <p>Two bundles consisting of 4 individual solar power project activities meet the criteria outlined in §11 of the GCC Clarification No. 1 version 1.3 as follows:</p> <ol style="list-style-type: none"> <li>1. Similarity in Technological Considerations - All activities in a bundle apply same type of technology i.e. Grid connected Solar PV and apply the same methodology i.e. GCCM001 Version 3.0</li> <li>2. Similarity in Economic and Policy Considerations: All activities in the bundle apply             <ol style="list-style-type: none"> <li>i. Post Tax Equity IRR for investment analysis</li> <li>ii. same initial implementation year, i.e., 2017</li> <li>iii. employ the same benchmark [Default value for the cost of equity (expected return on equity) as enshrined in the Investment Analysis.</li> <li>iv. all the activities in the bundle are located in same country i.e. India</li> <li>v. all the activities in the bundle supply electricity to the Indian Grid.</li> </ol> </li> <li>3. Similarity in Environmental or Methodological Considerations - All activities in the bundle             <ol style="list-style-type: none"> <li>i. apply the same methodology i.e. GCCM001 Version 3.0/B02/</li> <li>ii. adopt same baseline approach i.e. Indian Grid</li> <li>iii. adopt same monitoring approach and measurement parameters</li> </ol> </li> </ol> <p><b><u>Level-2 analysis – Criteria for differentiating the bundles:</u></b></p> <p>Two bundles consisting of 4 individual solar power project activities meet the criteria outlined in §12 of the GCC Clarification No. 1 version 1.3/B01 as follows:</p> <ol style="list-style-type: none"> <li>1. Same baseline of each activity within a bundle i.e. Indian Grid</li> <li>2. Same output of each activity i.e. electricity</li> <li>3. Same Technology of each activity i.e. solar power based electricity generation</li> <li>4. Same additionality approach i.e. investment analysis using post tax equity IRR</li> </ol> <p>It can therefore be concluded that all the 4 individual project activities involved in the bundle satisfy the criteria outlined in §11 and §12 of the GCC Clarification No. 1 version 1.3 /B01/ and hence the bundle is homogenous in nature. The project verification team confirmed the same after review of the PSF /1-b/ and other relevant documents.</p> <p>The crediting period is a fixed crediting period of 10 years from 23/04/2018 to 22/04/2028. This is cross checked with the PSF /1/ and conforms with the requirements of §39 and §40 of Project Standard Version 03.1 /B01-1/.</p>
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	<p>CCIPL verification team is therefore able to confirm that the description of the proposed Project Activity in the PSF is accurate and complete and it provides a clear understanding of the Project Activity. The same is found to be acceptable.</p> <p>Furthermore, the verification team cross checked other GHG programmes like Clean Development Mechanism (CDM) Registry /B08/, VERRA Registry /B09/, Gold Standard Registry /B10/, and voluntary non-GHG Programs like I-REC /B12/ Renewable Energy Certificate (REC) Mechanism /B11/ in India for the information regarding the consistency of the title of the project activity , GPS coordinates, Legal Ownership of the Project activity to determine if the project was part of any other GHG Program prior to commencement of this verification. It was confirmed that the project owner has not submitted the said bundled project activity or any of the individual project activities involved under any other GHG program apart from GCC</p>
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### D.3. Application and selection of methodologies and standardized baselines

#### D.3.1 Application of methodology and standardized baselines

<b>Means of Project Verification</b>	DR, I								
<b>Findings</b>	CAR 03 and CAR 04 were raised. Please refer to Appendix 4 for further details.								
<b>Conclusion</b>	<p>The GCC methodology applied is GCCM001, version 3.0 /B02/. It is applicable to grid-connected electricity generation from renewable sources. Applicability of the methodology was confirmed by means of interviews with the PO representatives and document review.</p> <p>The applied methodology is correctly quoted and is identical to the version available on the GCC website. The applied methodology version of the baseline and monitoring methodology /B02/ is valid at the time of submission of the PSF for global stakeholder consultation. All applicability criteria in the methodology are assessed in the below table:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Applicability criteria of the methodology (GCCM001, version 3.0)</th> <th style="width: 33%;">Justification in the PSF</th> <th style="width: 33%;">Project verifier assessment</th> </tr> </thead> <tbody> <tr> <td> <p><b>Paragraph 9 of the applied methodology states that:</b></p> <p>The project activities eligible under this methodology aim to build and operate a new USPP or new DPPs, which are subject to following eligibility conditions.</p> <p>(a) The renewable energy generation projects shall supply electricity to user(s), either grid or a specific identified user. The project activity will displace electricity from an electricity distribution system that is or would have been supplied by from a national or a regional grid (grid</p> </td> <td> <p>This criterion is applicable, as the bundled project activity employs Solar Photovoltaic power generation technology and supply generated electricity to Indian Grid.</p> </td> <td> <p>The project activity involves the installation of 133 MW Solar Photovoltaic Panels. The same is a bundled project involving 4 project activities as detailed in section D.2 above.</p> <p>The electricity thus generated from project activity is exported to the Indian grid in India through power purchase agreement (PPA) /5/, thereby displacing electricity from the regional grid generated</p> </td> </tr> </tbody> </table>			Applicability criteria of the methodology (GCCM001, version 3.0)	Justification in the PSF	Project verifier assessment	<p><b>Paragraph 9 of the applied methodology states that:</b></p> <p>The project activities eligible under this methodology aim to build and operate a new USPP or new DPPs, which are subject to following eligibility conditions.</p> <p>(a) The renewable energy generation projects shall supply electricity to user(s), either grid or a specific identified user. The project activity will displace electricity from an electricity distribution system that is or would have been supplied by from a national or a regional grid (grid</p>	<p>This criterion is applicable, as the bundled project activity employs Solar Photovoltaic power generation technology and supply generated electricity to Indian Grid.</p>	<p>The project activity involves the installation of 133 MW Solar Photovoltaic Panels. The same is a bundled project involving 4 project activities as detailed in section D.2 above.</p> <p>The electricity thus generated from project activity is exported to the Indian grid in India through power purchase agreement (PPA) /5/, thereby displacing electricity from the regional grid generated</p>
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	<p>hereafter); the following renewable energy generation technologies qualify under this methodology: (i) Solar Photovoltaic; (ii) On-shore or Off-shore Wind; (iii) Tidal; (iv) Wave</p>		<p>by fossil fuel-based power plants.</p> <p>CC IPL project verification team has confirmed the same from the power purchase agreement /5/, as well as the commissioning certificates /8/. The said criterion is fulfilled by the project activity and hence the methodology is applicable to the project activity.</p>
	<p>(b) The project activities can also involve setting up and implementation of a BESS along with the renewable energy generation plant.</p>	<p>Not applicable as the bundled project activity doesn't involve setting up and implementation of a BESS.</p>	<p>The project activity involves the installation of a new grid- connected renewable power generation facility i.e. installation of solar PV panels to generate electricity.</p> <p>The project activity design does not involve setting up of battery energy storage systems (BESS). CC IPL project verification team confirmed the same during the onsite visit /30/.</p> <p>Hence this condition is not applicable to the project activity.</p>
	<p>(c) The project activity wherein a BESS has been deployed, can either be a greenfield installation wherein the BESS had been conceptualized along with the renewable energy generation unit or may be retrofitted into an existing setup of renewable energy project, whether or not registered with GCC.</p>	<p>Not applicable as the bundled project activity didn't deploy a BESS.</p>	<p>The project activity involves the installation of a new grid- connected renewable power generation facility i.e. installation of solar PV panels to generate electricity.</p> <p>The project activity design does not involve setting up of battery energy storage systems (BESS). CC IPL project verification team confirmed the same</p>

			<p>during the onsite visit /30/.</p> <p>Hence this condition is not applicable to the project activity.</p>
	<p>(d) In case the Project Owners want to claim carbon credits due to retrofit of BESS into existing renewable energy generation unit, they would need to demonstrate that historically the renewable energy unit was subject to curtailed output due to low grid stability or capacity limitation<sup>3</sup> in the grid infrastructure for handling the increased generation. This must be through evidence of existence of technical and regulatory/commercial constraints.</p>	<p>Not applicable as the bundled project activity didn't deploy a BESS.</p>	<p>The project activity involves the installation of a new grid- connected renewable power generation facility i.e. installation of solar PV panels to generate electricity.</p> <p>The project activity design does not involve setting up of battery energy storage systems (BESS). CCIPL project verification team confirmed the same during the onsite visit /30/.</p> <p>Hence this condition is not applicable to the project activity.</p>
	<p>(e) The project activities shall not involve combined heat and power (co-generation) systems.</p>	<p>This criterion is applicable as the bundled project activity generates electricity only and does not involve combined heat and power (co-generation) system.</p>	<p>The project activity involves the installation of a new grid- connected renewable power generation facility i.e. installation of solar PV panels to generate electricity.</p> <p>The project activity design does not involve combined heat and power (co-generation) system. CCIPL project verification team confirmed the same during the onsite visit /30/.</p> <p>Hence this condition is applicable to the project activity.</p>
	<p>(f) The project activities shall not involve co-firing of fossil fuel of any kind.</p>	<p>This criterion is applicable as the bundled project does</p>	<p>The project activity involves the installation of a new grid- connected renewable power</p>

		not involve co-firing of fossil fuel of any kind.	<p>generation facility i.e. installation of solar PV panels to generate electricity.</p> <p>The project activity design does not involve co-firing of fossil fuel of any kind. CCIPL project verification team confirmed the same during the onsite visit /30/.</p> <p>Hence this condition is applicable to the project activity.</p>
	(g) The project activities may have consumption of electricity (grid on on-site generation) for site offices.	This criterion is applicable as bundled project may have consumption of electricity (grid on onsite generation) for site offices during maintenance.	<p>The project activity involves the installation of a new grid- connected renewable power generation facility i.e. installation of solar PV panels to generate electricity.</p> <p>The project activity does consume electricity at the site office during maintenance. CCIPL project verification team confirmed the same during the onsite visit /30/, interviews with site personnel/30/ as well as from the records maintained for onsite electricity consumption /11/.</p> <p>Hence this condition is applicable to the project activity.</p>
	(h) Distributed Power Plants DPPs that supply electricity also for domestic, commercial or industrial captive purposes either wholly or in addition to supply to grid, shall demonstrate that grid connection was available on the site before the	Not applicable as bundled project is a Utility scale power plant (USPP).	<p>The project activity involves the installation of a new grid- connected renewable power generation facility i.e. installation of solar PV panels to generate electricity.</p> <p>CCIPL project verification team</p>



	<p>approved methodologies using the additionality tool.</p>	<p>assessment. Hence this tool is applicable</p>	<p>Hence this condition is applicable to the project activity.</p>
	<p><b>Paragraph 10 states that:</b></p> <p>Once the additionally tool is included in an approved methodology, its application by project participants using this methodology is mandatory.</p>	<p>In line with the methodology requirement, Project developer has applied this tool for the demonstration of additionality assessment. Hence this tool is applicable</p>	<p>The said tool is included in the applied methodology GCCM001, version 3.0.</p> <p>Hence, this condition is found to be met.</p>
	<p><b>Tool 07: Tool to calculate the emission factor for an electricity system; Version 7.0</b></p>	<p><b>Justification in the PSF</b></p>	<p><b>Project verifier Assessment</b></p>
	<p><b>Paragraph 3 states that:</b></p> <p>This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity that is where a project activity supplies electricity to a grid or a project activity that results in savings of electricity that would have been provided by the grid (e.g., demand-side energy efficiency projects).</p>	<p>This condition is applicable. OM, BM and CM are estimated using the Tool under section B.6.1 for calculating baseline Emissions.</p>	<p>The project activity involves the installation of a new grid- connected renewable power generation facility i.e. installation of solar PV panels to generate electricity which is then supplied to the Indian Grid.</p> <p>In the absence of this project activity, same amount of electricity would have been generated by the operation of existing/proposed grid connected power plants, predominantly fossil fuel-based.</p> <p>The baseline emissions are calculated from electricity supplied to the grid by the project activity multiplied with emission factor of the Indian grid, which is calculated using OM, BM and CM using this tool. The same was has been elaborated upon in section D.3.6 of this report.</p> <p>Hence this condition is applicable to the project</p>

			activity and found to be met.
	<p><b>Paragraph 4 states that:</b></p> <p>Under this tool, the emission factor for the project electricity system can be calculated either for grid power plants only or, as an option, can include off-grid power plants. In the latter case, two sub-options under the step 2 of the tool are available to the project participants, i.e. option IIa and option IIb. If option IIa is chosen, the conditions specified in "Appendix 1: Procedures related to off-grid power generation" should be met. Namely, the total capacity of off-grid power plants (in MW) should be at least 10 per cent of the total capacity of grid power plants in the electricity system; or the total electricity generation by off-grid power plants (in MWh) should be at least 10 per cent of the total electricity generation by grid power plants in the electricity system; and that factors which negatively affect the reliability and stability of the grid are primarily due to constraints in generation and not to other aspects such as transmission capacity.</p>	<p>The project activity is a grid Connected wind Power project. Estimation of OM &amp; BM has been prepared and published In India, Central Electricity Authority (CEA), Government of India provides this data, and accordingly the same has been used. The latest CO<sub>2</sub> Baseline Database for the Indian Power Sector, Version 17, October 2021, published by Central Electricity Authority (CEA), Government of India has been used for the calculation of emission factor. The above CO Baseline Database follows the "Tool to calculate the emission factor for an electricity system" Version 07.0.</p>	<p>The project activity has chosen the option to calculate the emission factor for grid power plants only by referring to the data published by CEA /17/. This confirms that only grid connected power plants have been considered for OM, BM and CM calculations and is found to be acceptable by the project verification team.</p> <p>The point has been assessed in detail under section D.3.6 of the report.</p>
	<p><b>Paragraph 5 states that:</b></p> <p>In case of CDM projects the tool is not applicable if the project electricity system is located partially or totally in an Annex I country.</p>	<p>No portion of the Project Electricity system (i.e. Indian Grid) is in an Annex I country.</p>	<p>The project activity is situated in India, which is not Annex I country, hence the condition is not applicable. The same can be confirmed from UNFCCC website (<a href="https://unfccc.int/process/parties-non-party-stakeholders/parties-convention-and-observer-states?field_parties_date_of_rati value=All&amp;field_parties_date_of_signatu re value=All&amp;field partie">https://unfccc.int/process/parties-non-party-stakeholders/parties-convention-and-observer-states?field_parties_date_of_rati value=All&amp;field_parties_date_of_signatu re value=All&amp;field partie</a>)</p>

			<a href="#">s_date_of_ratifi_value_1 =All&amp;field_parties_date_of_signature_value_1=Al&amp;combine=)</a>
	<p><b>Paragraph 6 states that:</b></p> <p>Under this tool, the value applied to the CO2 emission factor of biofuels is zero.</p>	No biofuels are used.	<p>The project activity involves the installation of a new grid- connected renewable power generation facility i.e. installation of solar PV panels to generate electricity and does not involve biofuels. The same was confirmed from power purchase agreement /5/ and site visit /30/.</p> <p>Hence the condition is not applicable.</p>
	<b>TOOL 27: Investment analysis; Version 12.0</b>	<b>Justification in the PSF</b>	<b>Project Verifier Assessment</b>
	<p><b>Paragraph 2 states that</b></p> <p>This methodological tool is applicable to project activities that apply the methodological tool “Tool for the demonstration and assessment of additionality”, the methodological tool “Combined tool to identify the baseline scenario and demonstrate additionality”, the guidelines “Non-binding best practice examples to demonstrate additionality for SSC project activities”, or baseline and monitoring methodologies that use the investment analysis for the demonstration of additionality and/or the identification of the baseline scenario.</p>	Project activity applies “Tool for the demonstration and assessment of additionality”. Hence this tool is applicable.	<p>The project activity utilises the methodological tool “Tool 01: Tool for the demonstration and assessment of additionality”, version 07.</p> <p>Hence this condition is applicable to the project activity and found to be met.</p>
<p><b>Paragraph 3 states that:</b></p> <p>In case the applied approved baseline and monitoring methodology contains requirements for the investment analysis that are different from those</p>	Not applicable The applied approved baseline and monitoring methodology does not contain requirements for the investment analysis that are	The applied methodology, GCCM001 version 3.0 /B02/ does not contain requirements for investment analysis which are different from that specified in the tool.	

	described in this methodological tool, the requirements contained in the methodology shall prevail.	different from those described in this methodological tool. Hence not applicable	Hence the condition is not applicable.
	<b>TOOL 24: Common Practice; Version 3.1</b>	<b>Justification in the PSF</b>	<b>Project verifier Assessment</b>
	<b>Paragraph 3 states that:</b>  This methodological tool is applicable to project activities that apply the methodological tool “Tool for the demonstration and assessment of additionality”, the methodological tool “Combined tool to identify the baseline scenario and demonstrate additionality”, or baseline and monitoring methodologies that use the common practice test for the demonstration of additionality.	Project activity applies “Tool for the demonstration and assessment of additionality”. Hence this tool is applicable.	The project activity utilises the methodological tool “Tool 01: Tool for the demonstration and assessment of additionality”, version 07.  Hence this condition is applicable to the project activity and found to be met.
	<b>Paragraph 4 states that:</b>  In case the applied approved baseline and monitoring methodology defines approaches for the conduction of the common practice test that are different from those described in this methodological tool, the requirements contained in the methodology shall prevail.	Not applicable The applied approved baseline and monitoring methodology does not define any different approaches for the conduction of the common practice test from those described in this methodological tool	The applied methodology, GCCM001 version 3.0 /B02/ does not contain approaches for conducting common practice test which are different from that specified in the tool.  Hence the condition is not applicable.
The applied baseline and monitoring methodology and relevant tools are valid and applicable to the project activity. The project fulfils all relevant criteria of the applied methodology ‘GCCM001: Methodology for Renewable Energy Generation Projects Supplying Electricity to Grid or Captive Consumers’ – Version 3.0 /B02/ and Tool to calculate the emission factor for an electricity system; (Version 7.0) /B05/. Hence, use of the selected methodology is appropriate for this project activity			

### D.3.2 Clarification on applicability of methodology, tool and/or standardized baseline

<b>Means of Project Verification</b>	DR, I
<b>Findings</b>	No findings pertaining to this section.
<b>Conclusion</b>	No further clarifications were sought as the applicability criteria of methodology and the associated tools was found to be fulfilled.

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### D.3.3 Project boundary, sources and GHGs

<b>Means of Verification</b>	<b>Project</b>	DR, I
<b>Findings</b>		No findings pertaining to this section.
<b>Conclusion</b>		<p>As per §12 of the applied methodology GCCM001, version 3.0 /B02/, the project boundary is stated as “The spatial extent of the project boundary includes the project power plant, BESS (where deployed) and all power plants connected physically to the electricity system that the GCC project power plant or distributed type power generation devices are connected to”.</p> <p>Section B.3 of the PSF /01/ clearly depicts the project boundary along with a pictorial representation. The verification team conducted desk review of the implemented project to confirm the appropriateness of the project boundary identified and the same was found to be in conformity with the applied methodology. Furthermore, the physical boundary of the project activity identified by the project owner has been cross-verified during site visit /30/ and duly verified from the commissioning reports /8/ and power purchase agreement /5/. The same was found to be appropriate and acceptable.</p> <p>The verification team also confirmed that all GHG sources required by the methodology have been included within the project boundary. It was assessed that no emission sources related to project activity will cause any deviation from the applicability of the methodology or accuracy of the emission reductions.</p> <p>The verification team therefore confirms that the identified boundary and the selected emissions sources are justified for the project activity.</p>

### D.3.4 Baseline scenario

<b>Means of Verification</b>	<b>Project</b>	DR, I
<b>Findings</b>		No findings pertaining to this section.
<b>Conclusion</b>		<p>As per §13 of the applied methodology GCCM001, version 3.0/B-02/, the baseline scenario is the electricity delivered to the grid by the project activity that otherwise would have been generated by the operation of grid-connected power plants and by the addition of new generation sources into the grid.</p> <p>The Project activity involves generation of electricity by harnessing solar radiation energy and selling it to the Indian grid. The same was confirmed through the power purchase agreement /5/ and commissioning reports /8/. In the absence of this project activity, same amount of electricity would have been generated by the operation of existing/proposed grid connected power plants, predominantly fossil fuel-based.</p> <p>The verification team confirms that all assumptions and data used by the project participants are listed in the PSF, including their references and sources. All relevant national and/or sectoral policies and circumstances are considered and listed in the PSF /1/. Furthermore, the verification team also concludes that the identified baseline scenario reasonably represents what would occur in the absence of the project activity.</p> <p>The baseline scenario applied in the PSF was compared with the requirements of</p>

	the baseline described in the applied methodology and found to be consistent. Therefore, the verification team also concludes that the identified baseline scenario reasonably represents what would occur in the absence of the project activity and is found to be acceptable.
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### D.3.5 Demonstration of additionality

<b>Means of Project Verification</b>	DR, I
<b>Findings</b>	CL 06 and CAR 05 were raised. Please refer Appendix 4 for further details.
<b>Conclusion</b>	<p>Project Owner has described the Demonstration of additionality according to the GCC Project Standard Version 03.1/B01/ and the applied methodology GCCM001, version 3.1/B02/ and relevant methodological tools.</p> <p>In section B.5 of the PSF /1-b/, two components are applied for the demonstration of additionality:</p> <ul style="list-style-type: none"> <li>- A Legal Requirement Test</li> <li>- Additionality Test</li> </ul> <p><u>Legal Requirement:</u></p> <p>The project activity is a Type A project and requires undergoing a Legal Requirement Test. The relevant national acts and regulations pertaining to generation of energy in the host country i.e., India are Electricity Act 2003/B13/, National Electricity Policy 2005/B14/, National Tariff Policy 2006/B15/, National Solar Mission /B18/, National Action Plan on Climate Change (NAPCC) 2008/B16/, and Renewable Energy Certificates (RECs) 2011 /B17/ which are verified by the assessment team.</p> <p>It was confirmed that there are no enforced laws, statutes, regulations, court orders, environmental-mitigation agreements, permitting conditions or other legally binding mandates requiring its implementation, or requiring the implementation of a similar technology/measure that would achieve equivalent levels of GHG emission reductions. The assessment team assessed the relevant regulations of the host county to confirm the requirements and also confirmed based on the local expertise by the verification team the project is not implemented to meet any legal requirement.</p> <p>The project activity is therefore voluntary in nature and hence is additional as per paragraph 46 of GCC Project Standard V3.1/B01/ and passes the legal requirement test.</p> <p>Additionality is demonstrated at the project activity level for the bundled project. Accordingly, common practice analysis is also demonstrated at project activity level. This is in accordance with §7 and §20 of GCC Clarification No. 1 version 1.3 /B01/.</p> <p><u>Additionality Test:</u></p> <p>To cover this requirement from the GCC Project Standard 3.1, section 6.4.8, paragraph 45 and as per the applied methodology GCCM001 Version 3.0 /B02/, additionality of the project activity is demonstrated and assessed using the latest version of Tool 01: Tool for the demonstration and assessment of additionality” Version 7.0 /B04/</p> <p>The PO has adopted the stepwise approach for demonstrating and assessing the additionality of the project activity as follows:</p>

	<p><b>Step 0: Demonstration whether the proposed project activity is the first-of-its-kind</b></p> <p>The project activity is a grid connected solar power project in India. This is not the first such project to be installed in the country and therefore project activity does not meet this criterion.</p> <p><b>Step 1: Identification of alternatives to the project activity consistent with current laws and regulations</b></p> <p><b>Sub-step 1a: Define alternatives to the project activity</b></p> <p>Alternative 1: The proposed project activity not undertaken as a GCC project activity. Alternative 2: Continuation of the present situation, i.e., the power generated from the project activity will be fed into India National Grid.</p> <p><b>Sub-step 1b: Consistency with mandatory laws and regulations</b></p> <p>Both the alternatives are consistent with the laws and regulations of India. The environmental regulations, legislations and policy guidelines in respect to the project activity are governed by various regulatory agencies. The principal environmental regulatory agency in India is Ministry of Environment, Forest and Climate Change (MoEF &amp;CC), Delhi supported by Central Pollution Control Board (CPCB).</p> <p>The Solar Power Projects are not covered under the ambit of EIA Notification, 2006. Hence, it does not require preparation of Environmental Impact Assessment Report and pursuing Environmental Clearance from Ministry of Environment, Forest and Climate Change (MoEF &amp; CC). (Annexure-II MOEF&amp;CC, OM on J-11013/41/2006-IA. II (I) dated 7th July 2017) /B21/</p> <p>Further, MoEF &amp; CC has included Solar Power Projects under “White category” for Consent to Establish/Operate. Newly introduced White category contains 36 industrial sectors which are practically non-polluting. There shall be no necessity of obtaining the Consent to Establish/Operate for White category of industries and an intimation to concerned SPCB / PCC shall suffice. In accordance with the requirement of the Modified directions under section 18(1)(b) of the Water (P&amp;PC) Act, 1974 and the Air (P &amp; PC) Act, 1981 regarding harmonization of classification of industrial sectors under red/ orange/ green/ white categories by the CPCB /26/, acknowledgement of Letter to PCB for White Category Industry/26/ received by the PO was checked and found to be acceptable.</p> <p><b>Step 2: Investment analysis:</b></p> <p>In this section it is demonstrated that the project activity is not financially feasible without the revenue from the sale of ACCs. This is demonstrated in following sections as per “Investment analysis” (Version 12.0)/B07/.</p> <p>This solar bundled project consists of 2 bundles with 4 project Activities as these 4 different solar power projects are located in the State of Telangana and Andhra Pradesh of the host country India are bundled together. All the three project activities have been commissioned during the year 2017 and for this Bundled Project, the Letter of Authorization states that the legal owners of the projects have nominated M/s Zuka Power Private Limited as project owner.</p> <p><b>Sub-step 2a: Determine appropriate analysis method</b></p> <p>Since project activity generates revenue, Option III - Benchmark Analysis has been chosen to carry out investment analysis.</p>
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	<p><b>Sub-step 2b: Option III. Apply benchmark analysis</b></p> <p>Since the project is funded through equity and debt funds, Post Tax Equity IRR has been considered an appropriate financial indicator which will be tested against an appropriate benchmark cost of equity.</p> <p>These indicators are industry accepted indicators and are commonly used for financial analysis of similar kinds of projects.</p> <p>In line with para 16 of investment analysis /B07/, as the investment analysis is carried out in nominal terms and the available IRR benchmarks are in real terms, therefore, project owner has converted the real term values of benchmarks to nominal values by adding the inflation rate.</p> <p>As per para 19 of investment analysis, the cost of equity is determined by selecting the values provided in the Appendix, i.e., Default values for cost of equity (expected return on equity) is presented below:</p> <p>The Required return on equity (benchmark) was computed in the following means:</p> <p>Nominal Benchmark = <math>\{(1+\text{Real Benchmark}) * (1+\text{Inflation rate})\} - 1</math></p> <p>Where:</p> <ul style="list-style-type: none"> <li>- Default value for Real Benchmark = 9.77%, as per TOOL27, version12.0, which is the latest version available at the time of preparation of PSF</li> <li>- Inflation Rate forecast for by Reserve Bank of India (RBI) i.e., Central Bank of India.</li> </ul> <p>TOOL27, version 12.0 specifies default value of expected return on equity in real terms for Energy Industries (Group 1) in India = <b>9.77%</b></p> <p>As per RBI report “Survey of Professional forecasters” dated 05/08/2014 /32/, the latest report available at the time of decision making, the 10-year inflation forecast projected was 3.7%.</p> <p>Therefore, Benchmark is calculated as <math>\{(1+9.77\%) * (1+3.7\%)\} - 1 = \mathbf{13.83\%}</math></p> <p><b>Sub-step 2c: Calculation and comparison of financial indicators</b></p> <p>For calculation of financial indicator, all relevant costs and revenues were found to be included in the IRR sheet /3/ provided by the PO. All assumptions and estimates used for input values were checked against the relevant sources.</p> <p>GCC project activity has a less favourable Equity IRR compared to the benchmark, and hence the GCC project activity cannot be considered as financially attractive.</p> <p>The key data parameters used to calculate Equity IRR are tabulated below:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Parameter</th> <th style="width: 20%;">Value</th> <th style="width: 40%;">Project verifier assessment</th> </tr> </thead> <tbody> <tr> <td style="height: 40px;"></td> <td></td> <td></td> </tr> </tbody> </table>	Parameter	Value	Project verifier assessment			
Parameter	Value	Project verifier assessment					

	Capacity	Jilesh Power Pvt. Ltd -45 MW	<p>The project rated capacity i.e. 45 MW is based on the commissioning reports /8/, and found to be consistent and thus acceptable. The same was further confirmed from the purchase order //10/ as well as the PPA /5/.</p> <p>Installed capacity proposed at the time of decision making (i.e. internal management decision) and post decision making (actual implementation) is same.</p>
		Vishvarupa Solar Power Private Limited- 10 MW	
		Zuka Power Pvt. Ltd.-48 MW	
	PLF	19.00%	<p>Value is based on CERC RE tariff order dated 15/05/2014 /31/. The same is equivalent to the PLF offered by the technology provider and is found to be acceptable.</p> <p>To further cross-check the robustness of the PLF, verification team has cross-checked the actual generation of the project activity to ascertain the conformity of the estimated PLF to the actual and observed that the generation yielded that the actual PLF achieved by the project since COD is only 25.27% for ZPPL ,23.41% for VSPL and 23.68% for JPPL /11/.</p> <p>The project will become non-additional only when the PLF of the bundled project goes up by 25.04% or the PLF of 23.76%. Though the actual PLF achieved by ZPPL is 25.27 but considering increasing project cost by 23.97% the possibility of base case IRR breaching the benchmark will not arise.</p>
	Annual generation	Jilesh Power Pvt. Ltd - 74,898 MWh	<p>The value is calculated as: Capacity * PLF * 8760</p> <p>The input values used in calculation were available at the time of investment decision making.</p>
		Vishvarupa Solar Power Private	

		Limited - 16,644 MWh Zuka Power Pvt. Ltd.- 79,891 MWh	The actual PLF since the start of operation of the project activity is 25.27% in respect of Jilesh, 23.41% for Vishvarupa, 23.68% for Zuka /11/ and therefore the annual average generation value comes to 9,961,434 MWh, 2,050,716 MWh, and 9,956,996.4 MWh.
	<b>Revenue &amp; Expenses</b>		
	Power tariff	Jilesh-6.35 INR/kWh  Vishvarupa- 5.09 INR/kWh  Zuka- 6.35 INR/kWh	The Value is based on the CERC RE tariff order 2014-15 and 2015-2016 /31/ which was available at the time of investment decision making date and is deemed acceptable to the project verification team. The project activity exports the entire power generated to DISCOM at a fixed tariff Rs 5.59 /kWh for ZPPL, Rs. 4.67 for VSPL and Rs. 5.59 for Jilesh /5/. The same was cross-checked with the sample invoices /13/ by the verification team.
	Annual degradation during 1st year (%)	2.50%	
	Annual degradation from 2nd year till 10 <sup>th</sup> year (%)	0.83%	
	Annual degradation from 11th year till 25 <sup>th</sup> year (%)	0.67%	
	O & M cost	Jilesh Power Pvt. Ltd -66.98 INR million Vishvarupa Solar Power Private Limited - 8.05 INR million Zuka Power Pvt. Ltd - 71.45 INR million	Value is based on CERC RE tariff order dated 15/05/2014 /31/ and found to be consistent and thus acceptable. According to the said order, O&M expense norm for solar PV power project as ` 12.30 Lakh/MW for FY 2014-15 has been considered. This is also inclusive of the service tax of 15% applicable during FY 2014-15.
	Escalation in O&M expenses p.a.	5.72%%	Value is based on CERC RE tariff order dated 15/05/2014 /31/. The same was further checked against the purchase order /10/ and found to be consistent and thus acceptable.
	<b>Project cost and financing structure</b>		

	Project cost	<p>Jilesh - 2,726.33 INR million</p> <p>Vishvarupa- 530.02 INR million</p> <p>Zuka- 2908.08 INR million</p>	<p>Value is based on the CERC RE Tariff order 2014-15 /31/. According to the said order, the capital cost norm for FY 2014-15 is INR 691 Lakh/MW for Solar PV Power Projects. The project cost for IRR analysis for Jilesh is calculated as 60.585 INR million * 45MW = 2726325 INR.</p> <p>The project cost for IRR analysis for Zuka is calculated as 60.585 INR million * 48MW = 2908.08 INR Million.</p> <p>The project cost for IRR analysis for Viswarupa is calculated as 53.002 INR million * 10MW = 530.02 INR Million.</p> <p>The actual project cost for the project activity is INR 3622.2 Mn for ZPPL, INR 634.3 MN for VSPL and INR 3331.7MN /33/ which is lower than the input value for IRR analysis and hence, conservative.</p>
	Loan Amount	<p>Jilesh - 1,908.43 INR million</p> <p>Vishvarupa- 371.01 INR million</p> <p>Zuka- 2,035.66 INR million</p>	<p>The value is based on the CERC RE Tariff order 2013-14 /31/. According to the said order, the computations of interest on loan carried out for determination of tariff in respect of the RE projects treating the value base of loan as 70% of the capital cost. Therefore, the loan amount considered for IRR calculations is 70% of the project cost which is deemed acceptable to the project verification team.</p> <p>According to the loan sanction letter /14/, the loan amount for Jilesh is 1908.43 INR million.</p> <p>According to the loan sanction letter /14/, the loan amount for Jilesh - 2600 INR million Vishvarupa is 513,254,038 INR. Zuka is 2700 INR million.</p>

			According to the combined loan sanction letter /14/, the loan amount for Zuka is 2,035.66 INR million.
	Equity investment	Jilesh - 817.90 INR million	<p>The value is based on the CERC RE Tariff order 2014-15 /31/. The value is equivalent to 30% of the total project cost which is deemed acceptable to the project verification team.</p> <p>The actual equity investment is calculated as difference between the actual project cost and the loan amount.</p> <p>3622.2-2600= 1022.2 for Jilesh 634.3-513,254,038=121045962 for Vishvarupa 27,26,325- 2700=2,723,623 for Zuka</p>
		Vishvarupa-159.01 INR million	
		Zuka-872.42 INR million	
	Interest rate on loan	13.00%	<p>The value is based on CERC tariff orders dated 31/03/2015 for ZPPL and JPPL and 30/03/2016. VSPL /31/.</p> <p>According to CERC tariff order dated 30/03/2016 /31/, the computations of interest on loan carried out for determination of tariff in respect of the RE projects treating the value base of loan as 70% of the capital cost and the weighted average of Base rate prevalent during the first six months of the (i.e. 9.76%) plus 300 basis points (equivalent to interest rate of 12.70%).</p> <p>According to CERC tariff order dated 31/03/2015 /31/, the computations of interest on loan have been carried out for determination of tariff in respect of the RE projects treating the value base of loan as 70% of the capital cost and the weighted average of Base rate prevalent during the first six months of the (i.e. 10.00%) plus 300 basis points (equivalent to interest rate of 13.00%).</p>
		12.76%	
		13.00%	

	Book Depreciation (SLM)		
	Salvage Value (%)	10.00	<p>Salvage value is considered as 10% of the total project cost (excluding cost of land lease, erection, and commissioning charges as well as transportation charges) as per the CERC tariff order dated 31/03/2015 and 30/03/2016 /31/. These have been added back to the cash flow. Land cost is not considered in IRR calculations which is deemed acceptable to the project verification team. PO considered 10% of cost of plant and machinery (solar plant) as residual (salvage) value for the project activity conservatively).</p> <p>This is further validated as per the accounting practises and same has been also cross checked from Schedule II of the Companies Act 2013 /B19/ which allows 95% of original cost to be depreciated implying a consideration of 5% as salvage value as a standard accounting practice.</p> <p>Thus, the consideration by the PO of 10% salvage value is conservative and hence appropriate for the project activity.</p>
	IT Depreciation (SLM)	7.69%	<p>As Per Income Tax, Depreciation rates for power generating units.</p> <p><a href="http://www.incometaxindia.gov.in/charts%2020tables/depreciation%20rates.htm">http://www.incometaxindia.gov.in/charts%2020tables/depreciation%20rates.htm</a></p> <p>The verification team found that the value is acceptable in accordance with the accounting principles of the host country.</p>
	Income tax rate (%)	30.00%	Values are based on tax rates notified by the Government of India for the said FY 2014-
	MAT (%)	18.50%	
Service Tax (%)	14.50%		

	Surcharge (%)	12.00%	2015 and 2015-16 (year in which decision was taken).																					
	Education cess (%)	3.00%	The values are verified from the following links: <a href="https://taxguru.in/income-tax/income-tax-rate-chart-assessment-year-201516-financial-year-201415.html">https://taxguru.in/income-tax/income-tax-rate-chart-assessment-year-201516-financial-year-201415.html</a>  <a href="https://taxguru.in/service-tax/service-tax-rate-increased-1236-14-subsuming-ec-shec-effective-01062015.html">https://taxguru.in/service-tax/service-tax-rate-increased-1236-14-subsuming-ec-shec-effective-01062015.html</a>																					
<p>The input values of the parameters involved in the investment analysis have been crosschecked against each of the evidence provided by the project owner and all the values were found to be applicable/relevant at the time of the investment decision and or project activity scenario.                  Post tax Equity IRR i.e., 7.29% is less than Cost of Equity i.e., 13.83% and therefore renders the project activity financially non-feasible.</p>																								
<p><b>Sub-step 2d: Sensitivity analysis</b>                  As per Tool 27, version 11, variables, including the initial investment cost, that constitute more than 20% of either total project costs or total project revenues should be subjected to reasonable variation. The Guidance on Assessment of Investment Analysis requires the robustness of the conclusion arrived at to be proved through a sensitivity analysis by varying the critical assumptions to a reasonable variation (<math>\pm 10\%</math>). The project developer has identified PLF, project cost, O&amp;M cost and electricity tariff as critical assumptions. The sensitivity analysis reveals that even under more favourable conditions, the equity IRR would not cross the benchmark return as given in the following table:</p>																								
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<p>The validation team carried out its own an independent assessment on the likelihood of the equity IRR breaching the benchmark and this assessment reveals that the project would become non additional only if:</p>																								
<ul style="list-style-type: none"> <li>• PLF goes up by 22.5%</li> <li>• Project cost goes down by 23%</li> <li>• Tariff increases by 22.5%</li> </ul>																								
<p>PP has submitted that such a reduction in project cost / O&amp;M cost or increase in PLF</p>																								

	<p>/ tariff is highly unrealistic and unlikely to happen for the following reasons:</p> <p><u>PLF</u>: Generation taken into consideration is equal to CERC recommended PLF. However, as per actual generation since COD, the PLF works out to 23.68% in respect of Jilesh, 23.41% for Vishvarupa, 25.27% for Zuka.</p> <p><u>Project cost</u>: Since the project activity is already operational since 2017, the cost incurred by the project owner for all the 3 project activities is INR 2542.60 MN as against the assumed amount of INR 2880 MN, which represents firm cost and as such the question of any reduction in the cost is hypothetical.</p> <p><u>Tariff</u>:</p> <p>The PPA /5/ signed for a period of 25 years, mentions a tariff rate of INR 6.45/ kWh for all project activities. The same was crosschecked with the sample invoices /13/ provided by the PO. It is therefore evident that the tariff rates have decreased compared to that assumed for the financial calculations. Hence, an increase of 33.50% over the current tariff is not feasible.</p> <p>In conclusion, the post-tax equity IRR will not reach the benchmark of 13.83% within reasonable fluctuation range of +/-10% of the key financial parameters. The project verification team has cross checked all the input values and calculations which are found to be correct and in accordance with Tool 27, version 12.</p> <p><b>Step 3: Barrier analysis</b> PO has not applied barrier analysis.</p> <p><b>Step 4: Common practice analysis</b> Common practice analysis for the project was conducted using CDM Tool 24, version 3.1)</p> <p><b>Sub-step 4a: The proposed project activity(ies) applies measure(s) that are listed in the definitions section above</b></p> <p>The project is a solar power generation project and adopts type (b) measure listed in the Methodological tool am-tool-24-v03.1 Common practice. The applicable geographical area is Telangana state of India.</p> <p>The state of Telangana is chosen as the applicable geographical area as against the rest of the host country as the policy/tariff applicable for the renewable power projects is regulated by respective State Electricity Regulatory Commissions (SERCs) in accordance with the generic policy framed by the Central Electricity Regulatory Commission (CERC) and they differ from state to state. This is based on Electricity Act 2003, section 82 which clearly mentions “Every State Government shall, within six months from the appointed date, by notification, constitute for the purposes of this Act, a Commission for the State to be known as the (name of the State) Electricity Regulatory Commission” Appropriateness of the same has been checked and confirmed from the aforementioned act. (<a href="http://www.cercind.gov.in/08022007/Act-withamendment.pdf">http://www.cercind.gov.in/08022007/Act-withamendment.pdf</a>).</p> <p>The investment climate for the renewable energy projects varies from State to State within India due to state specific local policy &amp; regulatory framework as outlined by the State Electricity Regulatory Commissions of the respective state. Thus, consideration of the specific geographical area i.e. State of Telangana for the</p>
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common practice analysis of the proposed project activity found to be reasonable and justified.

**Sub-step 4a-1: calculate applicable capacity or output range as +/-50% of the total design capacity or output of the proposed project activity.**

The installed capacity of the project is 103 MW The applicable capacity calculated as +/-50% of total design capacity of proposed project activity was 51.5 to 154.5 MW, which was found to be in line with Tool 24.

**Sub-step 4a-2: identify similar projects (both CDM and non-CDM) which fulfil all of the following conditions:**

- (a) The projects are located in the applicable geographical area**  
These fall in the applicable geographical location i.e., state of Telangana in India.
- (b) The projects apply the same measure as the proposed project activity**  
These apply the same measure i.e., solar radiation based power generation.
- (c) The projects use the same energy source/fuel and feedstock as the proposed project activity, if a technology switch measure is implemented by the proposed project activity**  
These use the same source of input energy i.e., solar.
- (d) The plants in which the projects are implemented produce goods or services with comparable quality, properties and applications areas (e.g. clinker) as the proposed project plant**  
These produce the same goods/services i.e., electricity supplied to the connected grid.
- (e) The capacity or output of the projects is within the applicable capacity or output range calculated in Step 1**  
The capacity of these projects is in the range as defined in Step 1 i.e., xx MW – xx MW.
- (f) The projects started commercial operation before the project design document (CDM-PDD) is published for global stakeholder consultation or before the start date of proposed project activity, whichever is earlier for the proposed project activity.**  
The projects started commercial operations before the start date of proposed project activity i.e., 28/10/2017 (earliest date of commissioning of the project activity)

There are 1 similar projects which satisfy all of the above conditions.

Name of the Plant	Installed Capacity (MW)	Date of Commissioning
M/s Renew Akshay Urja Private Limited (SPV of M/s Renew Solar Power Pvt Limited)	100.00	30/06/2016

A detailed analysis sheet for Common practice /B01/ provided by the PO satisfactorily mentions all the projects implemented before 28/10/2017 within the desired capacity range. This was crosschecked with the relevant sources and found to be accurate.

	<p><b>Sub-step 4a-3: within the projects identified in Step 2, identify those that are neither registered CDM project activities, project activities submitted for registration, nor project activities undergoing validation. Note their number <math>N_{all}</math>.</b></p> <p>Among the identified projects, 1 of them are registered with a carbon scheme.</p> <p>Therefore, <math>N_{all} = 0</math>.</p> <p><b>Sub-step 4a-4: within similar projects identified in Step 3, identify those that apply technologies that are different to the technology applied in the proposed project activity. Note their number <math>N_{diff}</math>.</b></p> <p>None of the projects identified above apply a different technology than the proposed project activity. Hence, <math>N_{diff} = 0</math>.</p> <p><b>Sub-step 4a-5: calculate factor <math>F=1-N_{diff}/N_{all}</math> representing the share of similar projects (penetration rate of the measure/technology) using a measure/technology similar to the measure/technology used in the proposed project activity that deliver the same output or capacity as the proposed project activity.</b></p> <p>The factor of the proposed project activity is calculated as follows:</p> $F = 1 - \frac{N_{diff}}{N_{all}} = 1 - \frac{0}{0} = 1$ $N_{all} - N_{diff} = 0 - 0 = 0$ <p>As per applied tool, the proposed project activity is a “common practice” within a sector in the applicable geographical area if the factor F is greater than 0.2 and <math>N_{all} - N_{diff}</math> is greater than 3.</p> <p>For the proposed project, F is greater than 0.2, but <math>N_{all} - N_{diff}</math> is not greater than 3, therefore, the project activity is not a common practice for ZPPL, VSPL and JPPL in the state of TelanganaL.</p> <p>The project verification team therefore concludes that as the project activity is not financially feasible and not a common practice, the project is additional.</p> <p><b>Step 2: Investment analysis for SEI Green Flash Private Limited:</b>          In this section it is demonstrated that the project activity is not financially feasible without the revenue from the sale of ACCs. This is demonstrated in following sections as per “Investment analysis” (Version 12.0).</p> <p>The commissioning date of the project activity is 27/10/2017. Prior to this, PO had signed a PPA on 05/12/2014 and had achieved the financial closure (loan approval) in 03/05/2017. This was a key decision stage and also the investment decision date for the project proponent to start the project implementation despite inherent financial barriers. The additionality has been established using the data available at the time of investment decision which are mainly CERC RE tariff order dated 15/05/2014, PPA and loan agreement.</p> <p><b>Sub-step 2a: Determine appropriate analysis method</b>          Since project activity generates revenue, Option III - Benchmark Analysis has been chosen to carry out investment analysis.</p> <p><b>Sub-step 2b: Option III. Apply benchmark analysis</b></p>
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	<p>Since the project is funded through equity and debt funds, Post Tax Equity IRR has been considered an appropriate financial indicator which will be tested against an appropriate benchmark cost of equity.</p> <p>These indicators are industry accepted indicators and are commonly used for financial analysis of similar kinds of projects.</p> <p>In line with para 16 of investment analysis /B07/, as the investment analysis is carried out in nominal terms and the available IRR benchmarks are in real terms, therefore, project owner has converted the real term values of benchmarks to nominal values by adding the inflation rate.</p> <p>As per para 19 of investment analysis, the cost of equity is determined by selecting the values provided in the Appendix, i.e., Default values for cost of equity (expected return on equity) is presented below:</p> <p>The Required return on equity (benchmark) was computed in the following means:</p> <p>Nominal Benchmark = <math>\{(1+\text{Real Benchmark}) * (1+\text{Inflation rate})\} - 1</math></p> <p>Where:</p> <ul style="list-style-type: none"> <li>- Default value for Real Benchmark = 9.77%, as per TOOL27, version 12.0, which is the latest version available at the time of preparation of PSF</li> <li>- Inflation Rate forecast for by Reserve Bank of India (RBI) i.e., Central Bank of India.</li> </ul> <p>TOOL27, version 12.0 specifies default value of expected return on equity in real terms for Energy Industries (Group 1) in India = <b>9.77%</b></p> <p>As per RBI report “Survey of Professional forecasters” dated 05/08/2014 /32/, the latest report available at the time of decision making, the 10-year inflation forecast projected was 4.8%.</p> <p>Therefore, Benchmark is calculated as <math>\{(1+9.77\%) * (1+4.8\%)\} - 1 = \mathbf{15.04\%}</math></p> <p><b><i>Sub-step 2c: Calculation and comparison of financial indicators</i></b>          For calculation of financial indicator, all relevant costs and revenues were found to be included in the IRR sheet /3/ provided by the PO. All assumptions and estimates used for input values were checked against the relevant sources.</p> <p>GCC project activity has a less favourable Equity IRR compared to the benchmark, and hence the GCC project activity cannot be considered as financially attractive.</p> <p>The key data parameters used to calculate Equity IRR are tabulated below:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Parameter</th> <th style="text-align: center;">Value</th> <th style="text-align: center;">Project verifier assessment</th> </tr> </thead> <tbody> <tr> <td>Capacity</td> <td style="text-align: center;">30 MW</td> <td>The project rated capacity i.e. 30 MW is based on the commissioning reports /8/, and found to be consistent and thus acceptable. The</td> </tr> </tbody> </table>	Parameter	Value	Project verifier assessment	Capacity	30 MW	The project rated capacity i.e. 30 MW is based on the commissioning reports /8/, and found to be consistent and thus acceptable. The
Parameter	Value	Project verifier assessment					
Capacity	30 MW	The project rated capacity i.e. 30 MW is based on the commissioning reports /8/, and found to be consistent and thus acceptable. The					

			<p>same was further confirmed from the purchase order dated /10/ as well as the PPA /5/.</p> <p>Installed capacity proposed at the time of decision making (i.e. internal management decision) and post decision making (actual implementation) is same.</p>
	PLF	19.00%	<p>Value is based on CERC RE tariff order dated 15/05/2014 /31/. The same is equivalent to the PLF offered by the technology provider and is found to be acceptable.</p> <p>To further cross-check the robustness of the PLF, validation team has cross-checked the actual generation of the project activity to ascertain the conformity of the estimated PLF to the actual and observed that the generation yielded a PLF of 23.7% /11/.</p>
	Annual generation	49,932 MWh	<p>The value is calculated as: Capacity * PLF * 8760 = 30 MW * 19% * 8760 h = 49,932 MWh.</p> <p>The input values used in calculation were available at the time of investment decision making.</p> <p>The actual PLF since the start of operation of the project activity is 23.7% /11/ and therefore the annual average generation value comes to 27,896 MWh which is more than the input value used for IRR analysis.</p>
	<b>Revenue &amp; Expenses</b>		
	Power tariff	6.95 INR/kWh	<p>The Value is based on the CERC RE tariff order 2014-15 /31/ which was available at the time of investment decision making date and is deemed acceptable to the project verification team.</p> <p>The project activity exports the entire power generated to DISCOM at a fixed tariff ₹7.01/kWh (based on PPA</p>

			/5/). The same was also crosschecked with the sample invoices /13/ and found to be consistent.
	Annual degradation during 1st year (%)	2.50%	The value considered is based on standard performance warranty by the PV module manufacturers (data modules) /6/.  Based on the data module sheet for the PV modules /6/:  Annual degradation from 2 <sup>nd</sup> year till 10 <sup>th</sup> year: $(97.5-90)/9= 0.83$  Annual degradation from 11 <sup>th</sup> year till 25 <sup>th</sup> year: $(90-80)/15=0.67$  The percentage of annual degradation is therefore considered appropriate for the project activity.
	Annual degradation from 2nd year till 10 <sup>th</sup> year (%)	0.83%	
	Annual degradation from 11th year till 25 <sup>th</sup> year (%)	0.67%	
	O & M cost	36.90 INR million	Value is based on CERC RE tariff order dated 15/05/2014 /31/ and found to be consistent and thus acceptable. According to the said order, O&M expense norm for solar PV power project as ` 12.30 Lakh/MW for FY 2014-15 has been considered. This is also inclusive of the service tax of 15% applicable during FY 2014-15.
	Escalation in O&M expenses p.a.	5.72%	Value is based on CERC RE tariff order dated 15/05/2014 /31/. The same was further checked against the purchase order /10/ and found to be consistent and thus acceptable.
	<b>Project cost and financing structure</b>		
	Project cost	2073.00 INR million	The value is based on the CERC RE Tariff order 2014-15 /31/. According to the said order, the capital cost norm for FY 2014-15 is INR 691 Lakh/MW for Solar PV Power Projects. The project cost for IRR analysis is calculated as $69.1 \text{ INR million} * 30\text{MW} = 2073 \text{ INR Million}$ .

			<p>According to the loan sanction letter /14/, the project cost is 2250.00 INR million which is higher than the input value. Though the project cost is higher than the input value, the project is additional, and it is deemed acceptable.</p> <p>The actual project cost for the project activity is 2524.4 INR million /33/ which is higher than the input value for IRR analysis but the project remains additional based on the IRR calculated using actual values /3/.</p>
	Loan Amount	1451.10 INR Mn	<p>The value is based on the CERC RE Tariff order 2014-15 /31/. According to the said order, the computations of interest on loan carried out for determination of tariff in respect of the RE projects treating the value base of loan as 70% of the capital cost and the weighted average of Base rate prevalent during the first six months of the (i.e. 9.70%) plus 300 basis points (equivalent to interest rate of 12.70%). Therefore, the loan amount considered for IRR calculations is 70% of the project cost which is deemed acceptable to the project verification team.</p> <p>According to the loan sanction letter /14/, the loan amount is 60% of the project cost i.e., 870 INR million.</p>
	Equity investment	621.90 INR Mn	<p>The value is based on the CERC RE Tariff order 2014-15 /31/. The value is equivalent to 30% of the total project cost which is deemed acceptable to the project verification team.</p> <p>Actual Equity investment is calculated as the difference between the actual project cost and the loan amount i.e., <math>2524.4 - 870 = 559.3</math> INR million</p>
	Interest rate on loan	12.70%	The value is based on the CERC RE Tariff order 2014-

			<p>15 /31/. According to the said order, the computations of interest on loan carried out for determination of tariff in respect of the RE projects treating the value base of loan as 70% of the capital cost and the weighted average of Base rate prevalent during the first six months of the (i.e. 9.70%) plus 300 basis points (equivalent to interest rate of 12.70%). This is deemed acceptable to the project verification team.</p> <p>According to the loan sanction letter /14/, the applicable interest rate is 11.50% p.a. post perfection of security, payable on monthly basis.</p>
	Salvage Value (%)	10.00	<p>Salvage value is considered as 10% of the total project cost (excluding cost of land lease, erection and commissioning charges as well as transportation charges) as per the CERC tariff order dated 15/05/2014. These have been added back to the cash flow. As the land is purchase and it is being non-depreciable item, it is added back to the cash flow. However, PP considered 10% of cost of plant and machinery (solar plant) and 100% land cost as residual (salvage) value for the project activity conservatively.</p> <p>This is further validated as per the accounting practises and same has been also cross checked from Schedule II of the Companies Act 2013 which allows 95% of original cost to be depreciated implying a consideration of 5% as salvage value as a standard accounting practice.</p> <p>Thus, the consideration by the PO of 10% salvage value is conservative and hence</p>

			appropriate for the project activity.
	IT Depreciation (SLM)	7.69%	As Per Income Tax, Depreciation rates for power generating units.  http://www.incometaxindia.gov.in/charts%2020tables/depreciation%20rates.htm  The verification team found the value to be acceptable in accordance with the accounting principles of the host country.
	Income tax rate (%)	30.00%	Values are based on tax rates notified by the Government of India for the said FY 2014-2015 (year in which decision was taken). The values are verified from the following links: <a href="https://taxguru.in/income-tax/income-tax-rate-chart-assessment-year-201516-financial-year-201415.html">https://taxguru.in/income-tax/income-tax-rate-chart-assessment-year-201516-financial-year-201415.html</a>  <a href="https://taxguru.in/service-tax/service-tax-rate-increased-1236-14-subsuming-ec-shec-effective-01062015.html">https://taxguru.in/service-tax/service-tax-rate-increased-1236-14-subsuming-ec-shec-effective-01062015.html</a>
	MAT (%)	18.50%	
	Service Tax (%)	12.36%	
	Surcharge (%) - Rs. 10 to Rs. 100 m.	10.00%	
	Education cess (%)	3.00%	
<p>The input values of the parameters involved in the investment analysis have been crosschecked against each of the evidence provided by the project owner and all the values were found to be applicable/relevant at the time of the investment decision and or project activity scenario. Post tax Equity IRR i.e., 7.71% is less than Cost of Equity i.e., 15.04% and therefore renders the project activity financially non-feasible.</p> <p><b>Sub-step 2d: Sensitivity analysis</b> As per Tool 27, version 12, variables, including the initial investment cost, that constitute more than 20% of either total project costs or total project revenues should be subjected to reasonable variation. The Guidance on Assessment of Investment Analysis requires the robustness of the conclusion arrived at to be proved through a sensitivity analysis by varying the critical assumptions to a reasonable variation (<math>\pm 10\%</math>). The project developer has identified PLF, project cost, O&amp;M cost and electricity tariff as critical assumptions. The sensitivity analysis reveals that even under more favourable conditions, the equity IRR would not cross the benchmark return as given in the following table:</p>			
<b>Parameter</b>	<b>-10%</b>	<b>0</b>	<b>+10%</b>
			<b>Breaching value</b>

PLF	5.19%	8.36%	10.34%	27.25%
Electricity tariff Rate	5.19%	7.71%	10.34%	-25%
Project Cost	9.99%	7.71%	5.84%	27.25%

In conclusion, the equity IRR (after tax) will not reach the benchmark of 15.59% within the reasonable fluctuation range of +/-10% of the key financial parameters. The project verification team has cross-checked all the input values and calculations which are found to be correct and in accordance with Tool 27, version 12 /B07/.

The validation team carried out its own an independent assessment on the likelihood of the equity IRR breaching the benchmark and this assessment reveals that the project would become non additional only if:

- PLF goes up by 27%
- Project cost goes down by 25.5%
- Tariff increases by 27%

PP has submitted that such a reduction in project cost / cost or increase in PLF / tariff is highly unrealistic and unlikely to happen for the following reasons:

PLF: Generation taken into consideration is equal to CERC recommended PLF. However, as per actual generation since COD , the PLF works out to only 23.7%. Hence, to get a PLF of 24.13% (which translates to a hike of 27%) on a sustained basis is highly hypothetical and unrealistic.

Project cost: Since the project activity is already operational since 2017, the cost incurred by the project owner is INR 2524.4 MN as against the assumed amount of INR 2073.00 MN, which represents firm cost and as such the question of any reduction in the cost is hypothetical.

Tariff:

The PPA /5/ signed for a period of 25 years, mentions a tariff rate of INR 5.97/ kWh. It is therefore evident that the tariff rates have not increased compared to that assumed for the financial calculations. Hence, an increase of 27% over the current tariff is not feasible.

In conclusion, the post-tax equity IRR will not reach the benchmark of 15.08% within reasonable fluctuation range of +/-10% of the key financial parameters. The project verification team has cross checked all the input values and calculations which are found to be correct and in accordance with Tool 27, version 12.

**Step 3: Barrier analysis**

PO has not applied barrier analysis.

**Step 4: Common practice analysis**

Common practice analysis for the project was conducted using CDM Tool 24, version 3.1)

**Sub-step 4a: The proposed project activity(ies) applies measure(s) that are listed in the definitions section above**

	<p>The project is a solar power generation project and adopts type (b) measure listed in the Methodological tool am-tool-24-v03.1 Common practice. The applicable geographical area is Andhra Pradesh state of India.</p> <p>The state of Andhra Pradesh is chosen as the applicable geographical area as against the rest of the host country as the policy/tariff applicable for the renewable power projects is regulated by respective State Electricity Regulatory Commissions (SERCs) in accordance with the generic policy framed by the Central Electricity Regulatory Commission (CERC) and they differ from state to state. This is based on Electricity Act 2003, section 82 which clearly mentions “Every State Government shall, within six months from the appointed date, by notification, constitute for the purposes of this Act, a Commission for the State to be known as the (name of the State) Electricity Regulatory Commission” Appropriateness of the same has been checked and confirmed from the aforementioned act. (<a href="http://www.cercind.gov.in/08022007/Act-withamendment.pdf">http://www.cercind.gov.in/08022007/Act-withamendment.pdf</a>).</p> <p>The investment climate for the renewable energy projects varies from State to State within India due to state specific local policy &amp; regulatory framework as outlined by the State Electricity Regulatory Commissions of the respective state. Thus, consideration of the specific geographical area i.e. State of Andhra Pradesh for the common practice analysis of the proposed project activity found to be reasonable and justified.</p> <p><b><i>Sub-step 4a-1: calculate applicable capacity or output range as +/-50% of the total design capacity or output of the proposed project activity.</i></b></p> <p>The installed capacity of the project is 30 MW. The applicable capacity calculated as +/-50% of total design capacity of proposed project activity was 15 MW to 45 MW, which was found to be in line with Tool 24.</p> <p><b><i>Sub-step 4a-2: identify similar projects (both CDM and non-CDM) which fulfil all of the following conditions:</i></b></p> <ol style="list-style-type: none"> <li>a) <b>The projects are located in the applicable geographical area</b> These fall in the applicable geographical location i.e., state of Andhra Pradesh in India.</li> <li>b) <b>The projects apply the same measure as the proposed project activity</b> These apply the same measure i.e., solar radiation based power generation.</li> <li>c) <b>The projects use the same energy source/fuel and feedstock as the proposed project activity, if a technology switch measure is implemented by the proposed project activity</b> These use the same source of input energy i.e., solar.</li> <li>d) <b>The plants in which the projects are implemented produce goods or services with comparable quality, properties and applications areas (e.g. clinker) as the proposed project plant</b> These produce the same goods/services i.e., electricity supplied to the connected grid.</li> <li>e) <b>The capacity or output of the projects is within the applicable capacity or output range calculated in Step 1</b> The capacity of these projects is in the range as defined in Step 1 i.e., 15 MW – 45 MW.</li> <li>f) <b>The projects started commercial operation before the project design document (CDM-PDD) is published for global stakeholder consultation or</b></li> </ol>
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	<p><b>before the start date of proposed project activity, whichever is earlier for the proposed project activity.</b></p> <p>The projects started commercial operations before the start date of proposed project activity i.e., 27/10/2017 (date of commissioning of the project activity)</p> <p>There are no similar projects which satisfy all of the above conditions.</p> <p><b><i>Sub-step 4a-3: within the projects identified in Step 2, identify those that are neither registered CDM project activities, project activities submitted for registration, nor project activities undergoing validation. Note their number <math>N_{all}</math>.</i></b></p> <p>No similar projects were identified to be registered with any carbon scheme.</p> <p>Therefore, <math>N_{all} = 0</math>.</p> <p><b><i>Sub-step 4a-4: within similar projects identified in Step 3, identify those that apply technologies that are different to the technology applied in the proposed project activity. Note their number <math>N_{diff}</math>.</i></b></p> <p>None of the projects identified above apply a different technology than the proposed project activity. Hence, <math>N_{diff} = 0</math>.</p> <p><b><i>Sub-step 4a-5: calculate factor <math>F=1-N_{diff}/N_{all}</math> representing the share of similar projects (penetration rate of the measure/technology) using a measure/technology similar to the measure/technology used in the proposed project activity that deliver the same output or capacity as the proposed project activity.</i></b></p> <p>The factor of the proposed project activity is calculated as follows:</p> $F = 1 - N_{diff}/N_{all} = 1 - 0 = 1$ $N_{all} - N_{diff} = 0 - 0 = 0$ <p>As per applied tool, the proposed project activity is a “common practice” within a sector in the applicable geographical area if the factor F is greater than 0.2 and <math>N_{all} - N_{diff}</math> is greater than 3.</p> <p>For the proposed project, F is greater than 0.2, but <math>N_{all} - N_{diff}</math> is not greater than 3, therefore, the project activity is not a common practice in the state of Andhra Pradesh.</p> <p>The project verification team therefore concludes that as the project activity is neither financially feasible nor a common practice, the project activity is additional.</p>
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### D.3.6 Estimation of emission reductions or net anthropogenic removal

<b>Means of Project Verification</b>	DR, I
<b>Findings</b>	CL 02, CL 03, CL 10 and CAR 06 were raised. Please refer to Appendix 4 for further details.

<b>Conclusion</b>	<p>The verification team confirms that the equations and parameters used to calculate GHG emission reductions or net anthropogenic removals in the sections B.6 of PSF /1/ are in accordance with applied methodology, GCCM001 version 3.0 /B02/.</p> <p>The baseline emissions are calculated using the formula:</p> $BE_y = EG_{PJ, y} \times EF_{grid, y}$ <p>Where:  <math>BE_y</math> = Baseline emissions in year <math>y</math> (t CO<sub>2</sub>)  <math>EG_{PJ, y}</math> = Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the GCC project activity in year <math>y</math> (MWh/yr.)  <math>EF_{grid, y}</math> = Combined margin CO<sub>2</sub> emission factor for grid connected power generation in year <math>y</math> calculated using the latest version of “TOOL07: Tool to calculate the emission factor for an electricity system” (t CO<sub>2</sub>/MWh)</p> <p>The formula has been correctly applied as per §24 of the applied methodology according to which “baseline emissions include only CO<sub>2</sub> emissions from electricity generation in power plants that are displaced due to the project activity”.</p> <p>As per the PSF the estimated net electricity generation from the project activity (<math>EG_{PJ, y}</math>) is estimated to be 241,567 MWh/year which is derived from the Joint Monthly Reading Reports/7/. The same have been duly verified and the project verification team confirms that the actual generation from the project activity tallies with the estimation in the PSF as well as the ER calculation sheet /2/ and hence is acceptable.</p> <p>The electricity generation from the project activity is calculated based on the value of PLF i.e. 19 % which is sourced from the generic levelized generation tariff order for the FY 2013-2014 by the CERC /31/. The value considered by the project owner for determining the ex-ante emission reductions in the PSF is therefore deemed acceptable to the verification team after verification of the said order /1/.</p> <p>Also, the degradation of solar panels is assumed as 2.5% for the 1<sup>st</sup> year and 0.83% on each year up to 10 years (till the end of the crediting period). Based on the sectoral expertise and standard performance warranty of the solar panel suppliers/6/ of the project activity this is acceptable to verification team.</p> <p>The project activity has applied the “Tool to calculate the emission factor for an electricity system” version 7.0 for the calculation of CO<sub>2</sub> emission factor of the grid. The assessment of the step wise approach for the calculation of the parameter <math>EF_{grid, y}</math> is detailed below:</p> <table border="1" data-bbox="504 1559 1489 2022"> <thead> <tr> <th data-bbox="504 1559 999 1787" style="background-color: #e0e0e0;">Steps for Calculation of combined grid emission factor as per TOOL07: “Tool to calculate the emission factor for an electricity system” version 07</th> <th data-bbox="1005 1559 1489 1787" style="background-color: #e0e0e0;">Assessment</th> </tr> </thead> <tbody> <tr> <td data-bbox="504 1787 999 2022"> <b>Step 1:</b> Identify the relevant electricity systems                 </td> <td data-bbox="1005 1787 1489 2022">                     In accordance with §10(e) of the applied tool, the project activity identifies the Indian Grid as the relevant electricity system.                       In India, all regional grids have been integrated as a single Indian Grid covering all the states in December                 </td> </tr> </tbody> </table>	Steps for Calculation of combined grid emission factor as per TOOL07: “Tool to calculate the emission factor for an electricity system” version 07	Assessment	<b>Step 1:</b> Identify the relevant electricity systems	In accordance with §10(e) of the applied tool, the project activity identifies the Indian Grid as the relevant electricity system.  In India, all regional grids have been integrated as a single Indian Grid covering all the states in December
Steps for Calculation of combined grid emission factor as per TOOL07: “Tool to calculate the emission factor for an electricity system” version 07	Assessment				
<b>Step 1:</b> Identify the relevant electricity systems	In accordance with §10(e) of the applied tool, the project activity identifies the Indian Grid as the relevant electricity system.  In India, all regional grids have been integrated as a single Indian Grid covering all the states in December				

		<p>2013 by the Central Electricity Authority (CEA), Government of India.</p> <p>Therefore, in accordance with §17(a) of the applied tool the delineation of the project electricity system and connected electricity systems published by the DNA of the host country i.e. CO<sub>2</sub> Baseline Database for the Indian Power Sector, Version 17(latest version at the time of initial submission), October 2021 published by Central Electricity Authority (CEA), Government of India /17/ is used. The same has been duly verified and found to be acceptable.</p>
	<p><b>Step 2:</b> Choose whether to include off-grid power plants in the project electricity system (optional)</p>	<p>The project activity has chosen only grid power plants. The project verification team has reviewed the ER sheet /2/, the CEA published database /17/ and found the same to be acceptable.</p>
	<p><b>Step 3:</b> Select a method to determine the operating margin (OM) ((EF<sub>grid</sub>,OMSimple,y)</p>	<p>With reference to the options provided for the determination of OM under §38 of the Tool, the project activity has selected Simple OM emission factor calculation.</p> <p>The same is found acceptable as the options of Simple adjusted OM and Dispatch data analysis OM could not be utilized due to lack of availability of data. The aforementioned fact is also considered by the Central Electricity Authority in the user guide for CO<sub>2</sub> Baseline Database for the Indian Power Sector version 17.0, October 2021 /17/. Furthermore, the Average OM method also cannot be applied as low cost/must run resources (LCMR) constitute less than 50% of total grid generation for recent 5year data (2016-2017 to 2020-2021). The same has been verified against the CEA Baseline database /17/.</p> <p>Therefore, as the LCMR share for the recent 5 years is less than 50%, simple OM can be used.</p> <p>The same is found to be in compliance with the applied tool and found to be acceptable.</p> <p>The parameter “Simple OM emission factor”, is fixed ex-ante.</p>

	<p><b>Step 4:</b> Calculate the operating margin emission factor according to the selected method</p>	<p>The Simple OM emission factor is calculated as a weighted average generation for the recent 3 years i.e. 2018-2019, 2019-2020, and 2020-2021.</p> <p>The values have been verified against the database used i.e. Central Electricity Authority in the user guide for CO<sub>2</sub> Baseline Database for the Indian Power Sector version 17.0, October 2021 /17/ and found to be accurate. The same is found to be in compliance with §42(a) of the applied tool and found to be acceptable.</p>
	<p><b>Step 5:</b> Calculate the build margin (BM) emission factor (<math>EF_{grid,BM,y}</math>)</p>	<p>The Build Margin emission factor is calculated based on the recent information available i.e. value for the year 2020-2021.</p> <p>The value has been verified against the database used i.e. Central Electricity Authority in the user guide for CO<sub>2</sub> Baseline Database for the Indian Power Sector version 17.0, October 2021 /17/ and found to be accurate. The same is found to be in compliance with §72(a) of the applied tool and found to be acceptable.</p>
	<p><b>Step 6:</b> Calculate the combined margin (CM) emission factor</p>	<p>The combined margin emission factor is calculated by the Weighted average CM method and is based on the formula provided in §85 of the applied tool.</p> <p>The verification team has reviewed the calculation in the PSF/1/ as well as the ER calculation sheet/2/ and found the same to be transparent and accurate. The result of the emission factor calculation is therefore found to be acceptable.</p>
<p>The combined margin emission factor (<math>EF_{grid,y}</math>) calculated on the basis of Tool 07 is 0.9373 tCO<sub>2e</sub>/MWh. This complies with the requirement stated in paragraph 9 of GCC Clarification no. 3 (version 1.0) /B01-8/, which states that "if the project owner applies options 8(c) to 8(e) above, the latest available emission factor shall not be older than 3 years, at the time of submission of the project documentation for starting Global Stakeholder Consultation (GSC)".</p> <p>Therefore, the baseline emission value is derived as 224,781 tCO<sub>2e</sub> using the aforementioned formulae and figures and is found to be acceptable.</p>		

	<p><u>Project emissions:</u></p> <p>As per §26 of the applied methodology “for most renewable energy project activities, project emissions are equal to zero.” As solar energy is a GHG emission free source of energy for the project activity, project emissions are considered “Zero” for the project activity i.e. <math>PE_y = 0</math>.</p> <p>The same is in accordance with the applied methodology as well as project design and hence is found to be acceptable.</p> <p><u>Leakage Emissions</u></p> <p>As per §29 of the applied methodology no leakage emissions are estimated for the project activity. Leakage emission are therefore considered “Zero” for the project activity i.e. <math>LE_y = 0</math>.</p> <p>The same is in accordance with the applied methodology as well as project design and hence is found to be acceptable.</p> <p><u>Emission reductions</u></p> <p>In accordance with §30 of the applied methodology, emission reductions are calculated as follows:</p> $ER_y = BE_y - PE_y - LE_y$ <p>Where:  <math>ER_y</math> = Emission reductions in year <math>y</math> (t CO<sub>2</sub>)  <math>BE_y</math> = Baseline Emissions in year <math>y</math> (t CO<sub>2</sub>)  <math>PE_y</math> = Project emissions in year <math>y</math> (t CO<sub>2</sub>)  <math>LE_y</math> = Leakage emissions in year <math>y</math> (t CO<sub>2</sub>)</p> <p>Therefore, the annual emission reduction value is derived as 224,781 tCO<sub>2</sub>e using the aforementioned formulae and figures and is found to be acceptable.</p> <p>CC IPL verification team confirms that the baseline methodology and the applicable tool(s) have been applied correctly to calculate emission factor, project emissions, baseline emissions, leakage and emission reductions. Furthermore, all the data used in the PSF /1/ as well as the ER calculation sheet /2/ is quoted correctly including their source.</p> <p>The verification team therefore concludes that all the values used in the PSF are reasonable and the calculations are complete and accurate without any omissions. The same is found to be acceptable.</p>
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### D.3.7 Monitoring plan

<b>Means of Project Verification</b>	DR, I
<b>Findings</b>	CL 03, CL 04, CL 05 and CAR 06 were raised. Please refer to Appendix 4 for further details.
<b>Conclusion</b>	The monitoring plan described in the PSF is in compliance with the applied methodology “GCCM001” version 3.0 /B02/. The monitoring plan is also found to be in compliance with the requirements of GCC Environment and Social-Safeguards Standard version 3.0 and Project Sustainability Standard version 3.0/B01/.

	<p>The CCIPL project verification team has reviewed all the parameters in the monitoring plan against the requirements of the applied methodology and confirmed that no deviations relevant to the project activity have been found. The procedures have been reviewed through document review and interviews with the respective monitoring personnel.</p> <p>The project verification team can hence confirm that the proposed monitoring plan is feasible within the project design. Therefore, the project owner is able to implement the monitoring plan and the achieve emission reductions that can be reported ex-post and verified.</p> <p><b>Data and parameters fixed ex-ante:</b></p> <p>Ex-ante parameters provided under section B.6.2 of the PSF /1/ are found to be appropriate and in line with the applied methodology GCCM001 (version 3.0) /B02/. Ex-ante parameters of the project activity would be as follows:</p>		
	<b>Parameter</b>	<b>Verified Value</b>	<b>Assessment</b>
	Operating margin CO <sub>2</sub> emission factor for the project electricity system in year y <b>EF<sub>grid,OM,y</sub></b>	0.9522 tCO <sub>2</sub> /MWh	<p>The values are based on latest CO<sub>2</sub> Baseline Database for the Indian Power Sector User Guide, Version 17.0 /17/, October 2021 published by Central Electricity Authority (CEA), Government of India.</p> <p>For parameter <b>EF<sub>grid,OM,y</sub></b>, as per paragraph 42(a) of the “tool to calculate the emission factor for an electricity system” version 7.0, 3-year generation-weighted average, based on the most recent data available at the time of submission of the PSF has been used and found to be appropriate.</p> <p>For parameter <b>EF<sub>grid,BM,y</sub></b>, as per paragraph 72(a) of the “tool to calculate the emission factor for an electricity system” version 7.0, the most recent data available at the time of submission of the PSF has been used and found to be appropriate.</p> <p>The documentation source /17/ has been duly verified to confirm the values.</p> <p>Please also refer section D.3.6</p>
	Build margin CO <sub>2</sub> emission factor for the project electricity system in year y <b>EF<sub>grid,BM,y</sub></b>	0.8653 tCO <sub>2</sub> /MWh	

	<p>Combined margin CO<sub>2</sub> emission factor for the project electricity system in year y  <math>EF_{grid,CM,,y}</math></p>	<p>0.9305 tCO<sub>2</sub> /MWh</p>	<p>In accordance with paragraph 85 of “tool to calculate the emission factor for an electricity system” version 7.0, the parameter <math>EF_{grid,CM,,y}</math> is calculated as the weighted average of the operating margin (0.75) &amp; build margin (0.25) values, sourced from CO<sub>2</sub> Baseline Database for the Indian Power Sector User Guide, Version 17.0, October 2021/17/.</p> <p>The PSF/1/ as well as Emission Reduction calculation excel sheet/2/ have been duly verified to confirm the calculation. The derived value is found to be appropriate.</p>
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**Data and parameters to be monitored ex-post:**

Ex-post parameters mentioned under section B.7.1 of the PSF /1/ are found to be appropriate and in line with the applied methodology GCCM001 (version 3.0) /B02/. The parameters that are to be monitored ex-post are:

Sr. No.	Parameter	Assessment
1.	<p><math>EG_{PJ,Y}</math>                      Quantity of net electricity generation supplied by the project plant/unit to the grid in year y                       (SDG 7)</p>	<p>The electricity generated by the project activity is supplied to the Indian grid. The net electricity generated is based on the difference between export to the DISCOM and import from grid. The amount of electricity exported by the project activity is continuously monitored by bi-directional energy meters (main meter, check meter, and in some cases a backup meter as well) of accuracy class 0.2s which are located at the substation. The serial numbers mentioned in the PSF are in accordance with the onsite observation /30/. The energy meters installed at the substation end are jointly inspected and sealed by the state utility and its representatives.</p> <p>The calibration of the meters has been carried out once a year for all the project activities by the state electricity officials as per provision in the Power Purchase Agreement for each project activity /5/ which is acceptable to the verification team. The same has been confirmed</p>

			<p>during the onsite visit /30/ and by checking the calibration certificates /9/. The verification team also confirmed that the metering is performed as per the single line diagram /12/ checked during the onsite visit.</p> <p>The monitoring parameter is recorded on monthly basis. The Joint Meter Readings (JMR) taken every month from the meter, in the presence of authorised official from state electricity board along with a representative of the project owner, gives the net value of electricity supplied by the project activity to the grid. The monthly value of metered energy is the basis for PO to raise monthly invoices /13/. Therefore, Net electricity supplied to the grid by the project activity will be cross checked with the JMR /7/ and monthly invoices raised /13/.</p> <p>It can therefore be concluded that the project owner has the ability to implement the monitoring plan mentioned in the PSF /1/.</p> <p>Furthermore, the data collected as part of monitoring will be archived electronically and be kept for at least 2 years after the end of the crediting period or till the last issuance of ACCs for the project activity whichever occurs later.</p>
	2.	CO <sub>2</sub> Emission Reductions and SDG 13	<p>The project activity generates and supplies renewable solar sourced based electricity to the grid, where it replaces fossil fuel source-based electricity. Emission reduction is calculated based on the net electricity generation from the project activity and grid emission factor. While the grid emission factor is fixed ex-ante, the net electricity generation is continuously monitored as stated above for the monitoring parameter <b>EG<sub>P,J,Y</sub></b></p> <p>The calculation procedures for the reduction in CO<sub>2</sub> emissions are correctly defined in the PSF. The parameter is being monitored to assess to contribution SDG goal -13 Climate Change and also the positive environmental impact. Adequate details for monitoring/reporting/recording are defined in the PSF.</p> <p>The CO<sub>2</sub> emission reduction is validated</p>

			from the ER calculation sheet /02/ and found appropriate.
	3.	Skill Development Training (SDG 4)	<p>The project owner will provide training for both existing employees and local youth and adults with relevant skills. The project will train at least 3 persons throughout the crediting period (under each project activity) which can be verified from the training attendance sheet.</p> <p>The means of monitoring was confirmed during interviews conducted on site /30/ and the monitoring practices followed by the project owner is appropriate in relation to the project activity and its acceptable to the assessment team.</p>
	4.	Efficiency of health services (SDG 3)	<p>The project owner will create basic health services, set up health camps and distribute medicines and vaccines to local people, under each project activity. The records for the same will be kept by the project owner and will be monitored once in four years.</p> <p>The means of monitoring was confirmed during interviews conducted on site /30/ and the monitoring practices followed by the project owner is appropriate in relation to the project activity and its acceptable to the assessment team.</p>
	5.	Health services for Employees (SDG 3)	<p>The project owner will create basic health care services, group health insurance and health camps for the employees under each project activity. The records for the same will be kept by the project owner and will be monitored yearly.</p> <p>The means of monitoring was confirmed during interviews conducted on site /30/ and the monitoring practices followed by the project owner is appropriate in relation to the project activity and its acceptable to the assessment team.</p>
	6.	Solid waste Pollution from E-wastes	<p>The e-waste generated by the Project activity viz. Spares of SCADA system, inverters and other electrical and electronic parts involved in the project or post their useful life will be disposed as per prevailing laws and regulations of the host country i.e. E-Waste (Management) Rules, 2011 /B23/. Accordingly, the e-waste generated from the project activity will be collected by the SPCB authorized Solid E-Waste recyclers/ dismantlers/ Scrap dealers.</p>

			<p>The quantity of E-waste reused/recycled/refurbished/disposed of under each project activity will be monitored per year by means of the records maintained on site. This was further confirmed by interviewing /30/ the monitoring personnel of the project activity during site visit.</p> <p>The monitoring practice followed is therefore found to be appropriate and is acceptable to the verification team.</p>
	7.	Incidents/Accidents (SDG 8)	<p>The number of major incidents/accidents will be monitored yearly. The project owner conducts occupational safety trainings, display of safety posters at site and follows company EHS policy /24/ strictly. The monitored value can be confirmed from the EHS records maintained on site.</p> <p>This was confirmed during interviews conducted on site /30/ and the monitoring practices followed by the project owner is appropriate in relation to the project activity and its acceptable to the assessment team.</p>
	8.	Employment – Long Term (SDG 9)	<p>This parameter is monitored yearly based on the number of jobs created by the project owner on a long-term basis. The project will at least provide employment to 10 persons yearly which can be verified using the site register / employment records maintained for project activity. PO has provided the Project Activity specific Employee Lists segregated into long term and short-term employments /36/.</p> <p>This was confirmed during interviews conducted on site /30/ and the monitoring practices followed by the project owner is appropriate in relation to the project activity and its acceptable to the assessment team.</p>
	9.	Employment – Short Term	<p>This parameter is monitored yearly based on the number of jobs created by the project owner on a short-term basis. The project will at least provide employment to 5 persons yearly which can be verified using the site register / employment records maintained for project activity. PO has provided the Project Activity specific Employee Lists segregated into long term and short-term</p>

			<p>employments /36/.</p> <p>This was confirmed during interviews conducted on site /30/ and the monitoring practices followed by the project owner is appropriate in relation to the project activity and its acceptable to the assessment team.</p>
<p>The verification team therefore confirms that the parameters to be monitored have been presented correctly according to methodological as well as Standard specific requirements/B02/. This is in conformance with the requirements of GCC Verification Standard (version 3.1) /B01-2/.</p>			

#### D.4. Start date, crediting period and duration

<b>Means of Verification</b>	DR, I																														
<b>Findings</b>	No findings pertaining to this section.																														
<b>Conclusion</b>	<p>The project activities forming the bundle have the following start dates:</p> <table border="1" style="margin-left: 40px;"> <thead> <tr> <th>Project Activity Location</th> <th>Total Capacity</th> <th>Capacity</th> <th>Start Date</th> </tr> </thead> <tbody> <tr> <td rowspan="4">Jilesh Power Private Limited</td> <td rowspan="4">45 MW</td> <td>13 MW</td> <td>28/10/2017</td> </tr> <tr> <td>5 MW</td> <td>27/11/ 2017</td> </tr> <tr> <td>5 MW</td> <td>01/12/2017</td> </tr> <tr> <td>22 MW</td> <td>23/04/2018</td> </tr> <tr> <td rowspan="3">Vishvarupa Solar Power Limited</td> <td rowspan="3">10 MW</td> <td>4 MW</td> <td>28/10/2017</td> </tr> <tr> <td>3 MW</td> <td>08/11/2017</td> </tr> <tr> <td>3 MW</td> <td>11/11/2017</td> </tr> <tr> <td>Zuka Power Private Limited</td> <td>48 MW</td> <td>48 MW</td> <td>30/11/2017</td> </tr> <tr> <td>SEI Green Flash Private Limited</td> <td>30 MW</td> <td>30 MW</td> <td>27/10/2017</td> </tr> </tbody> </table> <p>The start date of the bundle activity is therefore considered as 27/10/2017, which is the earliest date of start of operation amongst all the involved project activities in the bundle. The same has been duly verified against the commissioning reports /8/ and found to be acceptable by the verification team.</p> <p>Crediting period has been chosen as fixed 10 years from 23/04/2018 to 22/04/2028. The start date of the crediting period is stated as 23/04/2018, which is appropriate as per §40(b) of the Project Standard version 03.1/B01/.</p> <p>Project owner has considered the expected lifetime of the project activity as 25 years. The same has been verified against the technical specification /6/ of the Solar Photovoltaic Panels installed and confirmed on the basis of sectoral expertise.</p> <p>The project verification team therefore concludes that the start date, crediting period type and duration are in conformance with the requirements of §38, §39 and §40 of</p>	Project Activity Location	Total Capacity	Capacity	Start Date	Jilesh Power Private Limited	45 MW	13 MW	28/10/2017	5 MW	27/11/ 2017	5 MW	01/12/2017	22 MW	23/04/2018	Vishvarupa Solar Power Limited	10 MW	4 MW	28/10/2017	3 MW	08/11/2017	3 MW	11/11/2017	Zuka Power Private Limited	48 MW	48 MW	30/11/2017	SEI Green Flash Private Limited	30 MW	30 MW	27/10/2017
Project Activity Location	Total Capacity	Capacity	Start Date																												
Jilesh Power Private Limited	45 MW	13 MW	28/10/2017																												
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SEI Green Flash Private Limited	30 MW	30 MW	27/10/2017																												

	GCC Project Standard, version 03.1 /B01-1/ and §13 of GCC Clarification No. 1, version 1.3 /B01/.
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### D.5. Environmental impacts

<b>Means of Project Verification</b>	DR, I
<b>Findings</b>	No findings were raised pertaining to this section
<b>Conclusion</b>	<p>The project activity refers to the guidelines on Environmental Impact Assessment published by Ministry of Environment, Forests and Climate Change (MoEF &amp; CC), Government of India (GOI) under Environmental Impact Assessment notification 14/09/2006 which was further amended on 14/07/2018 /B20/. The said guidelines categorise project activities that require Environmental Impact Assessment.</p> <p>Solar radiation based power projects are not listed in any of the categories of the schedule and hence are exempted from conducting Environmental Impact Assessment as per host country legislation.</p> <p>Furthermore, the report on “Developmental Impacts and Sustainable Governance Aspects of Renewable Energy Projects” by the Ministry of New and Renewable Energy (MNRE) dated September 2013 /37/ does not envisage any significant impact due to solar radiation based power projects on the environment.</p> <p>The verification team therefore concludes that as per host country legislation, environmental impacts due to solar power plants are not considered significant and hence Environmental Impact Assessment is not mandated.</p>

### D.6. Local stakeholder consultation

<b>Means of Project Verification</b>	DR, I															
<b>Findings</b>	CL 12 and CAR 07 were raised. Please refer to Appendix 4 for further details.															
<b>Conclusion</b>	<p>The local stakeholder consultation (LSC) was conducted for each project activity in the bundle at their respective project activity site as per GCC requirements. Details of the same are as follows:</p> <table border="1"> <thead> <tr> <th>Project Activity Developer</th> <th>LSC Completion Date</th> <th>Location</th> </tr> </thead> <tbody> <tr> <td>Jilesh Power Pvt. Ltd.</td> <td>03/02/2022</td> <td>Kodakandla, Jangaon, Telangana</td> </tr> <tr> <td>Vishvarupa Solar Power Limited</td> <td>03/02/2022</td> <td>Kodakandla, Jangaon, Telangana</td> </tr> <tr> <td>Zuka Power Pvt. Ltd.</td> <td>03/02/2022</td> <td>K.M.Pally, Nalgonda, Telangana,</td> </tr> <tr> <td>SEI Green Flash Pvt. Ltd.</td> <td>03/02/2022</td> <td>Bodipadu panchayat, Chejarla Mandal, SPSR Nellore, Andhra Pradesh,</td> </tr> </tbody> </table>	Project Activity Developer	LSC Completion Date	Location	Jilesh Power Pvt. Ltd.	03/02/2022	Kodakandla, Jangaon, Telangana	Vishvarupa Solar Power Limited	03/02/2022	Kodakandla, Jangaon, Telangana	Zuka Power Pvt. Ltd.	03/02/2022	K.M.Pally, Nalgonda, Telangana,	SEI Green Flash Pvt. Ltd.	03/02/2022	Bodipadu panchayat, Chejarla Mandal, SPSR Nellore, Andhra Pradesh,
Project Activity Developer	LSC Completion Date	Location														
Jilesh Power Pvt. Ltd.	03/02/2022	Kodakandla, Jangaon, Telangana														
Vishvarupa Solar Power Limited	03/02/2022	Kodakandla, Jangaon, Telangana														
Zuka Power Pvt. Ltd.	03/02/2022	K.M.Pally, Nalgonda, Telangana,														
SEI Green Flash Pvt. Ltd.	03/02/2022	Bodipadu panchayat, Chejarla Mandal, SPSR Nellore, Andhra Pradesh,														

	<p>The verification team confirms that the local stakeholder consultation process was performed by the project owner before the submission of the project activity for global stakeholder consultation.</p> <p>The relevant local stakeholders were invited through meeting notice /18/. The assessment team has reviewed the documentation in order to validate the inclusion of relevant stakeholders. The verification team confirms that the communication method used to invite the stakeholders is found to be appropriate.</p> <p>As detailed in the PSF /1-b/, the representative of GCC project owner explained technical aspects and GCC mechanism &amp; its requirement of project to stakeholders, also explained about Social, Environmental benefits and UN sustainable development goal impacts of the project. Furthermore, the stakeholders were asked to answer a questionnaire to gauge their understanding of the project activity and address their concerns if any. The summary of comments presented in the PSF has been verified with the documentation of the stakeholder consultation /18/ as well as onsite interviews with various stakeholders /30/ and has been found to be complete and appropriate. No negative feedback was received.</p> <p>Therefore, the verification team concludes that the local stakeholder consultation process was adequately conducted by the project participant considering the ongoing pandemic to receive unbiased comments from the all the relevant stakeholders. The verification team confirms that the local stakeholder consultation process performed for the bundled project activity fulfils the GCC requirements and all the LSC documents /18/ are verified and found acceptable.</p>
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#### D.7. Approval and Authorization- Host Country Clearance

<b>Means of Project Verification</b>	DR, I
<b>Findings</b>	FAR 01 has been raised in this context. Please refer to Appendix 4 for further details.
<b>Conclusion</b>	<p>As per the GCC Clarification No. 1 /B01/ the submission of Host Country Attestation on double counting is required by CORSIA labelled project after 31/12/2020. Therefore, for carbon credits issued during the period 24/04/2018 to 31/12/2020 the host country approval is not required.</p> <p>The verification team confirms that Host Country Attestation will be required and provided by the project owner during the first or subsequent verification when the issuance of carbon credit is considered beyond 31/12/2020.</p>

#### D.8. Project Owner- Identification and communication

<b>Means of Project Verification</b>	DR, I
<b>Findings</b>	No findings were raised pertaining to this section
<b>Conclusion</b>	<p>The project activity is a bundle involving 4 individual project activities. The project activities involved in the bundle are legally owned by Jilesh Power Pvt. Ltd., Vishvarupa Solar Power Limited, Zuka Power Pvt. Ltd. and SEI Green Flash Pvt. Ltd. The project verification team has also verified the company registration documents /4/, commissioning reports /8/ as well as the power purchase agreements /5/ to ascertain the legal ownership of the project activity and found the same to be acceptable.</p>

	<p>The entities involved have chosen Zuka Power Private Limited and Greenko Energies Private Limited to act as the project owner for the bundled project and same has been duly verified against the Letter of Authorization signed by all the legal owners and accepted by the designated project owner/25/. The information and contact details of the project owner have also been appropriately incorporated in Appendix 1 of the PSF. The verification team further confirms that the information of the project owner is provided as per the template and the information regarding the project owner stated in the PSF/1/ and authorization letter/25/ were found to be consistent and acceptable. The same is also in accordance with paragraph 18 of GCC Clarification No. 1 version 1.3 /B01-6/.</p>
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#### D.9. Global stakeholder consultation

<b>Means of Project Verification</b>	DR, I
<b>Findings</b>	No findings pertaining to this section
<b>Conclusion</b>	<p>The PSF was published for global stakeholder consultation from 12/12/2022 till 26/12/2022 (<a href="https://www.globalcarboncouncil.com/global-stakeholders-consultation/">https://www.globalcarboncouncil.com/global-stakeholders-consultation/</a>). During the said period no Global stakeholders' comments were received.</p> <p>The verification team therefore concludes that the process for global stakeholder consultation was conducted in accordance with the requirements of section 3.2.4 of the Verification Standard (version 3.1) /B01-2/. The PSF was made public for receiving stakeholder feedback and no comments were raised during the GSC process.</p>

#### D.10. Environmental Safeguards (E+)

<b>Means of Project Verification</b>	DR, I
<b>Findings</b>	CL 07 was raised. Please refer to Appendix 4 for further details.
<b>Conclusion</b>	<p>The Project owner has chosen to apply for the Environmental No-net-harm Label (E+). The assessment of the impact of the project activity on the environmental safeguards has been carried out in section E.1 of the PSF. No risks to the environment were identified due to the project implementation and operation.</p> <p>The following have been identified as positive impacts of the project activity:</p> <p>Environment – Air- CO<sub>2</sub> emissions: Use of solar energy for electricity production          Environment – Natural Resources – Replacing fossil fuels with renewable sources of energy.</p> <p>Furthermore, risks are identified regarding Solid Waste Pollution from E-waste, during operational life of the project activity and project owner has provided appropriate mitigation plan for the same in section B.7.2 of the PSF /1/.</p> <p>The appropriate monitoring plan has been put in place to monitor the parameters scored and risks identified due to implementation of the project activity. The detailed matrix, including project verification team assessment, has been included in appendix 5 of this report.</p>

	Impact of Project Activity on Environmental Safeguards	Assessment
	CO <sub>2</sub> emissions	<p>In absence of the project activity, the electricity generated from the project activity would be generated in the Indian Grid by power plants that are predominantly fossil-fuel based, thereby leading to CO<sub>2</sub> emissions. The generated electricity by the project activity is based on the renewable energy source, which causes no CO<sub>2</sub> emissions. The project will thus have a positive impact by reducing measurable amount of CO<sub>2</sub> emissions. The project is expected to reduce the CO<sub>2</sub> emission throughout the crediting period. As no negative environmental impacts are anticipated, the parameter is evaluated as harmless and scored a +1 by the project owner. This is accepted by the project verification team.</p> <p>This amount of emission reduction will be monitored as per monitoring plan in the PSF section B.7.1 and assessment of the same is provided section D.3.7 of the Project Verification Report.</p>
	Solid waste Pollution from E-wastes(EL04)	<p>The e-waste generated by the Project activity viz. Spares of SCADA system, inverters, and other electrical and electronic parts involved in the project or post their useful life will be disposed as per prevailing laws and regulations i.e. E-Waste (Management) Rules, 2011 /B23/.</p> <p>Monitoring plan is provided in section B.7.2 of the PSF to ensure the compliance with the regulations in place. The same will be monitored throughout the crediting period by the project owner by means of records of e-waste re-used/recycled/refurbished or disposal from the project activity. The same was confirmed during the onsite assessment /30/ and accepted by the verification team. The monitoring plan provided is provided in section B.7.2 is appropriate and assessment of the same is provided section D.3.7 of the Project Verification Report.</p>
	Replacing fossil fuels with renewable sources of energy (ENR07)	<p>In absence of the project activity, the equivalent amount of electricity would be generated from the operation of grid-connected power plants, which is GHG intensive. The project activity generates and supplies renewable solar sourced based electricity to the grid, where it replaces fossil fuel source-based electricity, thus the project activity is unlikely to cause any harm and is assessed as harmless.</p> <p>As the project activity will have a positive impact by replacing fossil fuels with renewable sources of energy, the parameter is evaluated as harmless and scored a +1 by the</p>

	<p>project owner. This is accepted by the project verification team.</p> <p>This amount of emission reduction will be monitored as per monitoring plan in the PSF section B.7.1 and assessment of the same is provided section D.3.7 of the Project Verification Report.</p>
<p>The verification team confirms that the project owner has conducted assessment and reporting of the potential aspects which are identified for each project type as per appendix 1 of the GCC Project Environmental and Social Safeguards standard version 3.0/B01-4/ and is applicable to the Project activity and the monitoring procedure of each is given in section E.1, B.7.1, and B.7.2 of the PSF. Therefore, it can be concluded that the Project Activity is not likely to cause any harm to the environment and net score for the project comes out to be +3, hence, is eligible to achieve additional E+ certification.</p> <p>The GCC Verifier certifies that the Project Activity is not likely to cause any net harm to environment.</p>	

**D.11. Social Safeguards (S+)**

<b>Means of Project Verification</b>	DR, I				
<b>Findings</b>	CL 07 was raised. Please refer to Appendix 4 for further details.				
<b>Conclusion</b>	<p>The Project owner has chosen to apply for the Social No-net-harm Label (S+). The assessment of the impact of the project activity on the social safeguards has been carried out in section E.2 of the PSF. No risks to the society were identified due to the project implementation and operation.</p> <p>The following have been identified as positive impacts of the project activity:</p> <ul style="list-style-type: none"> <li>Social – Jobs – Long-term jobs (&gt; 1 year) created/ lost.</li> <li style="padding-left: 40px;">New short-term jobs (&lt; 1 year) created/ lost</li> <li>Social – Health &amp; Safety –</li> <li style="padding-left: 40px;">Efficiency of Health Services</li> <li>Social – Education - Specialized training / education to local personnel</li> </ul> <p>Furthermore, risks are identified regarding accidents/incidents during operational life of the project activity and project owner has provided appropriate mitigation plan for the same in section B.7.2 of the PSF.</p> <p>The appropriate monitoring plan has been put in place to monitor the elements scored in social safeguard section E .2 of the PSF/1/. The detailed matrix, including project verification team assessment, has been included in appendix 6 of this report.</p> <table border="1" style="width: 100%; margin-top: 10px;"> <thead> <tr> <th style="width: 40%;">Impact of Project Activity on Social Safeguards</th> <th>Assessment</th> </tr> </thead> <tbody> <tr> <td>Long-term jobs (&gt; 1 year) created/ lost</td> <td>The project activity will lead to long term employment generation during the operational phase which can be verified from the employment records /36/ maintained on site for each project activity. The monitoring approach is discussed in section D.3.7 of this report.</td> </tr> </tbody> </table>	Impact of Project Activity on Social Safeguards	Assessment	Long-term jobs (> 1 year) created/ lost	The project activity will lead to long term employment generation during the operational phase which can be verified from the employment records /36/ maintained on site for each project activity. The monitoring approach is discussed in section D.3.7 of this report.
Impact of Project Activity on Social Safeguards	Assessment				
Long-term jobs (> 1 year) created/ lost	The project activity will lead to long term employment generation during the operational phase which can be verified from the employment records /36/ maintained on site for each project activity. The monitoring approach is discussed in section D.3.7 of this report.				

		<p>The aforementioned documents can be verified during issuance verification in accordance with the monitoring plan in the PSF section B.7.1. and E.2</p> <p>The creation of permanent jobs is a positive impact created by the project activity and thus this impact is assessed as harmless. An appropriate monitoring plan has been put in place to monitor the parameter for the impact, hence the scoring of +1 has found acceptable by the team.</p>
	Short-term jobs (< 1 year) created/ lost	<p>The project activity has led to short term employment generation during the construction and the operational phase which can be verified from the employment records /36/ maintained on site for each project activity. The monitoring approach is discussed in section D.3.7 of this report.</p> <p>The aforementioned documents can be verified during issuance verification in accordance with the monitoring plan in the PSF section B.7.1. and E.2</p> <p>The creation of temporary jobs is a positive impact created by the project activity and thus this impact is assessed as harmless. This was accepted by the project verification team.</p>
	Specialized training / education to local personnel (SE01)	<p>As per the PSF/1-b/ and interview with the project owner/30/, the project owner would impart training to the local youth periodically so as to increase the skill set of on operation and maintenance of project; occupational safety, first aid, accident reporting etc. The monitoring approach is discussed in section D.3.7 of this report.</p> <p>The same could be verified from the training records /20/ and interviews with the employees /30/ to confirm the same during issuance verification in accordance with the monitoring plan in the PSF section B.7.1. and E.2</p> <p>The parameter is a positive impact created by the project activity and thus this impact is assessed as harmless. An appropriate monitoring plan has been put in place to monitor the parameter for the impact, hence the scoring of +1 has found acceptable by the team.</p>
	Reducing / increasing accidents/Incidents/fatality (SHS03)	<p>As per the PSF /1-b/, records of major accidents/incidents in a year will be monitored through EHS records. The project owner shall provide the job-related Health and safety trainings to its employees on regular interval, and the number of accidents occurred can be verified at the time on emission reduction verification in accordance with the monitoring plan in the PSF /1/ section B.7.1. and E.2. The monitoring approach is discussed in section D.3.7 of this report.</p> <p>The impact created by the project is assessed as harmless. An appropriate monitoring plan has been put</p>

		in place to monitor the parameter for the impact, hence the scoring of +1 has found acceptable by the team.
	Efficiency of health services (SHS07)	<p>The project owner will organize medical camps including distribution of medicines and vaccines for the local people. The number of health camps conducted, vaccines distributed, and Medicine distributed will be monitored once in four years.</p> <p>The same could be verified during issuance verification in accordance with the monitoring plan in the PSF /1/ section B.7.1. and E.2.</p> <p>The parameter is a positive impact created by the project activity and thus this impact is assessed as harmless. An appropriate monitoring plan has been put in place to monitor the parameter for the impact, hence the scoring of +1 has found acceptable by the team.</p>
<p>The verification team confirms that the project owner has conducted assessment and reporting of the potential aspects which are identified for each project type as per appendix 1 of the GCC Project Environmental and Social Safeguards standard version 3.0/B01-4/ and is applicable to the Project activity and the monitoring procedure of each is given in section E.1, B.7.1, and B.7.2 of the PSF. Therefore, it can be concluded that the Project Activity is not likely to cause any harm to society and net score for the project comes out to be +5, hence, is eligible to achieve additional S+ certification.</p> <p>The GCC Verifier certifies that the Project Activity is not likely to cause any net harm to society.</p>		

**D.12. Sustainable development Goals (SDG+)**

<b>Means of Project Verification</b>	DR, I
<b>Findings</b>	CL 08 was raised. Please refer to Appendix 4 for further details.
<b>Conclusion</b>	<p>The project Activity demonstrates that it contributes to achieving the United Nations Sustainable Development Goals (SDGs). Of the 17 defined Goals, the project activity has no adverse effect on any and is expected to contribute to 6 SDGs. Hence the Project owner has chosen to apply for the United Nations Sustainable Development Goals (SDG+ label). The detailed assessment of the impact of the project activity on each of the targeted SDG’s has been carried out in section F of the PSF by the project owner and Annexure 7 of this report.</p> <p>The 6 SDGs targeted for the SDG+ Label are:</p> <p>Goal 3: Ensure healthy lives and promote well-being for all at all ages                  Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all                  Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all                  Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all                  Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation                  Goal 13: Take urgent action to combat climate change and its impacts.</p>

UN-level SDGs	Assessment
<p>Goal 3. Ensure healthy lives and promote well-being for all at all ages</p> <p>SDG Target 3.8: Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all</p> <p>Indicator 3.8.1: Coverage of essential health services</p>	<p>The project owner will organize medical camps including distribution of medicines and vaccines for the local people. The number of health camps conducted, vaccines distributed, and Medicine distributed will be monitored once in four years and should be verified during ER verification stage.</p> <p>PO has provided a declaration /38/ which states that some activities performed to achieve SDG 3 targets are beyond CSR, which is deemed acceptable to the project verification team.</p> <p>The parameter being monitored in the monitoring plan is found adequate. This has been discussed under section D.3.7 of this report.</p>
<p>Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all</p> <p>SDG Target 4.4: By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship</p> <p>Indicator 4.4.1: Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill</p>	<p>The project owner will conduct training on relevant technologies to empower local stakeholders with digital literacy. Records of trainings and workshops conducted should be verified during the ER Verification stage along with the number of people trained over the crediting period.</p> <p>The parameter being monitored in the monitoring plan is found adequate. This has been discussed under section D.3.7 of this report.</p>
<p>Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all</p> <p>SDG target 7.2: By 2030, increase substantially the share of renewable energy in the global energy mix</p> <p>Indicator 7.2.1:</p>	<p>The project activity is a bundled solar power project with an installed capacity of 133 MW and it generates electricity of 241,567 MWh per year. The start date of the project activity is 27/10/2017 (earliest start date of operation amongst the project activities involved in the bundle) and it continues to provide clean energy, thereby increasing the renewable energy share in the total final energy consumption thereby complying with the SDG target 7.2. The same was duly verified by the verification team from commissioning reports /8/ and electricity generation records /11/.</p>

	<p>Renewable energy share in the total final energy consumption</p>	<p>The generated power is continuously monitored by the energy meters installed at the substation and details of the same are included in the PSF /1/ and found to be acceptable.</p>	
	<p>Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</p> <p>SDG Target 8.8: Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.</p> <p>Indicator 8.8.1: Fatal and non-fatal occupational injuries per 100,000 workers, by sex and migrant status</p>	<p>PO will ensure to protect labour rights by implementing strict EHS policy /24/ and through safety trainings, and display of safety posters/guidelines at project sites. The number of major accidents/incidents will be monitored through EHS records which should be verified during ER Verification stage.</p> <p>The parameter being monitored in the monitoring plan is found adequate. This has been discussed under section D.3.7 of this report.</p>	
	<p>Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation</p> <p>SDG target 9.2: Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries</p> <p>Indicator: 9.2.2: Manufacturing employment as a proportion of total employment</p>	<p>The project will provide employment opportunities to at least 10 eligible candidates for operations of the renewable energy related project activity. This can be verified from the employment records maintained on site.</p> <p>The parameter being monitored in the monitoring plan is found adequate. This has been discussed under section D.3.7 of this report.</p>	

	<p>Goal 13. Take urgent action to combat climate change and its impacts</p> <p>SDG target 13.2: Integrate climate change measures into national policies, strategies and planning.</p> <p>Indicator 13.2.2: Total greenhouse gas emissions per year.</p>	<p>The project is estimated to achieve GHG emission reduction of 224,781 tCO<sub>2</sub>e/year, thereby meeting the SDG target 13.2.</p> <p>The generated power is continuously monitored by the energy meters installed at the substation and details of the same are included in the PSF /1/ and found to be acceptable.</p>
<p>The verification team confirms that the SDGs chosen by the project owner are in compliance with the paragraph 19, 20 and 21 GCC Project sustainability standard version 3.0/B01-5/ and is applicable to the Project activity and the monitoring procedure of each SDG is given in section F and B.7.1 of the PSF. It can therefore be concluded that the Project Activity is likely to contribute to the United Nations Sustainable Development Goals and would have a positive impact, hence, is eligible to achieve additional Diamond SDG+ (SDG 3, 4, 7, 8, 9 and 13) certifications.</p>		

### D.13. Authorization on Double Counting from Host Country (for CORSIA)

<b>Means of Project Verification</b>	DR, I
<b>Findings</b>	FAR 01 has been raised. Please refer to Appendix 4 for further details.
<b>Conclusion</b>	<p>A declaration under section A.5 of the PSF has been included for use of the approved carbon credits (ACCs) for the entire crediting period from 24/04/2018 to 23/04/2028 to offset GHG emissions.</p> <p>The project owner has clarified the intention for use of carbon credits for CORSIA. The project owner declared that no host country attestation is required for the pilot phase of 2021-23 (accepting credits issued for monitoring periods between 2016 and 2020), which is appropriate and acceptable according to paragraph 16 of the Standard on Avoidance of Double Counting, version 1.0 /B01-7/. Assessment with regards to confirmation on the project activity not being registered under any other GHG reduction certification mechanism, thereby avoiding double counting is provided under section D.2 of this report.</p> <p>The host country attestation is yet to be obtained for authorization on double counting. The verification team confirms that Host Country Attestation will be required and provided by the project owner during the first or subsequent verification when the issuance of carbon credit is considered beyond 31/12/2020.</p>

### D.14. CORSIA Eligibility (C+)

<b>Means of Project Verification</b>	DR, I
<b>Findings</b>	FAR 01 has been raised. Please refer to Appendix 4 for further details.
<b>Conclusion</b>	The project activity meets the CORSIA Eligibility criteria as the crediting period is after 01/01/2016 and the project is applying for registration under GCC, which is one of the approved programmes for eligibility. It was also confirmed that the project activity does not fall under the excluded unit types, methodologies, programme elements, and/or procedural classes.

	<p>Furthermore, the Project Activity does not cause any net harm to the environment and/or society and therefore achieves Environmental No-net-harm Label (E+) as well as Social No-net-harm Label (S+) in accordance with the Environmental and Social Safeguards Standard, version 3.0. The project activity also contributes towards achieving United Nations Sustainability Development Goals (SDGs) by achieving 6 SDGs as per Project Sustainability Standard, version 3.0 to achieve SDG+ Label.</p> <p>The verification team therefore concludes that “The Project Activity complies with all the applicable requirement of the GCC Program and ICAO’s requirements on CORSIA Emissions Unit Eligibility Criteria and CORSIA Eligible Emissions Units, as per Clarification No 1., v 1.3 paragraph 23-25, and the ACCs expected to be issued during the crediting period is likely to be CORSIA eligible and can be used by International Airlines for offsetting their emissions during all phases of CORSIA and therefore requests GCC Steering Committee to append CORSIA Certification label (C+) to this project”.</p>
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## Section E. Internal quality control

The Verification report has undergone a technical review and quality review before being submitted to the project owner. A technical reviewer is qualified in accordance with CCIPL’s qualification scheme for GCC verification performed the technical review.

## Section F. Project Verification opinion

The GCC Project Verifier, Carbon Check (India) Private Ltd, verifies and certifies that the GCC Project Activity “Zuka Power 133MW bundled Solar PV Power projects at Telangana and Andhra Pradesh, India”:

- (a) has correctly described the Project Activity in the Project Submission Form (version 1.2, dated 05/12/2023) including the applicability of the approved GCC methodology, GCCM001, version 3.0 and meets the methodology applicability conditions, is additional and is expected to achieve the forecasted real and additional GHG emission reductions, complies with the monitoring methodology, has appropriately conducted local and global stakeholder consultation processes and has calculated emission reduction estimates correctly and conservatively;
- (b) is likely to generate GHG emission reductions amounting to the estimated 2,247,809 tCO<sub>2</sub>e (for the fixed 10 years crediting period), as indicated in the PSF, which are additional to the reductions that are likely to occur in absence of the Project Activity and complies with all applicable GCC rules and therefore requests the GCC Program to register the Project Activity;
- (c) is not likely to cause any net-harm to the environment and/or society and complies with the Environmental and Social Safeguards Standard, version 3.0 and therefore requests the GCC Program to register the Project Activity, which is likely to achieve the requirements of the Environmental No-net-harm Label (E+) and the Social No-net harm Label (S+); and
- (d) is likely to contribute to the achievement of United Nations Sustainability Development Goals (SDGs), comply with the Project Sustainability Standard, version 3.0 and contribute to achieving a total of 6 SDGs, which is likely to achieve the Dimond SDG certification label (SDG+).
- (e) complies with all the applicable requirement of the GCC Program and ICAO’s requirements on CORSIA Emissions Unit Eligibility Criteria and CORSIA Eligible Emissions Units, as per Clarification No 1., v 1.3 paragraph 23-25, and the ACCs expected to be issued during the crediting period is likely to be CORSIA

## Project Verification Report

eligible and can be used by International Airlines for offsetting their emissions during all phases of CORSIA and therefore requests GCC Steering Committee to append CORSIA Certification label (C+) to this project.

The Verification report describes a total of 20 findings, which include:

- 01 Forward Action Request (FAR);
- 12 Clarification Requests (CLs);
- 07 Corrective Action Requests (CARs)

All findings are resolved by the project owner (except the FAR which needs to be resolved during emission reduction verification).

## Appendix 1. Abbreviations

Abbreviations	Full texts
ACC	Approved Carbon Credits
BM	Build Margin
CAR	Corrective Action Required
CERC	Central Electricity Regulatory Commission
CDM	Clean Development Mechanism
CL	Clarification Request
CM	Combined Margin
CORSIA	Carbon Offsetting and Reduction Scheme for International Aviation
DNA	Designated National Authority
DPR	Detailed Project Report
DR	Document Review
E <sup>+</sup>	Environmental No net harm Label
EIA	Environmental Impact Assessment
FAR	Forward Action Request
GCC	Global Carbon Council
GHG	Green House Gas
GORD	Gulf Organization for Research and Development
GSC	Global Stakeholder Consultation
I	Interview
IRR	Internal Return Rate
ISO	International Organization for Standardization
JPPL	Jilesh Power Private Limited
Kw	Kilo Watt
KWh	Kilo Watt hour
LSC	Local Stakeholder Consultation
MENA	Middle East & North Africa
MNRE	Ministry of New & Renewable Energy, Government of India.
MW	Mega Watt
MWh	Mega Watt hour
NTPC	National Thermal Power Corporation Ltd.
OM	Operating Margin
PO	Project Owner
PPA	Power Purchase Agreement
PLF	Plant load factor
PS	Project Standard
PSF	Project Submission Form
PVR	Project Verification Report
S <sup>+</sup>	Social No- net harm Label
SDG <sup>+</sup>	United Nation Sustainable Development Goal Label
SERC	State Electricity Regulatory Commission
SGPL	SEI Green Flash Private Limited
tCO <sub>2e</sub>	Tonnes of Carbon dioxide equivalent
UNFCCC	United Nations Framework Convention on Climate Change
V	Version
VB	Verification Body
VS	Verification Standard
VSPL	Vishvarupa Solar Power Private Limited
ZPPL	Zuka Power Private Limited

Appendix 2. Competence of team members and technical reviewers



**Carbon**  
CHECK

**Carbon Check (India) Private Limited**

*Certificate of Competency*

**Mr. Sanjay Kumar Agarwalla**

has been qualified as per CCIPL's internal qualification procedures in accordance with the requirements of CDM AS (V7.0), ISO/IEC 14065:2020, ISO/IEC 17029:2019 and other applicable GHG programs:

*for the following functions and requirements:*

<input checked="" type="checkbox"/> Validator	<input checked="" type="checkbox"/> Verifier	<input checked="" type="checkbox"/> Team Leader	<input checked="" type="checkbox"/> Technical Expert
<input checked="" type="checkbox"/> Technical Reviewer	<input type="checkbox"/> Health Expert	<input type="checkbox"/> Gender Expert	<input type="checkbox"/> Plastic Waste Expert
<input type="checkbox"/> CCB Expert	<input type="checkbox"/> Legal Expert	<input checked="" type="checkbox"/> Financial Expert	<input type="checkbox"/> Environmental, Health and Safety financial matters
<input checked="" type="checkbox"/> SDG+	<input checked="" type="checkbox"/> Social no-harm(S+)	<input checked="" type="checkbox"/> Environment no-harm(E+)	
<input checked="" type="checkbox"/> Local Expert for India and Bangladesh			

*in the following Technical Areas:*

<input checked="" type="checkbox"/> TA 1.1	<input checked="" type="checkbox"/> TA 1.2	<input checked="" type="checkbox"/> TA 2.1	<input checked="" type="checkbox"/> TA 3.1	<input checked="" type="checkbox"/> TA 4.1
<input type="checkbox"/> TA 4. n	<input checked="" type="checkbox"/> TA 5.1	<input checked="" type="checkbox"/> TA 5.2	<input checked="" type="checkbox"/> TA 7.1	<input type="checkbox"/> TA 8.1
<input checked="" type="checkbox"/> TA 9.1	<input checked="" type="checkbox"/> TA 9.2	<input checked="" type="checkbox"/> TA 10.1	<input checked="" type="checkbox"/> TA 13.1	<input checked="" type="checkbox"/> TA 13.2
<input type="checkbox"/> TA 14.1	<input type="checkbox"/> TA 15.1	<input checked="" type="checkbox"/> TA 16.1		

Issue Date	Expiry Date
05 <sup>th</sup> December 2023	31 <sup>st</sup> December 2024

*Priya Suman*

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**Ms. Priya Suman**  
Compliance Officer

**Revision History of the document:**

Revision	Summary of changes
2022 <sup>1</sup>	Annual revision
Jan 2023	Annual revision and template change
Dec 2023	Change in the template due to revision in TA and function

CCIPL\_FM 7.9 Certificate of Competency\_V4.0\_112023  
<sup>1</sup> Please refer to previous version of FM 7.9 for the revision history



## Carbon Check (India) Private Limited

### Certificate of Competency

**Mr. Manas Halder**

has been qualified as per CCIPL's internal qualification procedures in accordance with the requirements of CDM AS (V7.0), ISO/IEC 14065:2020, ISO/IEC 17029:2019 and other applicable GHG programs:

*for the following functions and requirements:*

- |   |   |  |  |
|---|---|--|--|
| <input checked="" type="checkbox"/> Validator | <input checked="" type="checkbox"/> Verifier                              | <input type="checkbox"/> Team Leader             | <input checked="" type="checkbox"/> Technical Expert |
| <input type="checkbox"/> Technical Reviewer   | <input type="checkbox"/> Health Expert                                    | <input type="checkbox"/> Gender Expert           | <input type="checkbox"/> Plastic Waste Expert        |
| <input type="checkbox"/> SDG+                 | <input type="checkbox"/> Social no-harm(S+)                               | <input type="checkbox"/> Environment no-harm(E+) | <input type="checkbox"/> CCB Expert                  |
| <input type="checkbox"/> Financial Expert     | <input checked="" type="checkbox"/> Local Expert for India and Bangladesh |  |  |

*in the following Technical Areas:*

- |                                  |  |                                  |   |                                  |
|----------------------------------|--|----------------------------------|---|----------------------------------|
| <input type="checkbox"/> TA 1.1  | <input checked="" type="checkbox"/> TA 1.2 | <input type="checkbox"/> TA 2.1  | <input checked="" type="checkbox"/> TA 3.1  | <input type="checkbox"/> TA 4.1  |
| <input type="checkbox"/> TA 4. n | <input type="checkbox"/> TA 5.1            | <input type="checkbox"/> TA 5.2  | <input type="checkbox"/> TA 7.1             | <input type="checkbox"/> TA 8.1  |
| <input type="checkbox"/> TA 9.1  | <input type="checkbox"/> TA 9.2            | <input type="checkbox"/> TA 10.1 | <input checked="" type="checkbox"/> TA 13.1 | <input type="checkbox"/> TA 13.2 |
| <input type="checkbox"/> TA 14.1 | <input type="checkbox"/> TA 15.1           |                                  |   |                                  |

Issue Date  
1<sup>st</sup> January 2023

Expiry Date  
31<sup>st</sup> December 2023

Mr. Vikash Kumar Singh  
Compliance Officer

Mr. Amit Anand  
CEO



## Carbon Check (India) Private Limited

### Certificate of Competency

**Ms. Kiran Nayak**

has been qualified as per CCIPL's internal qualification procedures in accordance with the requirements of CDM AS (V7.0), ISO/IEC14065:2020, ISO/IEC 17029:2019 and other applicable GHG programs:

*for the following functions and requirements:*

- |   |  |  |  |
|---|--|--|--|
| <input checked="" type="checkbox"/> Validator | <input checked="" type="checkbox"/> Verifier               | <input type="checkbox"/> Team Leader             | <input checked="" type="checkbox"/> Technical Expert |
| <input type="checkbox"/> Technical Reviewer   | <input type="checkbox"/> Health Expert                     | <input type="checkbox"/> Gender Expert           | <input type="checkbox"/> Plastic Waste Expert        |
| <input type="checkbox"/> SDG+                 | <input type="checkbox"/> Social no-harm(S+)                | <input type="checkbox"/> Environment no-harm(E+) | <input type="checkbox"/> CCB Expert                  |
| <input type="checkbox"/> Financial Expert     | <input checked="" type="checkbox"/> Local Expert for India |  |  |

*in the following Technical Areas:*

- |                                  |  |                                  |                                  |                                  |
|----------------------------------|--|----------------------------------|----------------------------------|----------------------------------|
| <input type="checkbox"/> TA 1.1  | <input checked="" type="checkbox"/> TA 1.2 | <input type="checkbox"/> TA 2.1  | <input type="checkbox"/> TA 3.1  | <input type="checkbox"/> TA 4.1  |
| <input type="checkbox"/> TA 4. n | <input type="checkbox"/> TA 5.1            | <input type="checkbox"/> TA 5.2  | <input type="checkbox"/> TA 7.1  | <input type="checkbox"/> TA 8.1  |
| <input type="checkbox"/> TA 9.1  | <input type="checkbox"/> TA 9.2            | <input type="checkbox"/> TA 10.1 | <input type="checkbox"/> TA 13.1 | <input type="checkbox"/> TA 13.2 |
| <input type="checkbox"/> TA 14.1 | <input type="checkbox"/> TA 15.1           |                                  |                                  |                                  |

Issue Date

1<sup>st</sup> January 2023

Expiry Date

31<sup>st</sup> December 2023

Mr. Vikash Kumar Singh  
Compliance Officer

Mr. Amit Anand  
CEO



## Carbon Check (India) Private Limited

### Certificate of Competency

**Mr. S. Ranganathan**

has been qualified as per CCIPL's internal qualification procedures in accordance with the requirements of CDM AS (V7.0), ISO/IEC14065:2020, ISO/IEC 17029:2019 and other applicable GHG programs:

*for the following functions and requirements:*

- |  |  |   |  |
|--|--|---|--|
| <input checked="" type="checkbox"/> Validator          | <input checked="" type="checkbox"/> Verifier               | <input checked="" type="checkbox"/> Team Leader             | <input checked="" type="checkbox"/> Technical Expert |
| <input checked="" type="checkbox"/> Technical Reviewer | <input type="checkbox"/> Health Expert                     | <input type="checkbox"/> Gender Expert                      | <input type="checkbox"/> Plastic Waste Expert        |
| <input checked="" type="checkbox"/> SDG+               | <input checked="" type="checkbox"/> Social no-harm(S+)     | <input checked="" type="checkbox"/> Environment no-harm(E+) | <input type="checkbox"/> CCB Expert                  |
| <input checked="" type="checkbox"/> Financial Expert   | <input checked="" type="checkbox"/> Local Expert for India |   |  |

*in the following Technical Areas:*

- |  |  |                                  |   |   |
|--|--|----------------------------------|---|---|
| <input checked="" type="checkbox"/> TA 1.1 | <input checked="" type="checkbox"/> TA 1.2 | <input type="checkbox"/> TA 2.1  | <input checked="" type="checkbox"/> TA 3.1  | <input type="checkbox"/> TA 4.1             |
| <input type="checkbox"/> TA 4. n           | <input checked="" type="checkbox"/> TA 5.1 | <input type="checkbox"/> TA 5.2  | <input type="checkbox"/> TA 7.1             | <input type="checkbox"/> TA 8.1             |
| <input type="checkbox"/> TA 9.1            | <input type="checkbox"/> TA 9.2            | <input type="checkbox"/> TA 10.1 | <input checked="" type="checkbox"/> TA 13.1 | <input checked="" type="checkbox"/> TA 13.2 |
| <input type="checkbox"/> TA 14.1           | <input type="checkbox"/> TA 15.1           |                                  |   |   |

Issue Date

1<sup>st</sup> January 2023

Expiry Date

31<sup>st</sup> December 2023

**Mr. Vikash Kumar Singh**  
Compliance Officer

**Mr. Amit Anand**  
CEO

## Appendix 3. Document reviewed or referenced

No.	Author	Title	References to the document	Provider
/1/	PO	a) PSF initial version	Version 1.1, Dated 16/11/2022	PO
		b) PSF final version	Version 1.2 Dated 05/12/2023	
/2/	PO	a. Emission reduction calculation spread sheet including grid emission factor calculation corresponding to /1-a/	ER cal Zuka bundle	PO
		b. Emission reduction calculation spread sheet including grid emission factor calculation corresponding to /1-b/	zuka ER sheet	
/3/	PO	a. IRR spread sheet corresponding to /1/ Investment analysis_Zuka bundle.xlsx	Investment analysis_Zuka bundle 3 Projects Base 04-10-23	PO
		b. IRR spread sheet corresponding to /1/ Investment analysis_Zuka bundle 3 Projects Base 04-10-23.xlsx GreenFlash Project Base_04.10.23.xlsx	GreenFlash Project Base_04.10.23	
		IRR sheet with actual values used for analysis	-	
/4/	Ministry of Corporate Affairs	Legal status of the project owners (Company Master data) viz: a. Jilesh Power Pvt. Ltd. b. Vishvarupa Solar Power Private Limited c. Zuka Power Pvt. Ltd. d. SEI Greenflash Pvt. Ltd.  Sourced from: <a href="http://mca.gov.in">Home (mca.gov.in)</a>	Date of Incorporation : a.28/03/2016 b.08/02/2016 c.31/03/2016 d.28/03/2017 e.28/03/2017	PO
/5/	a. Jilesh Power Pvt. Ltd.	Power Purchase Agreement entered between Jilesh Power Pvt. Ltd. and NPDCTL	Dated 04/03/2016	PO
	b. Vishvarupa Solar Power Private Limited	Power Purchase Agreement entered between Vishvarupa Solar Power Private Limited and NTPC	Dated 07/09/2016	PO
	c. Zuka Power Pvt. Ltd.	Power Purchase Agreement entered between Zuka Power Pvt. Ltd. and SPDCTL	Dated 26/02/2016	PO
	d. SEI Greenflash Pvt. Ltd.	Power Purchase Agreement entered between SEI Greenflash Pvt. Ltd and SPDCAPL	Dated 05/12/2014	PO

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/6/	PO	Evidence for the project location (all the four project activities in the bundle) including photographs, nameplates of the installed units, and technical specifications of key project equipment installed at site	-	PO
/7/	PO	IR Records for all the four project activities in the bundle from the year of start of operations	-	PO
/8/	PO	Commissioning reports of all the project activities in the bundle: a. Jilesh Power Pvt. Ltd. b. Vishvarupa Solar Power Private Limited c. Zuka Power Pvt. Ltd. d. SEI Greenflash Pvt. Ltd.	Dated a. 23/04/2018 b. 13/11/2017 c. 03/01/2019 d. 21/07/2017	PO
/9/	Yathva Energy Solutions Pvt. Ltd.	Calibration Certificates for meters installed for Jilesh Power Pvt. Ltd.  S No. 0017250979 S No. 0017250980 S No. 0017251008  Validation date: 24/01/2024	Dated 01/04/2023	PO
		Calibration Certificates for meters installed for Vishvarupa Solar Power Private Limited  S No. 0017074531 S No. 0016196318 S No. 0017250973  Validation date: 24/01/2024	- Dated 01/04/2023	
		Calibration Certificates for meters installed for Zuka Power Pvt. Ltd.  S No. 0017074548 S No. 0017074550 S No. 0017074555  Validation date: 15/02/2024	Dated 19/11/2022	
		Calibration Certificates for meters installed for SEI Greenflash Pvt. Ltd.  S No. 0022009919 S No. 0022009920 S No. 0022009921  Validation date: 15/02/2024	Dated 11/01/2023	
/10/	Risen Energy (Hong Kong) Co.Ltd.	Purchase Order for Jilesh Power Pvt. Ltd.	Dated 02/03/2017	PO

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	Renesola Singapore Pte. Ltd.	Purchase order for Vishvarupa Solar Power Private Limited	Dated 02/03/2017	
	Risen Energy (Hong Kong) Co.Ltd.	Purchase Order for Zuka Power Pvt. Ltd.	Dated 02/03/2017	
	<i>SunEdision Solar Power India Pvt Ltd.</i>	Purchase Order for SEI Greenflash Pvt. Ltd.	Dated 15/09/2015	
/11/	PO	Monthly Generation records: Jilesh Power Pvt. Ltd. Vishvarupa Solar Power Private Limited Zuka Power Pvt. Ltd. SEI Greenflash Pvt. Ltd.	For: - October 2017 – March 2023 - October 2017 – March 2023 - April 2018 – March 2019 - 2017 – March 2023	PO
/12/	PO	Single line diagram for the 4 project activities, from electricity generation to the electricity feed point at grid interconnection	-	PO
/13/		Sample Electricity Invoices	FY 2021 FY 2022	PO
/14/	PTC India Financial Services Ltd.	Loan sanction letter for Jilesh Power Pvt. Ltd.	Dated 28/03/2017	PO
	Aditya Birla Capital	Loan sanction letter for Vishvarupa Solar Power Private Limited	Dated 13/12/2018	
	IDBI Trusteeship Service Limited	Loan sanction letter for Zuka Power Pvt. Ltd.	Dated 08/02/2017	
	L& T finance ltd	Loan sanction letter for SEI Greenflash Pvt. Ltd.	Dated 03/05/2017	
/15/	PO	Letter of Award for Jilesh Power Pvt. Ltd.		PO
		Letter of Award for Vishvarupa Solar Power Private Limited		
		Letter of Award for Zuka Power Pvt. Ltd.		
		Letter of Award for SEI Greenflash Pvt. Ltd.		
/16/	PO	Sample solid waste records for all the 4 project activities	FY 2021-2022	PO
/17/	CEA	India's National Electricity Network Emission Factor (Grid EF calculations) - Central Electricity Authority (CEA) database <a href="https://cea.nic.in/cdm-co2-baseline-database/?lang=en">https://cea.nic.in/cdm-co2-baseline-database/?lang=en</a>	Version 17, October 2021	PO
/18/	PO	All evidence related to Local Stakeholders Consultation process for all the 4 project activities: <b>Jilesh Power Pvt. Ltd.</b> Invitation notice Attendance Sheet	-	PO

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		<p>Photos Feedback forms <b>Vishvarupa Solar Power Private Limited</b> Invitation notice Attendance Sheet Photos Feedback forms <b>Zuka Power Pvt. Ltd</b> Invitation notice Attendance Sheet Photos Feedback forms <b>SEI Greenflash Pvt. Ltd.</b> Invitation notice Attendance Sheet Photos Feedback forms</p>		
/19/	<p>Jilesh Power Pvt. Ltd. Vishvarupa Solar Power Private Limited Zuka Power Pvt. Ltd. SEI Greenflash Pvt. Ltd.</p>	<p>ODA Declaration for Jilesh Power Pvt. Ltd., Vishvarupa Solar Power Private Limited, Zuka Power Pvt. Ltd. , SEI Greenflash Pvt. Ltd.</p>	-	PO
/20/	Jilesh Power Pvt. Ltd.	Sample Training Records including photographs, attendance sheet, feedback forms, training material and questionnaires for years 2020, 2021, and 2022	FY 2022-2023	PO
	Vishvarupa Solar Power Private Limited	Sample Training Attendance sheets and photographs for the years 2019, 2020, 2021, 2022 and 2023	FY 2022-2023	
	Zuka Power Pvt. Ltd	Sample Training Records: Photographs and attendance sheets for the years 2021 and 2022	FY 2020-2021,2021-2022,2022-2023	
	SEI Greenflash Pvt. Ltd.	Sample Training Records including photographs, attendance sheet, feedback forms, training material and questionnaires for years 2020, 2021, and 2022	FY 2020-2023	
/21/	PO	Sample Accident and Incident Records for all the 4 project activities	April 2021 - March 2022	PO
/22/	Greenko	Greenko Corporate Social Responsibility Policy	Dated 18/01/2022	PO
/23/	Greenko	Greenko Sustainability Policy	Dated 19/04/2022	PO
/24/	Greenko	Greenko Integrated Management System (GIMS) Policy	Dated 03/03/2020	
/25/	<p>Jilesh Power Pvt. Ltd. Vishvarupa Solar Power Private Limited Zuka Power Pvt. Ltd.</p>	<p>Letter of Authorization issued by Jilesh Power Pvt. Ltd., Vishvarupa Solar Power Private Limited, Zuka Power Pvt. Ltd. , SEI Greenflash Pvt. Ltd. to authorize Zuka Power Pvt. Ltd. and Greenko Energies Private Limited as the Project Owners.</p>	<p>Dated 03/10/2023</p>	PO

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	SEI Greenflash Pvt. Ltd.			
/26/	Press Information Bureau Government of India Ministry of Environment, Forest and Climate Change.	Re-Categorisation of Industries a landmark decision, new category of white industries will not require environmental clearance	Dated 07/03/2016	PO
/27/	Jilesh Power Pvt. Ltd.	Jilesh Power Pvt. Ltd. invoice for export of power-tariff rate fixed Rs. 5.59 /unit invoice no: 90007045 between Jilesh Power Pvt. Ltd. and TS Transco	Dated 09/03/2022	PO
		Vishvarupa Solar Power Private Limited invoice for export of power-tariff rate fixed Rs. 4.67 /unit invoice no: 90006547 between Vishvarupa Solar Power Private Limited and NTPC	Dated 06/01/2022	
	Zuka Power Pvt. Ltd.	Zuka Power Pvt. Ltd invoice for export of power-tariff rate fixed Rs. 5.59 /unit invoice no: 90006419 between Zuka Power Pvt. Ltd. and TS Transco	Dated 31/12/2021	
	SEI Greenflash Pvt. Ltd.	SEI Greenflash Pvt. Ltd. invoice for export of power-tariff rate fixed Rs. 4.21 /unit invoice no: 90009236 between SEI Greenflash Pvt. Ltd.ad AP Transco	Dated 10/09/2022	
/28/	PO	Sample welfare records for all the 4 project activities including pictures	FY 2020-2023	PO
/29/	PO	Sample employee health coverage records (Checkup reports) for all the 4 project activities	FY 2020-2023	PO
/30/	CC IPL	Audit notes and photographs	Dated 10/02/2023 – 12/02/2023	CC IPL
/31/	CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI	Determination of generic levellised generation tariff for the FY 2014-15 under Regulation 8 of the Central Electricity Regulatory Commission (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2012. <a href="https://cercind.gov.in/2014/orders/SO354.pdf">https://cercind.gov.in/2014/orders/SO354.pdf</a>	Dated 15/05/2014	Others
		Determination of generic levellised generation tariff for the FY 2015-16 under Regulation 8 of the Central Electricity Regulatory Commission (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2012. <a href="https://cercind.gov.in/2015/orders/SO5.pdf">https://cercind.gov.in/2015/orders/SO5.pdf</a>	Dated 31/03/2015	
/32/	Reserve Bank of India	Results of the Survey of Professional Forecasters on Macroeconomic Indicators – 28th Round (Second Bi-monthly) <a href="https://m.rbi.org.in/Scripts/PublicationsView.aspx?id=15761">https://m.rbi.org.in/Scripts/PublicationsView.aspx?id=15761</a>	Dated 03/06/2014	Others
/33/	SAI CHAITHANYA & CO CHARTERED	CA Certificates for Jilesh Power Pvt. Ltd., Vishvarupa Solar Power Private Limited, Zuka Power Pvt. Ltd. , SEI Greenflash Pvt. Ltd. for total cost of projects.	Dated 25/02/2022	PO

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	ACCOUNTANTS			
/34/	Central Electricity Authority	Plant wise details of all India renewable energy projects <a href="https://cea.nic.in/wp-content/uploads/2020/04/Plant-wise-details-of-RE-Installed-Capacity-merged.pdf">https://cea.nic.in/wp-content/uploads/2020/04/Plant-wise-details-of-RE-Installed-Capacity-merged.pdf</a>	Dated 20/03/2020	Others
/35/	Reserve Bank of India	Results of the Survey of Professional Forecasters on Macroeconomic Indicators – 27th Round (Q4:2013-14) <a href="https://www.rbi.org.in/Scripts/PublicationsView.aspx?id=15729">https://www.rbi.org.in/Scripts/PublicationsView.aspx?id=15729</a>	Dated 01/04/2014	Others
/36/	PO	Long term and short term employment records for all 4 project activities	-	PO
/37/	Ministry of New and Renewable Energy (MNRE)	Developmental Impacts and Sustainable Governance Aspects of Renewable Energy Projects <a href="https://odishainnovationcell.nic.in/Content/SIC/Articles/RE_Development_Impacts_in_India.pdf">https://odishainnovationcell.nic.in/Content/SIC/Articles/RE_Development_Impacts_in_India.pdf</a>	Dated September 2013	Others
/38/	Jilesh Power Pvt. Ltd. Vishvarupa Solar Power Private Limited Zuka Power Pvt. Ltd. SEI Greenflash Pvt. Ltd.	Declaration for SDG 3 activities performed beyond CSR	Dated 21/10/2023	PO
/B01/	GCC	<ol style="list-style-type: none"> <li>1. GCC Project Standard, version 3.1</li> <li>2. GCC Verification Standard, version 3.1</li> <li>3. GCC Program Manual, version 3.1</li> <li>4. Environment-and-Social-Safeguards-Standard, version 3.0</li> <li>5. Project-Sustainability-Standard, version 3.0</li> <li>6. GCC Clarification No. 1, version 1.3</li> <li>7. GCC Standard on Avoidance of Double Counting, version 1.0</li> <li>8. GCC Clarification No. 3, version 1.0</li> </ol>	-	Others
/B02/	GCC	GCC Methodology: GCCM001 Methodology for Renewable Energy Generation Projects Supplying Electricity to Grid or Captive Consumers	version 3.0	Others
/B03/	GCC	PSF template	-	Others
/B04/	UNFCCC	Tool 01: Tool for demonstration and assessment of additionality	Version 7.0.0	Others
/B05/	UNFCCC	Tool 07: Tool to calculate the emission factor for an electricity system	Version 7.0	Others
/B06/	UNFCCC	Tool 24: Common practice	Version 3.1	Others
/B07/	UNFCCC	Tool 27: Investment analysis	Version 11.0	Others
/B08/	CDM	<a href="https://cdm.unfccc.int/Projects/proj_search.html">https://cdm.unfccc.int/Projects/proj_search.html</a>	-	Others
/B09/	VERRA	<a href="https://registry.verra.org/app/search/VCS/All%20Projects">https://registry.verra.org/app/search/VCS/All%20Projects</a>	-	Others
/B10/	Gold Standard	<a href="https://www.goldstandard.org">GSF Registry (goldstandard.org)</a>	-	Others

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/B11/	Indian REC Standard	Renewable Energy Certificate Registry <a href="https://www.recregistryindia.nic.in/index.php/publics/registered_regens">https://www.recregistryindia.nic.in/index.php/publics/registered_regens</a>	-	Others
/B12/	I.REC Standard	International REC Standard (I-REC ) <a href="https://www.irecstandard.org/registries/">https://www.irecstandard.org/registries/</a>	-	Others
/B13/	Govt. of India	Electricity Act 2003, dated 26/05/2003	-	Others
/B14/	Govt. of India	National Electricity Policy 2005, dated 12/02/2005		
/B15/	Govt. of India	Integrated Energy Policy, 2006	-	Others
/B16/	Govt. of India	National Action Plan on Climate Change (NAPCC), 2008	-	Others
/B17/	Govt. of India	Renewable Energy Certificates (RECs), 2011	-	Others
/B18/	Govt. of India	National Solar Mission	-	Others
/B19/	Govt. of India	Companies Act 2013	-	Others
/B20/	Ministry of Environment, Forest and Climate Change Govt. of India	Environmental Impact Assessment notification <a href="1_SO1533E_14092006.pdf">1 SO1533E 14092006.pdf</a> ( <a href="http://environmentclearance.nic.in">environmentclearance.nic.in</a> )	Dated 14/09/2006	Others
		Environmental Impact Assessment notification Amendment	Dated 14/07/2018	
/B21/	Ministry of Environment, Forest and Climate Change Govt. of India	Applicability of Environment Impact Assessment Notification, 2006 on Solar Photo Voltaic (PV) Power Projects; Solar Thermal Power Plants; and development of Solar Parks	Dated 07/07/2017	Others
/B22/	CCIPL	Contract signed between CCIPL and Zuka Power Private Limited	Dated 21/06/2022	CCIPL
/B23/	Central Pollution Control Board (CPCB)	E-Waste (Management) Rules, 2011	Dated May 2011	Others

## Appendix 4. Clarification request, corrective action request and forward action request

Table 1. CLs from this Project Verification

<b>CL ID</b>	01	<b>Section no.</b>	-	<b>Date:</b> 17/02/2023
<b>Description of CL</b>				
PO is requested to provide the following supporting documents for all the Four project activities in the bundle:				
<ol style="list-style-type: none"> <li>1. Proof of Legal Ownership</li> <li>2. Power Purchase Agreements</li> <li>3. Commissioning Certificates</li> <li>4. Technical specification document of installed Solar PV modules, Inverters and Transformers</li> <li>5. Joint Meter Reading Records (since the commissioning of project till date)</li> <li>6. Sample Invoices raised for FY 2021-2022</li> <li>7. Generation Records (since the commissioning of project till date)</li> <li>8. On site electricity consumption records</li> <li>9. Evidence for Investment decision date</li> <li>10. Detailed Project Report</li> <li>11. Loan sanction letters</li> <li>12. O&amp;M Agreement</li> <li>13. Contracts with PCB certified vendors and sample records of end of life waste, solid waste generation and disposal and</li> <li>14. Approval for usage of Ground water, if applicable</li> <li>15. Details of workers employed / contracts signed for long term during construction and operational stages</li> <li>16. Details of workers employed / contracts signed for short term during construction and operational stages</li> <li>17. Health coverage records</li> <li>18. Community and rural welfare contribution records</li> <li>19. Relevant Extracts of the HR policy / EHS policy and CSR Policy</li> <li>20. Accident / Incident Records</li> <li>21. Sample Training records</li> <li>22. Acknowledgement from PCB for White Category Industry</li> <li>23. No ODA Undertaking/ declaration from the project owner</li> <li>24. Local Stakeholder Meeting Photographs, Attendance sheet and Minutes of Meeting.</li> <li>25. Declaration of intended use of Approved Carbon Credits (ACCs)</li> </ol>				
*Since is project activity is operational since 2017, Sample Records, covering the period from Start date to till date, for parameters mentioned under E+/S+/SGD+ to be provided.				
<b>Project Owner's response</b>				<b>Date:</b> 05/12/2023
All the above documents are provided through mail except 12 and 14 are not applicable; 13: records are provided but no vendor's contractor for E waste disposal as there is no waste produced for disposal; 25: It is stated in sec A.5 of PSF. 10. Specific DPR was not prepared 17. Sample Health related activities are attached. However PO did not claimed for this.				
<b>Documentation provided by Project Owner</b>				
<b>Project verifier assessment</b>				<b>Date:</b> 07/12/2023
PO has provided all the required documents. Hence CL 01 is closed.				
<b>CL ID</b>	02	<b>Section no.</b>	D.3.6	<b>Date:</b> 17/02/2023

<b>Description of CL</b>	
Section B.2 of the PSF refers to onsite consumption of electricity “for site offices during maintenance”. However, PO has not considered the same as project activity emission referring to it as a “Minor source of emission” in section B.3 of the PSF. PO is required to corroborate and justify the same in accordance with paragraph 26 of the applied methodology.	
<b>Project Owner’s response</b>	<b>Date:</b> 05/12/2023
Though electricity is consumed for site offices during maintenance as mentioned in section B.2 of PSF, however the same is negligible at less than 0.5% of the generation. Hence is considered as negligible In Section B.6.1. since project emission is zero, the statement relating to calculation of CO2 emission, which has inadvertently crept in, has been removed. Likewise, in table under section B.3. has also been corrected and made consistent with sec. B 6.1.	
<b>Documentation provided by Project Owner</b>	
<b>Project verifier assessment</b>	<b>Date:</b> 07/12/2023
PO has corrected in the section B.3 as there is no source of emission and consistent with section B.2 and B.6.1 in PSF. Hence CL 02 is closed.	

<b>CL ID</b>	03	<b>Section no.</b>	D.3.6, D.3.7	<b>Date:</b> 17/02/2023
<b>Description of CL</b>				
In section B.6.1 of the PSF:				
<ul style="list-style-type: none"> <li>i. As per the applied methodology paragraph 42(a), Simple OM emission factor is to be calculated ex-ante using “a 3-year generation-weighted average, based on the most recent data available at the time of submission of the CDM-PDD to the DOE for validation”. However, the data used for the same in the PSF pertains to the years 2015-16, 2016-17 and 2017-18 which is not in accordance with the applied methodology.</li> <li>ii. Similarly, the data used in the PSF for Build Margin(BM) emission factor pertains to 2017-18. However, as per the applied methodology paragraph 72, BM is to be calculated ex-ante using “most recent information available on units already built for sample group m at the time of CDM-PDD submission to the DOE for validation”. Hence, the same is not in accordance with the applied methodology.</li> <li>iii. The data considered for low-cost/ must –run source of electricity generation is not based on the average of five most recent years.</li> </ul>				
<b>Project Owner’s response</b>				<b>Date:</b> 05/12/2023
<ul style="list-style-type: none"> <li>I. As per the applied methodology paragraph 42(a), Simple OM emission factor is calculated ex-ante using “a 3-year generation-weighted average, based on the most recent data available at the time of submission of the CDM-PDD to the DOE for validation” for which Version 17.0 of CEA data is considered and changed accordingly.</li> <li>II. Similarly, the data used for Build Margin (BM) emission factor pertains to the latest data i.e., 2020-21. Thus, BM is calculated ex-ante using “most recent information available on units already built for sample group m at the time of CDM-PDD submission to the DOE for validation”. Hence, the same is made in accordance with the applied methodology.</li> </ul> <p>The data considered for low-cost/ must –run source of electricity generation is taken based on the average of five most recent years.</p>				
<b>Documentation provided by Project Owner</b>				
<b>Project verifier assessment</b>				<b>Date:</b> 07/12/2023

I.	PO has updated the Simple OM emission factor is calculated ex-ante using “a 3-year generation-weighted average, based on the most recent data available at the time of submission of the CDM-PDD to the DOE for validation” for which Version 17.0 of CEA data is considered and changed accordingly as per the applied methodology paragraph 42(a).
II.	Similarly, PO has updated the data used for Build Margin (BM) emission factor pertains to the latest data i.e., 2020-21. Thus BM is calculated ex-ante using “most recent information available on units already built for sample group m at the time of CDM-PDD submission to the DOE for validation” in accordance with the applied methodology.
III.	PO has updated the data considered for low-cost/ must –run source of electricity generation is taken based on the average of five most recent years.

Hence, CL 03 is closed.

<b>CL ID</b>	04	<b>Section no.</b>	D.3.7	<b>Date:</b> 17/02/2023
<b>Description of CL</b>				
In Section B.7.1 of the PSF:				
<ul style="list-style-type: none"> <li>i. For the parameter <math>EG_{PJ,Y}</math>, as the project activity is already operational, please provide the specific energy meter type installed, their accuracy, serial numbers, calibration status etc. for all the project activities forming the bundle.</li> <li>ii. The QA/QC procedures should be more specific to the project activity as the same is operational since 2017, PO should touch upon the functioning of main and check meter.</li> <li>iii. Please check and correct the “Frequency of Measuring/reading” column.</li> <li>iv. In the Additional Comments column, the archiving period is to be appropriately mentioned.</li> </ul>				
<b>Project Owner’s response</b>				<b>Date:</b> 05/12/2023
In Section B.7.1 of the PSF:				
<ul style="list-style-type: none"> <li>i. For the parameter <math>EG_{PJ,Y}</math>, as the project activity is already operational, the specific energy meter type installed, their accuracy, serial numbers, calibration status etc. for all the project activities forming the bundle at the feeder as well as substation are provided.</li> <li>ii. The PO has updated QA/QC procedures with more specific to the project activity as the same is operational since 2017 and touching upon the functioning of main and check meter.</li> <li>iii. The Frequency of Measuring/reading column is corrected</li> <li>iv. In the Additional Comments column, the archiving period is changed and mentioned appropriately.</li> </ul>				
<b>Documentation provided by Project Owner</b>				
<b>Project verifier assessment</b>				<b>Date:</b> 07/12/2023
<ul style="list-style-type: none"> <li>i. PO has provided accuracy, serial numbers, calibration status etc. of installed energy meter for all the project activities forming the bundle at the feeder as well as substation for the parameter <math>EG_{PJ,Y}</math>, but value of “Reference No. of Calibration Certificates” is not mentioned.</li> <li>ii. PO has updated QA/QC procedures with more specific to the project activity as the same is operational since 2017 and touching upon the functioning of main and check meter.</li> <li>iii. PO has corrected the “Frequency of Measuring/reading” column.</li> <li>iv. PO has mentioned the archiving period in the column “Additional Comments” appropriately.</li> </ul>				
Hence, CL 04 is closed				

<b>CL ID</b>	05	<b>Section no.</b>	D.3.7	<b>Date:</b> 17/02/2023
<b>Description of CL</b>				

In section B.7.1 of the PSF, parameters to be monitored for E+/S+ and SDGs:

- i. The parameters, monitored with reference to scoring in Section E and F, are required to be specific and clear on the frequency of monitoring, the legal requirements in place, QA/QC in line with the PSF completing guidelines.
- ii. For the parameter “Solid Waste” please correlate with the information provided in section E.1 and be more specific to the project activity as the same is operational since 2017. Monitoring needs to be specific to each type of solid waste category generated.
- iii. Though the parameter “Community and rural welfare (indigenous people and communities) etc.” is scored in section E.2, the same does not find a mention under section B.7.1

**Section B.7.2**

In Section E.1 some of the parameters which are scored if not managed properly can create harmful impact on environment and hence risk mitigation plan needs to be defined for those for e.g. solid waste from end of life products.

**Project Owner’s response**

**Date:** 05/12/2023

In section B.7.1 of the PSF, parameters to be monitored for E+/S+ and SDGs:

- i. The parameters, monitored with reference to scoring in Section E and F, are made specific and clear on the frequency of monitoring, the legal requirements in place, QA/QC as per the PSF completing guidelines.
- ii. The PO has already indicated in the PSF in section E.1 that the monitoring is specific to solid waste quantity per year
- iii. The parameter “Community and rural welfare (indigenous people and communities) etc.” is scored in section E.2, and the same is mentioned under section B.7.1

In Section E.1 some of the parameters which are scored if not managed properly can create harmful impact on environment and hence risk mitigation plan is defined for those in section B.7.2

**Documentation provided by Project Owner**

**Project verifier assessment**

**Date:** 07/12/2023

- i. PO has corrected the parameters, monitored with reference to scoring in Section E and F, with specific and clear on the frequency of monitoring, the legal requirements in place, QA/QC as per the PSF completing guidelines.
- ii. PO has removed the ‘Solid waste’ as parameter from section B.7.1 as it is already mentioned in section E.1 of PSF and it is deemed appropriate.
- iii. Though the parameter “Community and rural welfare (indigenous people and communities) etc.” is scored in section E.2, the same has been mentioned under section B.7.1 of PSF.

Hence, CL 05 is closed.

<b>CL ID</b>	06	<b>Section no.</b>	D.3.5	<b>Date:</b>	17/02/2023
<b>Description of CL</b>					

With respect to investment analysis, the following findings are raised:

- i. PO needs to confirm (with credible evidence) on the compliance of paragraph 10 of CDM Tool 27, version 11 which states “*Input values used in all investment analysis shall be valid and applicable at the time of the investment decision taken by the project participant.*”
- ii. In accordance with paragraph 34 of the PSF completion guidelines, PO needs to specify the project milestones including the investment decision date under step 2 of investment analysis, in section B.5 of the PSF, and further needs to check and confirm that the listed input values have been consistently applied in all calculations.

Following Discrepancies were observed the excel sheets:

Jilesh Power Pvt. Ltd.: PLF considered in the excel (26.40%) is different from the one mentioned in the PSF (19%).

Vishvarupa Solar Power Pvt. Ltd.: PLF considered does not match with the source stated. The PLF considered is 26.81% while the source document, CERC Tariff Order dated 30/03/2016 considers a PLF of 19% for Solar PV Projects.

PO to check the input values and provide supporting documents.

- iii. PO to provide Standard performance warranty referred for deration/degradation factor applied.
- iv. PO to provide a breakup of the value considered under Total Cost and Gross Depreciation.
- v. Under Sensitivity analysis, the breaching values for each of the factors need to be mentioned along with justification as to why is it not possible. Furthermore, As the project is already generating, the sensitivity analysis to be based on realistic values.

**Project Owner’s response**

**Date:** 05/12/2023

- i. PO confirms that the project activity complies with paragraph 10 of CDM tool 27, version 12 and all the input values used in the investment analysis are valid and applicable at the time of taking investment decision by the project participant.
- ii. The following milestones are considered for determining the investment decision date under step-2 of investment analysis in section B.5 of the PSF and listed input values have been consistently applied in all calculations.  
Chronology for the project is mentioned in sec B.5  
The date of EPC contract is considered as decision date for investment analysis
- iii. The degradation normally takes place in solar power generation plants due to degradation of modules. That is reflected in module data sheet provided by manufacturers.
- iv. The PO has considered the entire project cost (less land) for the purpose of calculation depreciation as per the prevailing laws. As provided by Sec. 32 of the Income Tax Act, the entire plant and machinery excluding land has been considered as a ‘block of assets’ and the depreciation has been provided accordingly. Appendix IA prescribes only one rate – 7.69% – for all assets. Moreover, this is more conservative from the demonstration of additionality point of view.
- v. Under Sensitivity analysis, the breaching values for each of the factors is mentioned along with justification as to why is it not possible.

**Documentation provided by Project Owner**

**Project verifier assessment**

**Date:** 07/12/2023

Project Verification Report

- i. PO has confirmed that the project activity complies with paragraph 10 of CDM tool 27, version 11 and all the input values used in the investment analysis are valid and applicable at the time of taking investment decision by the project participant.
  - ii. PLF value is now consistent.
  - iii. PO has justified that the deration/degradation factor is applicable because normally degradation takes place in solar power generation plants due to degradation of modules and the justification is deemed appropriate.
  - iv. PO has explained the breakup of the value considered under Total Cost and Gross Depreciation and deemed appropriate.
  - v. PO has mentioned he breaching values for each of the factors along with justification as to why is it not possible under Sensitivity analysis.
- Hence CL 06 is still closed.

<b>CL ID</b>	07	<b>Section no.</b>	D.10, D.11	<b>Date:</b> 17/02/2023
<b>Description of CL</b>				

In section E: Environmental and Social Safeguards of the PSF:

- i. Please complete the table uniformly with appropriate use of “Not Applicable”, “No Action Required” etc. and accordingly fix appropriate KPI for each of the identified harmless and harmful Environmental and Social Safeguards along with proper reference for relevant applicable legislation.
- ii. Monitoring approach and parameter as well as the basis of the conclusion ‘as to why the parameter will be scored’ to be elaborated upon using specific targets and performance indicators such as targeted CO<sub>2</sub> emission reductions, minimum number of people targeted for imparting training etc. The chosen parameters should be quantified for the baseline scenario and the project scenario.
- iii. With reference to solid waste from Plastic, Hazardous waste, E-waste, End of Life Products as the project activity is operational since 2017, please be very specific as to what is being classified here (for e.g. Solar PV modules, inverter, cables, electronic cards etc.) and accordingly frame the detailed monitoring approach with reference disposal in line with applicable regulations viz. SPCB authorized vendor as well as quantity of waste generated/ disposed.
- iv. E-waste is governed by E-waste (Management and Handling) Rules and has a compliance obligation. PO to justify the basis for scoring the aforementioned parameter in the PSF.
- v. PO has indicated the use of Ground water for cleaning of PV Modules. However, the PSF does not mention about the waste that is being generated, its treatment and disposal and its environmental impacts. The section on the “Environment-water” therefore to be completed appropriately.
- vi. Scored parameters such as “Occupational health hazards”/ “Improving/ deteriorating working conditions” / etc.” make generic statements such as “reduces the chance to happen accidents ....”, “the people from local communities would have to work somewhere with fatiguing work conditions” etc. – please be project activity specific with respect to description of impact, the monitoring approach and parameters as well as conclusion leading to the parameter being scored.
- vii. The following parameters:
  - 1. “Replacing fossil fuels with renewable sources of energy” and “CO<sub>2</sub> emissions”;
  - 2. “specialized training / education to local personnel” and “Project related knowledge dissemination effective or not”;
  - 3. “Occupational health hazards” and “Reducing / increasing accidents /Incident s/fatality” are scored +1 based on the same theory / justification. PO to justify the scoring the said parameters.
- viii. PO is requested to justify as to how the trainings conducted for parameters “specialized trainings/ education to local personnel” and “Project related knowledge dissemination effective or not” are different from those mandated under legal/regulatory requirements for the sector.
- ix. Child Labour prohibition and Minimum Wage are governed by their respective acts in place in India and have a compliance obligation. PO to justify the basis for scoring the aforementioned parameters in the PSF.
- x. PO also needs to demonstrate that under “Social safeguards” impacts created are additional to compliance obligation under CSR commitments.
- xi. In accordance with paragraph 22(b) of Project Sustainability Standard version 3.0, PO to ensure that all linkages between chosen SDGs and E+/S+ parameters are reflected for e.g. Goal 1.1 and parameter “poverty elevation SW03”.

**Project Owner’s response**

**Date:** 05/12/2023

- i. The appropriate use of “Not Applicable”, “No Action Required” etc. and accordingly appropriate KPI for each of the identified harmless and harmful Environmental and Social Safeguards along with proper reference for relevant applicable legislation has been made clear.
- ii. The fact that projects are already established and in operation, the parameters scored like targeted CO2 emission reductions, minimum number of people employed targeted for imparting training are quantified for the project scenario.
- iii. With reference to solid waste, only solid waste from E-waste is considered in the project scenario. The E-waste (for e.g. Solar PV modules, inverter, cables, electronic cards etc.) is classified here as Solid waste and the detailed monitoring approach along with KPI is clearly defined.
- iv. E-waste is governed by E-waste (Management and Handling) Rules and PO agrees with it and Scores this parameter as per the latest GCC Environmental standard that the quantity of waste is monitored and is in line with the regulations.
- v. The water required for cleaning of modules is negligible and gets evaporated. Hence no waste is generated and we have not considered any score in the PSF
- vi. PO feels that scored parameters such as “Occupational health hazards”/ “Improving/ deteriorating working conditions” / etc.” are not project activity specific with respect to description of impact, the monitoring approach is not appropriate and hence those are not considered.
- vii. Parameters scored +1 with same theory with respect to others parameters that are scored are been ignored. Only one parameter for a theory is considered.
- viii. PO has considered extra trainings conducted for parameters “specialized trainings/ education to local personnel” and “Project related knowledge dissemination effective or not” that are different from those mandated under legal/regulatory requirements for the sector.
- ix. Child Labour prohibition and Minimum Wage are governed by their respective acts in place in India and have a compliance obligation. So, PO will not take score for the aforementioned parameters in the PSF.
- x. PO confirms that welfare activities done are additional to CSR commitments.

In accordance with paragraph 22(b) of Project Sustainability Standard version 3.0, PO ensures that all linkages between chosen SDGs and E+/S+ parameters are reflected in the PSF

**Documentation provided by Project Owner**

**Project verifier assessment**

**Date:** 07/12/2023

<ul style="list-style-type: none"> <li>i. PO has completed the table uniformly with appropriate use of “Not Applicable”, “No Action Required” etc. and fixed appropriate KPI for each of the identified harmless and harmful Environmental and Social Safeguards along with proper reference for relevant applicable legislation.</li> <li>ii. PO has explained that, only solid waste from E-waste is considered in the project scenario. The E-waste (for e.g. Solar PV modules, inverter, cables, electronic cards etc.) is classified here as Solid waste and the detailed monitoring approach along with KPI is clearly defined.</li> <li>iii. PO has explained that the scoring of the Environmental and social parameters in PSF has done as per the latest GCC Environmental standard and it is deemed appropriate.</li> <li>iv. PO has explained that the water is required for cleaning of modules and it evaporates. So the waste of water is negligible and PO have not considered any score for this in PSF. So it is deemed appropriate.</li> <li>v. PO has not considered the parameters such as “Occupational health hazards”/ “Improving/deteriorating working conditions” / etc.” as they are not project activity specific with respect to description of impact.</li> <li>vi. PO scored +1 with same theory with respect to other parameters that are scored are been ignored. Only one parameter for a theory is considered which is mentioned in PSF.</li> <li>vii. PO has given the justification for scoring of the following parameters: <ul style="list-style-type: none"> <li>1.“Replacing fossil fuels with renewable sources of energy” and “CO2 emissions”;</li> <li>2.“specialized training / education to local personnel” and “Project related knowledge dissemination effective or not”;</li> <li>3.“Occupational health hazards” and “Reducing / increasing accidents /Incident s/fatality”</li> </ul> </li> </ul> <p>The justification is deemed appropriate.</p> <ul style="list-style-type: none"> <li>viii. PO has justified how the trainings conducted an deemed appropriate.</li> <li>ix. PO has not scored against aforementioned parameters in the PSF as Child Labour prohibition and Minimum Wage are governed by their respective acts in place in India and deemed appropriate.</li> <li>x. PO confirms that welfare activities done are additional to CSR commitment and deemed appropriate.</li> <li>xi. Po has done all linkages between chosen SDGs and E+/S+ parameters in PSF in accordance with paragraph 22(b) of Project Sustainability Standard version 3.0 and deemed appropriate.</li> </ul> <p>Hence CL07 is closed.</p>
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<b>CL ID</b>	08	<b>Section no.</b>	D.12	<b>Date:</b> 17/02/2023
<b>Description of CL</b>				

In section F: Sustainable Development Goals of the PSF:

- i. For SDG Goals that are scored, indicators, project activity specific description, specific targets, justification for positive effect as well as specific monitoring approach and parameters need to be mentioned. As the project activity is operational since 2017, the indicators and monitoring needs to be substantiated with actual credible evidence.
- ii. Goal 1.1 states “Eradicate extreme poverty for all locally employed people”. Please justify the same. How does the PO ensure locally employed are extremely poor, is there a baseline being referred to, does the PO have specific hiring guidelines etc.
- iii. PO is required to justify the suitability of the following indicators scored considering Nature of Project activity and Baseline indicator:
  - a. Indicator 3.8.1 “Coverage of essential health services”
 

Also, Goal 3.8 states “ensure financial risk protection”, how does the PO define this and what measures are taken to ensure fulfilment. Financial Risk protection is covered under UN SDG indicator 3.8.2.
  - b. Indicator 4.4.1 “Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill”
  - c. Indicator 8.8.1 “Fatal and non-fatal occupational injuries per 100,000 workers, by sex and migrant status”
- iv. PO needs to justify the suitability of Goal 9 target and performance indicator chosen for the project activity considering:
  - a. Nature of project activity
  - b. Baseline indicator for target
  - c. Impact of parameter considered for this indicator is already covered under goal 7 & 13

**Project Owner’s response**

**Date:** 05/12/2023

- i. For SDG Goals that are scored, indicators, project activity specific description, specific targets, justification for positive effect as well as specific monitoring approach and parameters are substantiated with actual credible evidence.
- ii. PO finds that Goal 1.1 cannot be monitored as stated and don’t wish to claim it.
- iii. Indicator 3.8.1 “Coverage of essential health services” is applicable to this project activity as the PO provides the same to their employees within the project activity. Relevant record are being enclosed
 

PO considers indicator 3.8.1, while indicator 3.8.2 “ensure financial risk protection” is not considered

For SDG 4, the Indicator 4.4.1 “Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill” is modified to “Number of persons trained” who are locals and given skill development.

Indicator 8.8.1 “Fatal and non-fatal occupational injuries per 100,000 workers, by sex and migrant status” is applicable as the project is a solar generation plant there are chances of minor and major injuries/accidents to occur and the same are recorded and maintained in the EHS formats
- iv. PO calimed both 7 & 9. Detailed description is elobarated in sec F

**Documentation provided by Project Owner**

Project Verification Report

<b>Project verifier assessment</b>		<b>Date:</b> 07/12/2023
i.	PO has mentioned for SDG Goals that are scored, indicators, project activity specific description, specific targets, justification for positive effect as well as specific monitoring approach and parameters.	
ii.	Goal 1.1 cannot be monitored so PO is not claiming for this goal, and it is deemed appropriate.	
iii.	PO has justified the suitability of the SDG indicators and deemed appropriate.	
iv.	PO has justified the suitability of Goal 9 target and performance indicator chosen for the project activity and deemed appropriate.	
Hence CL 08 is closed.		

<b>CL ID</b>	09	<b>Section no.</b>	D.2	<b>Date:</b> 17/02/2023
<b>Description of CL</b>				
In Appendix 8 of the PSF, PO is requested to elaborate upon the analysis with regards to homogeneity of the Bundle in accordance with GCC Clarification No. 1.				
<b>Project Owner's response</b>				<b>Date:</b> 05/12/2023
In Appendix 8 of the PSF, PO has elaborated upon the analysis with regards to homogeneity of the Bundle in accordance with GCC Clarification No. 1				
<b>Documentation provided by Project Owner</b>				
<b>Project verifier assessment</b>				<b>Date:</b> 07/12/2023
PO has elaborated upon the analysis with regards to homogeneity of the Bundle in accordance with GCC Clarification No. 1. In appendix 8 of PSF. Hence, CL 09 is closed.				

<b>CL ID</b>	10	<b>Section no.</b>	D.3.6	<b>Date:</b> 17/02/2023
<b>Description of CAR</b>				
DG sets were found to be present on the sites for M/s Jilesh Power Pvt Ltd, M/s Vishvarupa Solar Power Pvt Ltd and M/s Zuka Power Pvt Ltd. However, the same does not find a mention in the PSF. PO to also justify the rationale behind not including DG set emissions under Project emissions.				
<b>Project Owner's response</b>				<b>Date:</b> 05/12/2023
<i>DG sets were used during construction period and they were not used during operation</i>				
<b>Documentation provided by Project Owner</b>				
<b>Project verifier assessment</b>				<b>Date:</b> 07/12/2023
Po has explained properly and deemed appropriate. Hence CL 10 is closed.				

<b>CL ID</b>	11	<b>Section no.</b>	D.2	<b>Date:</b> 17/02/2023
<b>Description of CAR</b>				
The physical address, checked during site visit, did not match with that mentioned in section A.2 of the PSF for Zuka Power Private Limited and SEI Green Flash Private Limited. PO is requested to clarify.				
<b>Project Owner's response</b>				<b>Date:</b> 05/12/2023
The physical address for in section A.2 of the PSF for Zuka Power Private Limited and SEI Green Flash Private Limited is corrected				
<b>Documentation provided by Project Owner</b>				
<b>Project verifier assessment</b>				<b>Date:</b> 07/12/2023
PO has provided the physical address properly. Hence CL 11 is closed.				

<b>CL ID</b>	12	<b>Section no.</b>	D.6	<b>Date:</b> 17/02/2023
<b>Description of CAR</b>				
In section G of the PSF, "NTPC Karvy -Vishvarupa Solar Power Limited" is mentioned as project proponent. However, the same does not match with the LOA or other sections of the PSF viz. coverpage, Section A.2 etc. Correction requested.				
<b>Project Owners response</b>				<b>Date:</b> 05/12/2023

Project Verification Report

The name is changed to Vishvarupa Solar Power Private Limited in section G of the PSF	
<b>Documentation provided by Project Owner</b>	
<b>Project verifier assessment</b>	<b>Date: 07/12/2023</b>
PO has corrected the project proponent name as “Vishvarupa Solar Power Private Limited” instead of “NTPC Karvy -Vishvarupa Solar Power Limited” in section G of the PSF. Hence CL 12 is closed.	

Table 2. CARs from this Project Verification

<b>CAR ID</b>	01	<b>Section no.</b>	D.2	<b>Date:</b> 17/02/2023
<b>Description of CAR</b>				
The following was not captured in section A of the PSF as per the 'Instructions for completing the PSF':				
<ul style="list-style-type: none"> <li>i. Summary of Project boundary and technologies/measures employed in section A.1.</li> <li>ii. Contribution of the project activity to sustainable development of host country in section A.1</li> <li>iii. Details and Arrangement of Metering/ monitoring equipment in section A.3.</li> <li>iv. Short summary of facilities, systems and equipment in the baseline scenario in section A.3.</li> <li>v. Description as to how the electricity is generated and exported to grid along with details of voltage levels at switchyard and grid station in section A.3.</li> </ul>				
<b>Project Owner's response</b>				<b>Date:</b> 05/12/2023
The following information has been updated in section A of the PSF				
<ul style="list-style-type: none"> <li>i. Summary of Project boundary, technologies/measures employed in section A.1.</li> <li>ii. Contribution of the project activity to sustainable development of host country is mentioned in section A.1</li> <li>iii. Details and Arrangement of Metering/ monitoring equipment for evacuation of electricity to the substation in section A.3.</li> <li>vi. Short summary of facilities, systems and equipment in the baseline scenario in section A.3.</li> <li>iv. Description as to how the electricity is generated and exported to grid along with details of voltage levels at switchyard and grid station in section A.3.</li> </ul>				
<b>Documentation provided by Project Owner</b>				
<b>Project verifier assessment</b>				<b>Date:</b> 07/12/2023
<ul style="list-style-type: none"> <li>i. PO has added summary of Project boundary, technologies/measures employed in section A.1</li> <li>ii. PO has added contribution of the project activity to sustainable development of host country in section A.1</li> <li>iii. PO has added details and Arrangement of Metering/ monitoring equipment in section A.3.</li> <li>iv. PO has added short summary of facilities, systems and equipment in the baseline scenario in section A.3.</li> <li>v. PO has added description as to how the electricity is generated and exported to grid along with details of voltage levels at switchyard and grid station in section A.3.</li> </ul>				
Hence CAR 01 is closed.				
<b>CAR ID</b>	02	<b>Section no.</b>	D.2	<b>Date:</b> 17/02/2023
<b>Description of CAR</b>				

The following discrepancies were observed during the site visit with respect to technical specifications provided under section A.3 of the PSF:

1. M/s Jilesh Power Pvt. Ltd
  - a. SPV – A total of 206,136 SPV modules were confirmed to be installed while section A.3 of the PSF mentions the installation of 216,426 PV modules. Total number of each type of module may be shown separately.
  - b. Inverters details provided under section A.3 are inconsistent with onsite observations. Installation of 50 inverters was confirmed on site as against the 40 inverters mentioned in the PSF.
  - c. Transformer details are not provided in the PSF.
2. M/s Vishvarupa Solar Power Pvt. Ltd
  - a. SPV – Only two different types of SPV modules are installed, viz. 315W and 320W as against the 4 types mentioned in the PSF. Furthermore, a total of 43,722 SPV modules were confirmed to be installed onsite while section A.3 of the PSF mentioned the installation of 125,680 PV modules.
  - b. Inverters details provided under section A.3 are inconsistent with onsite observations. Installation of 10 inverters was confirmed on site as against the 34 inverters mentioned in the PSF.
  - c. Transformer details are not provided in the PSF.
3. M/s Zuka Power Pvt Ltd
  - a. SPV – Only One type of SPV modules is installed, viz. 320W as against the 2 types mentioned in the PSF. A total of 231,882 SPV modules were confirmed to be installed onsite while section A.3 of the PSF mentioned the installation of 48,888 PV modules.
  - b. Inverters details provided under section A.3 are inconsistent with onsite observations. Installation of 53 inverters was confirmed on site as against the 11 inverters mentioned in the PSF.
  - c. Transformer details are not provided in the PSF.
4. M/s SEI Green Flash Pvt Ltd
  - a. SPV - Six different types of SPV modules are installed, viz. 310 W, 315 W, 320 W, 325 W, 330 W and 335 W while details of only five (310 W, 315 W, 320 W, 325 W, 330 W) have been provided in the PSF.
  - b. Inverters details provided under section A.3 are inconsistent with onsite observations. Installation of 34 inverters was confirmed on site as against the 11 inverters mentioned in the PSF.
  - c. Transformer details are not provided in the PSF.

**Project Owner's response**

**Date:** 05/12/2023

The above stated details with respect to technical specifications are addressed and updated under section A.3 of the PSF for all the PAs in the bundle

**Documentation provided by Project Owner**

**Project verifier assessment**

**Date:** 07/12/2023

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<ol style="list-style-type: none"> <li>1.             <ol style="list-style-type: none"> <li>a. PO has corrected the number of SPV modules used in PSF.</li> <li>b. PO has corrected the Number of the installed inverter in PSF.</li> <li>c. PO has provided the transformer details in the PSF.</li> </ol> </li> <li>2.             <ol style="list-style-type: none"> <li>a. PO has corrected the types and number of SPV modules used in PSF.</li> <li>b. PO has corrected the Number of the installed inverter in PSF.</li> <li>c. PO has provided the transformer details in the PSF.</li> </ol> </li> <li>3.             <ol style="list-style-type: none"> <li>a. PO has corrected the types and number of SPV modules used in PSF.</li> <li>b. PO has corrected the Number of the installed inverter in PSF.</li> <li>c. PO has provided the transformer details in the PSF.</li> </ol> </li> <li>4.             <ol style="list-style-type: none"> <li>a. PO has corrected the types and number of SPV modules used in PSF.</li> <li>b. PO has corrected the Number of the installed inverter in PSF.</li> <li>c. PO has provided the transformer details in the PSF.</li> </ol> </li> </ol> <p>Hence CAR 02 is closed.</p>
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<b>CAR ID</b>	03	<b>Section no.</b>	D.3.1	<b>Date:</b> 17/02/2023
<b>Description of CAR</b>				
The PO is required to indicate the exact reference to the tools to which the selected methodology refers and the project activity applies as well as GCC Clarification No.1 under section B.1.				
<b>Project Owner's response</b>				<b>Date:</b> 05/12/2023
The PO indicated the exact reference to the tools to which the selected methodology refers and the project activity applies as well as GCC Clarification No.1 under section B.1.				
<b>Documentation provided by Project Owner</b>				
<b>Project verifier assessment</b>				<b>Date:</b> 07/12/2023
The has indicated the exact reference to the tools to which the selected methodology refers and the project activity applies as well as GCC Clarification No.1 under section B.1. and its deemed appropriate. Hence, CAR 03 is closed.				

<b>CAR ID</b>	04	<b>Section no.</b>	D.3.1	<b>Date:</b> 17/02/2023
<b>Description of CAR</b>				
<ol style="list-style-type: none"> <li>i. Applicability conditions of the 'Tool to calculate the emission factor for an electricity system, Version 07.0 (Tool 07)' have not been included for justification in section B.2 of the PSF.</li> <li>ii. All applicability conditions mentioned under section 2.2 of "Tool 24 - Common Practice Version 3.1" and section 2.1 of "Tool 27 - Investment analysis, Version 11.0" have not been included for justification in section B.2.</li> </ol>				
<b>Project Owner's response</b>				<b>Date:</b> 05/12/2023
<ol style="list-style-type: none"> <li>i. Applicability conditions of the 'Tool to calculate the emission factor for an electricity system, Version 07.0 (Tool 07)' is included for justification in section B.2 of the PSF.</li> </ol> <p>All applicability conditions mentioned under section 2.2 of "Tool 24 - Common Practice Version 3.1" and section 2.1 of "Tool 27 - Investment analysis, Version 11.0" is included for justification in section B.2.</p>				
<b>Documentation provided by Project Owner</b>				
<b>Project verifier assessment</b>				<b>Date:</b> 07/12/2023
<ol style="list-style-type: none"> <li>i. PO has included the 'Tool to calculate the emission factor for an electricity system, Version 07.0 (Tool 07)' in section B.2 of the PSF.</li> <li>ii. PO has justified all applicability conditions mentioned under section 2.2 of "Tool 24 - Common Practice Version 3.1" and section 2.1 of "Tool 27 - Investment analysis, Version 11.0" in section B.2 of PSF.</li> </ol> <p>Hence CAR 04 is closed.</p>				

<b>CAR ID</b>	05	<b>Section no.</b>	D.3.5	<b>Date:</b> 17/02/2023
<b>Description of CAR</b>				

Under Section B.5 of the PSF:	
<ul style="list-style-type: none"> <li>i. The Legal Requirement Test to demonstrate additionality is required to be elaborated upon supported with details and documentary evidence.</li> <li>ii. In accordance with para 20 of clarification 1, "The common practice shall be ascertained for each bundle or activity depending upon the level for which additionality is defined." As additionality is defined at the activity level, common practice will be defined at the same level (each activity).</li> </ul>	
<b>Project Owner's response</b>	<b>Date: 05/12/2023</b>
<ul style="list-style-type: none"> <li>i. The Legal Requirement Test to demonstrate additionality is elaborated upon supported with details and documentary evidence.</li> <li>ii. In accordance with para 20 of clarification 1, common practice and additionality are ascertained at the same level (i.e., for bundle level).</li> </ul>	
<b>Documentation provided by Project Owner</b>	
<b>Project verifier assessment</b>	<b>Date: 07/12/2023</b>
<ul style="list-style-type: none"> <li>i. PO has elaborated the Legal Requirement Test to demonstrate additionality in the section B.5 of the PSF.</li> <li>iii. PO has defined the common practice and additionality are ascertained at the same level in accordance with para 20 of clarification 1.</li> </ul>	
Hence CAR 05 is closed	

<b>CAR ID</b>	06	<b>Section no.</b>	D.3.6, D.3.7	<b>Date:</b>	17/02/2023
<b>Description of CAR</b>					
Under Section B.6 of the PSF:					
<ul style="list-style-type: none"> <li>i. The equation for baseline emission calculation mentioned is not consistent with the methodology applied in section B.6 of the PSF. PO shall use nomenclatures and abbreviations aligned with the chosen methodology, GCCM001 Version 3.0.</li> <li>ii. The equation provided for "Calculation of <math>EG_{PJ,y}</math>" mentioned under section B.6 does not correspond to the methodology being used nor is the same utilized in the PSF for calculation of net electricity generation supplied.</li> <li>iii. Version of methodology stated is obsolete under section B.6.2.</li> <li>iv. The columns "QA/QC procedure" and "Purpose of data" are not appropriately completed for the parameter '<math>EF_{grid, OM,y}</math>' under section B.6.2.</li> <li>v. The column "Measured/calculated/default" is not appropriately completed for parameter "<math>EF_{grid, CM,y}</math>" under section B.6.2.</li> </ul>					
<b>Project Owner's response</b>					<b>Date: 05/12/2023</b>
Under Section B.6 of the PSF:					
<ul style="list-style-type: none"> <li>i. The equation for baseline emission calculation mentioned is made consistent with the methodology applied with use of nomenclatures and abbreviations aligned with the chosen methodology, GCCM001 Version 3.0.</li> <li>ii. The equation provided for "Calculation of <math>EG_{PJ,y}</math>" mentioned under section B.6.3 is corrected and correspond to the methodology being used.</li> <li>iii. Methodology version is corrected in section B.6.2</li> <li>iv. The columns "QA/QC procedure" and "Purpose of data" are filled under parameter '<math>EF_{grid, OM,y}</math>' under section B.6.2.</li> </ul>					
The column "Measured/calculated/default" is filled for parameter " $EF_{grid, CM,y}$ " under section B.6.2.					
<b>Documentation provided by Project Owner</b>					
<b>Project verifier assessment</b>					<b>Date: 07/12/2023</b>

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i.	PO has corrected the equation for baseline emission calculation and also updated the nomenclatures and abbreviations aligned with the chosen methodology, GCCM001 Version 3.0.
ii.	Po has corrected the equation provided for “Calculation of $EG_{P,j,y}$ ” mentioned under section B.6.3 correspond to the methodology being used.
iii.	Po has corrected the methodology version in section B.6.2
iv.	Po has updated the columns “QA/QC procedure” and “Purpose of data” are filled under parameter ‘ $EF_{grid, OM,y}$ ’ under section B.6.2.
v.	PO has updated the column “Measured/calculated/default” is not appropriately completed for parameter “ $EF_{grid,CM,y}$ ” under section B.6.2.

Hence CAR 06 is closed.

<b>CAR ID</b>	07	<b>Section no.</b>	D.6	<b>Date:</b> 17/02/2023
<b>Description of CAR</b>				
In section G of the PSF, it is not clear whether the E+/S+/SDG impacts of project were discussed during LSC meeting.				
<b>Project Owner’s response</b>				<b>Date:</b> 05/12/2023
In section G of the PSF, discussion about SDG impacts of project were discussed during LSC meeting is mentioned				
<b>Documentation provided by Project Owner</b>				
<b>Project verifier assessment</b>				<b>Date:</b> 07/12/2023
PO has updated the section G of the PSF, where the discussion about SDG impacts is mentioned in the LSC meeting. Hence CAE 07 is closed.				

Table 3. FARs from this Project Verification

<b>FAR ID</b>	01	<b>Section no.</b>	D.7, D.13, D.14	<b>Date:</b> 17/02/2023
<b>Description of FAR</b>				
Project Owners shall demonstrate the compliance to CORSIA requirements for the credits claimed beyond 31 December 2020 with respect to double counting and HCLOA requirements and also future CORSIA requirements applicable time to time for the project activity				
<b>Project Owner’s response</b>				<b>Date:</b> DD/MM/YYYY
-				
<b>Documentation provided by Project Owner</b>				
-				
<b>Project verifier assessment</b>				<b>Date:</b> DD/MM/YYYY
-				

Appendix 5. Environmental safeguard assessment

Impact of Project Activity on		Information on Impacts, Do-No-Harm Risk Assessment and Establishing Safeguards							Project Owner's Conclusion		GCC Project Verifier's Conclusion  (To be included in Project Verification Report only)	
		Description of Impact (positive or negative)	Legal/voluntary corporate requirement / regulatory / voluntary corporate threshold Limits	Do-No-Harm Risk Assessment (choose which ever is applicable)			Risk Mitigation Action Plans for aspects marked as Harmful		Performance indicator for monitoring of impact	Ex-ante scoring of environmental impact	Explanation of the Conclusion	3 <sup>rd</sup> Party Audit
				Not Applicable	Harmless	Harmful	Operational Controls	Program of Risk Management Actions				
<b>Environmental Aspects on the identified categories<sup>8</sup> indicated below.</b>	Indicators for environmental impacts	Describe and identify anticipated and actual significant environmental impacts, both positive and negative from all sources (stationary and mobile) during normal and abnormal/emergency conditions, that may result from the construction and operations of the Project Activity, within and outside the project boundary, over which the Project Owner(s) has/have control.	Describe the applicable national regulatory requirements /legal limits / voluntary corporate limits related to the identified risks of environmental impacts.	If no environmental impacts are anticipated, then the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as <b>Not Applicable</b>	If environmental impacts exist, but are expected to be in compliance with applicable national regulatory /stricter voluntary corporate requirements and will be within legal/voluntary corporate limits by way of plant design and operating principles, then the Project	If negative environmental impacts exist that will not be in compliance with the applicable national legal/regulatory requirements or are likely to exceed legal limits, then the Project Activity is likely to cause	Describe the operational controls and best practices, focusing on how to implement and operate the Project Activity, to reduce the risk of impacts that have been identified as <b>'Harmful'</b> at least to a level that is in compliance with applicable legal/regulatory or requirements or industry best practice or stricter	Describe the Program of Risk Management Actions (refer to Table 3), focusing on additional actions (e.g., installation of pollution control equipment) that will be adopted to reduce or eliminate the risk of impacts that have been identified as <b>Harmful</b> .	Describe the monitoring approach and the parameters (KPI) to be monitored for each impact irrespective of whether it is harmless or harmful. The frequency of monitoring to be specified as well including the data source.	-1 0 +1	Confirm the score of environmental impact of the project with respect to the aspect and its monitored value in relation to legal /regulatory limits (if any) including basis of conclusion.	Describe how the GCC Verifier has assessed that the impact of the Project Activity against the particular aspect and in case of "harmful impacts" how has the project adopted Risk Mitigation Action Plans to mitigate the risks of negative environmental impacts to levels that are unlikely to cause any harm as well as the net positive impacts of the project with respect to the most likely baseline alternative.

<sup>8</sup> sourced from the CDM SD Tool and the sample reports are available ( <https://www4.unfccc.int/sites/sdcmicrosite/Pages/SD-Reports.aspx> )

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					Activity is unlikely to cause any harm (is safe) and shall be indicated as <b>Harmless</b> /if the project has an positive impact on the environment mark it as "harmless" as well.	harm (may be un-safe) and shall be indicated as <b>Harmful</b>	voluntary corporate requirements					
<b>Reference to paragraphs of Environmental and Social Safeguards Standard</b>		Paragraph 12 (a)	Paragraph 13 (c)	Paragraph 13 (d) (i)	Paragraph 13 (d) (ii)	Paragraph 13 (d) (iii)	Paragraph 13 (e) (i)	Paragraph 13 (e) (ii)	Paragraph 12 (c) and Paragraph 13 (f)	Paragraph 22		Paragraph 24 and Paragraph 26 (a) (i)
<b>Environment - Air</b>	SO <sub>x</sub> emissions (EA01)	The project activity does not cause SO <sub>x</sub> emissions. The project activity avoids SO <sub>x</sub> emissions that would have been generated by the similar activity in the baseline, where the fuel used are fossil fuels.	National Ambient Air Quality Standards as notified by CPCB.	Not Applicable	-	-	Not applicable.	Not applicable.	No action required	0	The Project proponent confirms that the project activity will not cause SO <sub>x</sub> emissions.	There will be no SO <sub>x</sub> emissions or risk from the project being it Solar power project. However, the Assessment team feels that project activity does have an unquantifiable positive impact on SO <sub>x</sub> emissions as otherwise same amount of electricity would have been generated in baseline thermal power plants and that would have emitted some amount of SO <sub>x</sub> emissions. The Project Owner has not wished to identify the same and being

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												it an overall positive impact, accepted by the assessment team
<i>NO<sub>x</sub> emissions (EA02)</i>	The project activity does not cause NO <sub>x</sub> emissions. The project activity avoids NO <sub>x</sub> emissions that would have been generated by the similar activity in the baseline, where the fuel used are fossil fuels.	National Ambient Air Quality Standards as notified by CPCB.	Not Applicable	-	-	Not applicable	Not applicable-	No action required	0	The Project proponent confirms that the project activity will not cause NO <sub>x</sub> emissions.	There will be no NO <sub>x</sub> emissions or risk from the project being it Solar power project. However, the Assessment team feels that project activity does have an unquantifiable positive impact on NO <sub>x</sub> emissions as otherwise same amount of electricity would have been generated in baseline thermal power plants and that would have emitted some amount of NO <sub>x</sub> emissions. The Project Owner has not wished to identify the same and being it an overall positive impact, accepted by the assessment team	
<i>CO<sub>2</sub> emissions (EA03)</i>	Project Activity generates Electricity from renewable source. Hence no CO <sub>2</sub> emissions from the project activity.  In the absence of project fossil fuel based power plants will be used which produce more CO <sub>2</sub> emissions to generate electricity.	National Ambient Air Quality Standards as notified by CPCB.	-	Harmless	-	Not applicable	Not applicable-	Emission reductions in tCO <sub>2</sub> e per year monitored through ER sheet on a monthly basis using the emission factor	+1	Project owner concludes that, the project does not generate CO <sub>2</sub> as the power is generated using renewable energy CO <sub>2</sub> Emission reduction will be measured based on the electricity generated using	In absence of the project activity, the electricity generated from the project activity would be generated in the Indian Grid by power plants that are predominantly fossil-fuel	

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											<p>the emission reduction factor</p> <p>based, thereby leading to CO<sub>2</sub> emissions. The generated electricity by the project activity is based on the renewable energy source, which causes no CO<sub>2</sub> emissions. The project will thus have a positive impact by reducing measurable amount of CO<sub>2</sub> emissions. The project is expected to reduce CO<sub>2</sub> emission throughout the crediting period. As no negative environmental impacts are anticipated, the parameter is evaluated as harmless and scored a +1 by the project owner. This is accepted by the project verification team.</p> <p>This amount of emission reduction will be monitored as per monitoring plan in the PSF section B.7.1 and assessment of the same is provided section D.3.7 of the Project Verification Report.</p>
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<p><i>CO emissions (EA04)</i></p>	<p>The project activity does not generate any CO emissions within or outside the project boundary.</p> <p>In the absence of project activity, there is a possibility of CO emissions.</p>	<p>National Ambient Air Quality Standards as notified by CPCB.</p>	<p>Not Applicable</p>	<p>-</p>	<p>-</p>	<p>No action required</p>	<p>Not applicable</p>	<p>No action required</p>	<p>0</p>	<p>PP concludes that, there is no CO emissions are observed during operation of plant.</p>	<p>There will be no CO emissions or risk from the project being it Solar power project. However, the Assessment team feels that project activity does have an unquantifiable positive impact on CO emissions as otherwise same amount of electricity would have been generated in baseline thermal power plants and that would have emitted some amount of CO emissions. The Project Owner has not wished to identify the same and being it an overall positive impact, accepted by the assessment team.</p>
<p><i>Suspended particulate matter (SPM) emissions (EA05)</i></p>	<p>Executed Project activity does not produce any SPM emissions except during construction.</p>	<p>National Ambient Air Quality Standards as notified by CPCB.</p>	<p>Not Applicable</p>	<p>-</p>	<p>-</p>	<p>No action required</p>	<p>Not applicable</p>	<p>No action required</p>	<p>0</p>	<p>PP concludes that, no SPM emissions produced from the Project activity during Operational phase.</p> <p>Negligible amount of emissions during construction.</p>	<p>There will be no SPM emissions or risk from the project being it Solar power project.</p>

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<p><i>Fly ash generation (EA06)</i></p>	<p>Fly ash emissions are not produced from this project activity either within or outside the project boundary. In the absence of project activity, conventional power plant produce Fly ash emissions</p>	<p>National Ambient Air Quality Standards as notified by CPCB.</p>	<p>Not Applicable</p>	<p>-</p>	<p>-</p>	<p>Not applicable</p>	<p>Not applicable</p>	<p>No action required-</p>	<p>0</p>	<p>PP confirms that, in the baseline scenario (grid) some of the fossil fuel power plants produce Fly ash emissions, on which data is not available.</p>	<p>There will be no Fly Ash emissions or risk from the project being it Solar power project. However, the Assessment team feels that project activity do have an unquantifiable positive impact on Fly ash emissions as otherwise some amount of electricity would have been generated in baseline from COAL based thermal power plants and that would have emitted some amount of Fly Ash emissions. The Project Owner has not wished to identify the same and being it an overall positive impact, accepted by the assessment team.</p>
<p><i>Non-Methane Volatile Organic Compounds (NMVOCs) (EA07)</i></p>	<p>The solar plant does not cause any NMVOC emission</p>	<p>National Ambient Air Quality Standards as notified by CPCB</p>	<p>Not applicable</p>	<p>-</p>	<p>-</p>	<p>Not applicable</p>	<p>Not applicable</p>	<p>No action required</p>	<p>0</p>	<p>PP confirms that the project activity does not emit any NMVOCs and solar energy projects have been classified as white category. An acknowledgment from MOEF for White Category industry is enclosed</p>	<p>There will be no NMVOC emissions or risk from the project being it Solar power project. However, the Assessment team feels that project activity does have an unquantifiable positive impact on NMVOC emissions as otherwise same amount of</p>

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												electricity would have been generated in baseline thermal power plants and that would have emitted some amount of NMVOC emissions. The Project Owner has not wished to identify the same and being it an overall positive impact, accepted by the assessment team.
	<i>Odor (EA08)</i>	The project does not emit any odor.	National Ambient Air Quality Standards as notified by CPCB	Not applicable	-	-	Not applicable	Not applicable	No required action		PP confirms that the project activity does not emit any odor.	There is no risk of odor emission as project activity is a Solar power plant
	<i>Noise Pollution (EA09)</i>	The project does not produce any noise.	Noise (Regulation and control Rules 2000 amended in 2010)	Not applicable	-	-	Not applicable	Not applicable	No required action		PP confirms that the project activity does not produce any noise.	There is no risk of Noise pollution as project activity is a Solar power plant.
<b>Environment - Land</b>	<i>Solid waste Pollution from Plastics (EL-01)</i>	No plastic waste is generated by the project activity	Plastic Waste (Management and Handling) Rules, 2016	Not applicable	-	-	Not applicable	Not applicable	No required action		The project does not generate any plastic waste. Thus PP concludes that there is no solid waste pollution from plastics.	There will be no major plastic waste generated due to the project activity.
	<i>Solid waste Pollution from Hazardous</i>	There is no possibility of waste generation from hazardous wastes on year to year basis. Even otherwise	Hazardous and other Wastes (Management)	Not applicable	-	-	Not applicable	Not applicable	No required action		The project does not generate any hazardous waste on year to year basis. Even	The project has not generated hazardous waste till now.

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<p>s wastes(E L02)</p>	<p>if any waste is generated at site, PO has a standard procedure for disposal of such waste. Whenever such waste is generated, the same is stored at designated place at site and disposed off through approved PCB vendors.</p>	<p>ment and Transboundary Movement) Rules, 2016</p>								<p>otherwise if any waste is generated at site, PO has a standard procedure for disposal of such waste. Whenever such waste is generated, the same is stored at designated place at site and disposed off through approved PCB vendors on yearly basis. Thus doesn't harm environment.</p>	<p>PO has a standard procedure for disposal of such waste. Whenever such waste is generated, the same is stored at designated place at site and disposed off through approved PCB vendors on yearly basis.</p>
<p>Solid waste Pollution from Bio-medical wastes (EL03)</p>	<p>No bio medical waste is generated by the project activity</p>	<p>Biomedical Waste Management Rules 2016(Movement) Rules, 2016</p>	<p>Not applicable</p>	<p>-</p>	<p>-</p>	<p>Not applicable</p>	<p>Not applicable</p>	<p>No action required</p>		<p>Project proponent confirms that the project activity does not generate any biomedical waste. Thus there is no solid waste pollution from biomedical wastes</p>	<p>No risk identified</p>
<p>Solid waste Pollution from E-wastes (EL04)</p>	<p>There is a probability of project generating E-wastes ( spares of SCADA system and inverters) .</p>	<p>E-waste (Management and Handling) Rules 2011</p>	<p>-</p>	<p>Harmless</p>	<p>-</p>	<p>It will be Collected, stored at designated place and it is recycled/re-furnished / reused /disposed properly through authorized vendors and comply with the rules of E Waste disposal guidelines</p>	<p>Not applicables</p>	<p>Solid waste(E-waste) quantity numbers) reused/recycled/refurnished or disposed per year  Monitored through records maintained or form 2 of waste management</p>	<p>+1</p>	<p>PP concludes that, the solid waste from E-wastes will be collected, segregated and reused/recycled/refurbished/ and disposed properly.  Hence, E-waste will not cause any harm to environment</p>	<p>The e-waste generated by the Project activity viz. Spares of SCADA system, inverters, and other electrical and electronic parts involved in the project or post their useful life will be disposed as per prevailing laws and regulations i.e. E-Waste (Management) Rules, 2011.</p>

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												Monitoring plan is provided in section B.7.2 of the PSF to ensure the compliance with the regulations in place. The same will be monitored throughout the crediting period by the project owner by means of records of e-waste re-used/recycled/re-furbished or disposal from the project activity. The same was confirmed during the onsite assessment /30/ and accepted by the verification team. The monitoring plan provided is provided in section B.7.2 is appropriate and assessment of the same is provided section D.3.7 of the Project Verification Report.
<i>Solid waste Pollution from Batteries (EL05)</i>	The project activity will generate solid waste from batteries, at the end of life of batteries.	Battery Waste Management rules-2016	Not Applicable	-	-	Used batteries will be returned to the battery manufacturers, who will recycle them-	Not Applicable	No required action		PP concludes that the batteries will be returned to the manufactures as a part of Battery Management Rules.	No risk identified	
<i>Solid waste Pollution from end</i>	There is no possibility of waste generation from end of life products on year to	Solid Waste Management	Not Applicable	-	-	Not applicable	Not applicable	No required action		PP concludes that the project will not generate any solid waste	PO has a standard procedure for disposal of such	

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	<p>of life products/ equipment (EL06)</p>	<p>year. Even otherwise if any waste is generated at site, PO has a standard procedure for disposal of such waste. Whenever such waste is generated, the same is stored at designated place at site and disposed off to approved PCB vendors.</p>	<p>Rules, 2016</p>									<p>from end of life products / equipment during operational phase on year to year basis. Even otherwise if any waste is generated at site, PO has a standard procedure for disposal of such waste. Whenever such waste is generated, the same is stored at designated place at site and disposed off to approved PCB vendors.</p>	<p>waste. Whenever such waste is generated, the same is stored at designated place at site and disposed off through approved PCB vendors on yearly basis.</p>
	<p>Soil Pollution from Chemicals (including Pesticides, heavy metals, lead, mercury) (EL07)</p>	<p>The project does not use any chemicals (including pesticides, heavy metals ,lead, mercury)</p>	<p>Not applicable</p>	<p>Not applicable</p>	<p>-</p>	<p>-</p>	<p>Not applicable</p>	<p>Not applicable</p>	<p>No action required</p>		<p>PP confirms that the project will not generate any soil pollutant chemicals, including pesticides, heavy metals, lead and mercury</p>	<p>No significant soil pollution from chemicals during operation phase of the project activity. However, in the baseline scenario (grid) some of the fossil fuel power plants may have polluted soil from chemicals on which data is not available and can't be quantified and therefore the emission reductions cannot be quantified and therefore this parameter will not be scored.</p>	
	<p>land use change (change)</p>	<p>Project activity is established in non crop land and non</p>	<p>The Telangana</p>	<p>Not Applicable</p>	<p>-</p>	<p>-</p>	<p>Not applicable-</p>	<p>Not applicable-</p>	<p>- No action required</p>		<p>Project activity is located in non - crop/ non-forest</p>	<p>No risk identified</p>	

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	<i>from cropland/forest land to project land</i> (EL08)	forest land, so there is no change in land use.	Agricultural Land (Conversion for Non Agricultural Purposes) Act, 2006								area. Hence, the question of change in land use does not arise.	
<b>Environment - Water</b>	<i>Reliability / accessibility of water supply</i> (EW01)	Not Applicable	Not applicable	Not applicable	-	-	Not applicable	Not applicable	No required action		Project activity does not require water except for drinking and sanitary purposes	No risk identified
	<i>Water Consumption from ground and other sources</i> (EW02)	Ground water will be utilised for cleaning of modules at the site.		Not Applicable (No Actions Required)	-	-	Not applicable	Not applicable	No required action		PP confirms that there is no major impact from the project activity, by water consumption from ground and other sources.	No risk identified
	<i>Generation of wastewater</i> (EW03)	Not Applicable	The Water (Prevention & Control of Pollution) Act, 1974	Not applicable	-	-	Not applicable	Not applicable	No required action		The project activity does not generate any wastewater, except water used for sanitary purposes, which is harmless.	No risk identified
	<i>Wastewater discharge without/with insufficient treatment</i> (EW04)	Not Applicable	The Water (Prevention & Control of Pollution) Act, 1974	Not applicable	-	-	Not applicable	Not applicable	No required action		The project activity does not discharge any wastewater other than water used for sanitary purposes, which is harmless.	No risk identified
	<i>Pollution of Surface, Ground and/or Bodies of water</i> (EW05)	Not Applicable	The Water (Prevention & Control of Pollution) Act, 1974	Not applicable	-	-	Not applicable	Not applicable	No required action		The project activity does not pollute surface/ground and/or bodies of water.	No risk identified

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	<i>Discharge of harmful chemicals like marine pollutants / toxic waste (EW06)</i>	Not Applicable	The Water (Prevention & Control of Pollution) Act, 1974	Not applicable	-	-	Not applicable	Not applicable	No required action		The project activity does not discharge any harmful chemicals or toxic waste	
<b>Environment – Natural Resources</b>	<i>Conserving mineral resources (ENR01)</i>	The project activity generates electricity from renewable source i.e., using solar, so we conserve natural resources as, in the baseline scenario, electricity is generated by using fossil fuels.	Mines and Minerals (Development and Regulation) Amendment Act, 2015	Not Applicable	-	-	Not applicable	Not applicable	No required action	0	PP concludes that, project activity does not use any mineral, as the electricity is generated based on renewable sources	No risk identified
	<i>Protecting / enhancing plant life (ENR02)</i>	Not Applicable	There are no regulations	Not Applicable	-	-	Not applicable	Not applicable	No required action		Project activity is implemented in barren land. There were no trees at the time of implementation.	No risk identified
	<i>Protecting / enhancing species diversity (ENR03)</i>	Not Applicable	Environment protection Act, 1986.	Not Applicable	-	-	Not applicable	Not applicable	No required action		The protect or enhance species diversity	No risk identified
	<i>Protecting / enhancing forests (ENR04)</i>	Not applicable	The Forest (Conservation) Act, 1980 & 1981	Not applicable	-	-	Not applicable	Not applicable	No required action		The project proponent confirms that the project is located in a barren land,	No risk identified
	<i>Protecting / enhancing other depletable natural resources (ENR05)</i>	Not applicable	Mines and Minerals (Development and regulation) Act, 1957	Not applicable	-	-	Not applicable	Not applicable	No required action		Project proponent confirms that the project will not use any natural resources in the project activity	No risk identified
	<i>Conserving energy (ENR06)</i>	Not applicable	Energy Conserva	Not applicable			Not applicable	Not applicable	No required action		As the project is a renewable energy project, it	No risk identified

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			tion Act, 2001								is already conserving energy, as in the absence of the project, energy would have been generated using fossil fuel.	
<i>Replacing fossil fuels with renewable sources of energy (ENR07)</i>	This project activity replace fossil fuels with solar energy, which is a renewable energy source for the generation of electricity.	There are no Regulations at present,	-	Harmless	-	Not applicable-	Not applicable	Quantity of net electricity generated per year replacing fossils fuel., evidenced by Joint Meter Reading	+1	Project proponent concludes that the Project activity will Supply Energy to the grid using Renewable Source of energy.	In absence of the project activity, the equivalent amount of electricity would be generated from the operation of grid-connected power plants, which is GHG intensive. The project activity generates and supplies renewable solar sourced based electricity to the grid, where it replaces fossil fuel source-based electricity, thus the project activity is unlikely to cause any harm and is assessed as harmless.  As the project activity will have a positive impact by replacing fossil fuels with renewable sources of energy, the parameter is evaluated as harmless and scored a +1 by the project owner. This is	

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												accepted by the project verification team.  This amount of emission reduction will be monitored as per monitoring plan in the PSF section B.7.1 and assessment of the same is provided section D.3.7 of the Project Verification Report.
	<i>Replacing ODS with non-ODS refrigerants (ENR08)</i>	Not Applicable	There are no regulations at present	Not applicable			Not applicable	Not applicable-	No action required		As this is a renewable energy project replacement of ODS with non-ODS refrigerants does not arise	No risk identified
<b>Net Score:</b>			<b>+3</b>									
<b>Project Owner's Conclusion in PSF:</b>			The Project Owner confirms that the Project Activity will not cause any net harm to Environment.									
<b>GCC Project Verifier's Opinion:</b>			The GCC Verifier certifies that the Project Activity is not likely to cause any net harm to the environment...									

Appendix 6. Social safeguard assessment

Impact of Project Activity on		Information on Impacts, Do-No-Harm Risk Assessment and Establishing Safeguards						Project Owner's Conclusion		GCC Project Verifier's Conclusion  (To be included in Project Verification Report only)	
		Description of Impact (positive or negative)	Legal requirement /Limit, Corporate policies / Industry best practice	Do-No-Harm Risk Assessment (choose which ever is applicable)			Risk Mitigation Action Plans (for aspects marked as Harmful)	Performance indicator for monitoring of impact.	Ex-ante scoring of environmental impact	Explanation of the Conclusion	3 <sup>rd</sup> Party Audit
				Not Applicable	Harmless	Harmful					
<b>Social Aspects on the identified categories<sup>9</sup> indicated below.</b>	Indicators for social impacts	Describe and identify actual and anticipated impacts on society and stakeholders, both positive or negative, from all source during normal and abnormal/emergency conditions that may result from constructing and operating of the Project Activity within or outside the project boundary, over which the project Owner(s) has/have control	Describe the applicable national regulatory requirements / legal limits or organizational policies or industry best practices related to the identified risks of social impacts	If no social impacts are anticipated, then the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as <b>Not</b>	If social impacts exist, but are expected to be in compliance with the applicable national regulatory requirements/ stricter voluntary corporate limits by way of plant	If negative social impacts exist that will not be in compliance with the applicable national legal/regulatory requirements or are likely to exceed legal limits then the	Describe the operational or management controls that can be implemented as well as best practices, focusing on how to implement and operate the Project Activity, to reduce the risk of impacts that have been identified as <b>Harmful</b> .	Describe the monitoring approach and the parameters (KPI) to be monitored for each impact irrespective of whether it is harmless of harmful. The frequency of monitoring to be specified as well. Monitoring parameters can be quantitative or qualitative in	-1 0 +1	Confirm the score of the social impacts of the project with respect to the aspect and its monitored value in relation to legal/regulatory limits (if any) including basis of conclusion	Describe how the GCC Verifier has assessed that the impact of the Project Activity against the particular aspect and in case of "harmful impacts" how has the project adopted Risk Mitigation Action Plans to mitigate the risks of negative environmental impacts to levels that are unlikely to

<sup>9</sup> sourced from the CDM SD Tool and the sample reports are available ( <https://www4.unfccc.int/sites/sdcmicrosite/Pages/SD-Reports.aspx> )

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				<b>Applicable</b>	design and operating principles then the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as <b>Harmless</b> , project having positive impact on society wrt. To the BAU / baseline scenario must also mark their aspect as "harmless "	Project Activity is likely to cause harm and shall be indicated as <b>Harmful</b>		nature along with the data source			cause any harm as well as the net positive impacts of the project with respect to the most likely baseline alternative.
<b>Reference to paragraphs of Environmental and Social Safeguards Standard</b>		Paragraph 12 (a)	Paragraph 13 (c)	Paragraph 13 (d) (i)	Paragraph 13 (d) (ii)	Paragraph 13 (d) (iii)	Paragraph 13 (e) (i)	Paragraph 12 (c) and Paragraph 13 (f)	Paragraph 23		Paragraph 24 and Paragraph 26 (a) (i)
<b>Social - Jobs</b>	Long-term jobs (> 10 year) created/ lost (SJ01)	There is a positive impact of the project activity on the creation of long-term jobs during its operational time.	There are no Regulations at present	-	Harmless	-	No action required	Number of persons employed(> 1 year) and monitored per year through employment records	+1	Though there is no mandatory law PP has an internal goal of improving the local economy by providing direct and indirect employment opportunities and Economic value addition.	The project activity will lead to long term employment generation during the operational phase which can be verified from the employment records maintained on site for each project activity. The monitoring approach is discussed in section D.3.7 of this report.  The aforementioned documents can

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											<p>be verified during issuance verification in accordance with the monitoring plan in the PSF section B.7.1. and E.2.</p> <p>The creation of permanent jobs is a positive impact created by the project activity and thus this impact is assessed as harmless. An appropriate monitoring plan has been put in place to monitor the parameter for the impact, hence the scoring of +1 has found acceptable by the team.</p>
	<p><i>New short-term jobs (&lt; 1 year) created/lost (SJ02)</i></p>	<p>There is a positive impact of the project activity on the creation of short-term jobs for local worker during its construction phase and operational phase.</p>	<p>There are no Regulations at present</p>	-	Harmless	-	No action required	Number of persons employed(< 1 year) per year	+1	<p>Though there is no mandatory law PP has an internal goal of improving the local economy by providing short term employment and employment and Economic value addition.</p>	<p>The project activity has led to short term employment generation during the construction and the operational phase which can be verified from the employment records maintained on site for each project activity. The monitoring approach is discussed in section D.3.7 of this report.</p> <p>The aforementioned</p>

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											<p>documents can be verified during issuance verification in accordance with the monitoring plan in the PSF section B.7.1. and E.2.</p> <p>The creation of temporary jobs is a positive impact created by the project activity and thus this impact is assessed as harmless. An appropriate monitoring plan has been put in place to monitor the parameter for the impact, hence the scoring of +1 has found acceptable by the team.</p>
	<i>Sources of income generation increased / reduced (SJ03)</i>	The project activity creates employment for people through infrastructure development in the nearby project area which will increase income of people.	There are no regulations at present	Not Applicable	-	-	No action required	Not applicable	0	PP confirms that, the project activity will create jobs for people through infrastructure development which will increase in source of income.	No risk identified
	<i>Avoiding discrimination when hiring people from different race, gender, ethnics, religion, marginalized</i>	The project will provide employment to all without discrimination based on gender,	Article 16 of Constitution of India	Not applicable	-	-	No action required	Not applicable	0	As the constitution provides for equal opportunity to all in employment, PP confirms that the project will provide	No risk identified

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	<i>groups, people with disabilities (SJ04)</i>  ( <i>human rights</i> )	ethnicity, religion, etc.								employment without discrimination..	
<b>Social - Health &amp; Safety</b>	<i>Disease prevention (SHS01)</i>	There is no disease prevention through the project activity	The Factories Act, 1948	Not applicable	-	-	No action required	Not applicable		PP confirms that the project will maintain proper hygienic condition to protect the employees.	No risk identified
	<i>Occupational health hazards (SHS02)</i>	Like in any project, physical stress is the only occupational health hazard.	The Factories Act, 1948	Not applicable	-	-	No action required	Not applicable		PP confirms that the project will provide good working environment to employees so that they are not exposed to any occupational health hazards.	No risk identified
	<i>Reducing / increasing accidents/incidents/fatality (SHS03)</i>	Project activity will strive to reduce the accidents during construction and operational phase by its EHS policy.	There are no specific Regulations on this aspect	-	Harmless	-	As per the Factories Act, a written notice should be given to the Factories Inspector within 72 hours of the occurrence of accident and acknowledgment taken	Records of major accidents/incidents rate in the year monitored through EHS records  For this parameter trainings are also provide for which Training records are maintained	+1	PP has an strict EHS policy which aims to reduce accidents and ensure employeehealth and safety,  Employees will be trained in operation and maintenance aspects of solar plant and will be provided with necessary safety equipment to avoid accidents.	As per the PSF /1/, records of major accidents/incidents in a year will be monitored through EHS records. The project owner shall provide the job-related Health and safety trainings to its employees on regular interval, and the number of accidents occurred can be verified at the time on emission reduction verification in accordance with the monitoring plan in the PSF section B.7.1. and E.2. The

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											<p>monitoring approach is discussed in section D.3.7 of this report.</p> <p>The impact created by the project is assessed as harmless. An appropriate monitoring plan has been put in place to monitor the parameter for the impact, hence the scoring of +1 has found acceptable by the team.</p>
	<i>Reducing / increasing crime (SHS04)</i>	The project doesn't reduce or increase the crime.	Indian Penal Code deals with crime and punishment	Not applicable	-	-	No action required	Not applicable		Since the project activity will increase the sources of income of the people and develop infrastructure in and around the area, crime rate will come down. No credit is claimed	No risk identified
	<i>Reducing / increasing food wastage (SHS05)</i>	The project activity doesn't involve in reducing/increasing food wastage	Food Waste (Reduction) Act, 2018	Not applicable	-	-	No action required	Not applicable		The project will provide suitable place for employees to store the lunch and dine to avoid any contamination and wastage. Food wastage is not anticipated.	No risk identified
	<i>Reducing / increasing indoor air pollution (SHS06)</i>	The project activity doesn't involve in reducing/increasing indoor air pollution	The Air (Prevention & Control of Pollution) Act, 1981	Not applicable	-	-	No action required	Not applicable		Project proponent confirms that the solar energy projects are installed in open and do not cause any air pollution.	No risk identified

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	<p><i>Efficiency of health services (SHS07)</i></p>	<p>The project activity conducts medical camps, distribution of medicines and vaccines for the stakeholders which will contribute to rural or community welfare in terms of efficiency of health services.</p>	<p>There are no statutory regulations on efficiency of health services in India at present</p>	<p>-</p>	<p>Harmless</p>	<p>-</p>	<p>No action required</p>	<p>Number of health camps conducted. Vaccines distributed Medicine distributed</p> <p>These will be monitored once in four years</p>	<p>+1</p>	<p>Project proponent will conduct health camps for people in the nearby villages.</p>	<p>The project owner will organize medical camps including distribution of medicines and vaccines for the local people. The number of health camps conducted, vaccines distributed, and Medicine distributed will be monitored once in four years.</p> <p>The same could be verified during issuance verification in accordance with the monitoring plan in the PSF section B.7.1. and E.2</p> <p>The parameter is a positive impact created by the project activity and thus this impact is assessed as harmless. An appropriate monitoring plan has been put in place to monitor the parameter for the impact, hence the scoring of +1 has found acceptable by the team.</p>
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	<i>Sanitation and waste management (SHS08)</i>	Not Applicable	Hazardous and other Wastes (Management and Trans boundary movement) Amendment Rules, 2016	Not applicable	-	-	No action required	Not applicable		The project proponent confirms that the project will ensure proper disposal of wastes as per Central Pollution Control Board guidelines ;Septic tank will be provided with onsite treatment before disposal. Toilets, septic tanks and waste collection areas will be located away from natural drainage channels.	No risk identified
<b>Social - Education</b>	<i>specialized training / education to local personnel (SE01)</i>	The Project proponent will provide skill development training to local youths mainly on subjects relating to the project. This will have a positive impact on the project as it will create a reservoir of talents employable when need arises	There are no regulations at present	-	Harmless	-	Training will be provided to local youths to improve their skillset, on operation and maintenance of project;; Occupational safety  First aid, accident reporting etc.	Number of persons trained over entire crediting period  Training attendance sheet	+1	Project proponent Confirms that, training will be provided to local youths to upgrade their skills.	As per the PSF/1/ and interview with the project owner/30/, the project owner would impart training to the local youth periodically so as to increase the skill set of on operation and maintenance of project; occupational safety, first aid, accident reporting etc. The monitoring approach is discussed in section D.3.7 of this report.  The same could be verified from the training records and interviews with the employees to confirm the

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											<p>same during issuance verification in accordance with the monitoring plan in the PSF section B.7.1. and E.2</p> <p>The parameter is a positive impact created by the project activity and thus this impact is assessed as harmless. An appropriate monitoring plan has been put in place to monitor the parameter for the impact, hence the scoring of +1 has found acceptable by the team.</p>
<i>Educational services improved or not (SE02)</i>	The project activity under CSR program improves educational services as the requirement of nearby communities and fund availability	CSR policy of the company	Not Applicable	-	-	No action required	Not applicable	0	Project proponent will take initiative under CSR to improve educational services to the local communities	No risk identified	
<i>Project-related knowledge dissemination effective or not (SE03)</i>	Project provides job-related training and thereby impart knowledge to existing employees and new recruits	HR policy of the company	Not applicable	-	-	Training operation & maintenance of solar panels occupational safety, like fire safety, first aid, emergency procedures, risk assessment, accident reporting procedure welfare	Not Applicable		Project proponent confirms that job-related training will be provided to existing employees and new recruits to improve their knowledge base	No risk identified	

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							activities like, safe use of workplace tools, machinery, equipment etc.				
<b>Social - Welfare</b>	<i>Improving/ deteriorating working conditions (SW01)</i>	Not applicable	EHS and HR policy of the company	Not applicable	-	-	No action required	Not applicable		Since the project has a good EHS and HR policy and offers good working environment, there will be no deterioration in working condition.	No identified risk
	<i>Community and rural welfare (indigenous people and communities) (SW02)</i>	By initiating various programs the project activity enables welfare of the rural community.	CSR policy of the company	Not applicable	-	-	No action required	Not applicable	0	PP confirms that, the project will contribute towards welfare of the rural community.  Welfare activities will be organized as per requirement of the community.	No identified risk
	<i>Poverty alleviation (more people above poverty level) (SW03)</i>	By generating direct and indirect employment opportunities, the project activity contributes to the efforts of poverty alleviation.	There are no Regulations at present	Not Applicable	-	-	No action required	Not applicable	0	PP concludes that, the Poverty alleviation will occur due to providing direct and indirect employment opportunities.	No identified risk
	<i>Improving / deteriorating wealth distribution/ generation of income and assets (SW04)</i>	Not Applicable as the project activity only increases the income sources but cannot predict improving/deteriorating wealth distribution/generation of income and assets.	There are no regulations at present	Not applicable	-	-	No action required	Not applicable	0	Since the project is an equal opportunity employer, it will provide employment to all based on the need and suitability. This action will result in generation of income sources	No identified risk
	<i>Increased or / deteriorating municipal revenues (SW05)</i>	Taxes payable by the company and the Professional Taxes payable by employees improves the amount of taxes		Not applicable	-	-	Not applicable	Not applicable	0	Project proponent confirms that the company has to pay tax to concern local body and the employees have to pay professional	No identified risk

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		paid but cannot predict increased/deteriorating municipal revenue.								tax, which will improve the revenue of municipal corporation. Moreover, the small shops coming up in nearby areas due to this project will also contribute to the revenue of municipal corporation	
<i>Women's empowerment (SW06)</i> <i>(human rights)</i>	Women are not employed at the project activity as it is located in a far remote location.	There is no specific regulation requiring employment of women even in remote location at present	Not Applicable	-	-	Not applicable	Not applicable -			PP concludes that women are not employed as the project is in a remote location.	No risk identified
<i>Reduced / increased traffic congestion (SW07)</i>	Not Applicable	Nil	Not applicable	-	-	Not applicable	Not applicable			Due to project activity traffic may increase in the area. However, since the project is located in a remote area, it will not create traffic congestion.	No risk identified
<i>Exploitation of Child labour (SW08)</i> <i>(human rights)</i>	project does not employ child labour as it is prohibited by law	The Child Labour (Prohibition and Regulation) Act, 1986	Not applicable	-	-	Not applicable	Not applicable			PP confirms that the project will not employ child labour in any of the project activity	No risk identified
<i>Minimum wage protection (SW09)</i> <i>(human rights)</i>	Employees are paid wages confirming to the Minimum Wages Act.	The Minimum Wages Act, 1948	Not applicable	-	-	Not applicable	Not applicable			Project proponent confirms that all the employees will be paid wages and salaries confirming to the rates stipulated for that category by the Act	No risk identified
<i>Abuse at work place (with specific reference to women and people with</i>	The extant laws prevent, prohibit and in case of occurrence redressal of any	Sexual Harassment of Women at Workplace	Not applicable	-	-	Not applicable	Not applicable			Project proponent confirms that while women are not employed in the project location,	No risk identified

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<p><i>special disabilities / challenges</i> )  (human rights) (SW10)</p>	<p>abuse of women, scheduled caste and tribe and differently abled employees at work</p>	<p>(Prevention, Prohibition and Redressal) Act, 2013  Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act, 1989  The Rights of Persons with Disability Act, 2016</p>							<p>employees belonging to SC and ST and differently abled employees will be treated like any other employees.</p>	
<p><i>Other social welfare issues</i> (SW11)</p>	<p>Not applicable</p>	<p>Not applicable</p>	<p>Not applicable</p>	<p>-</p>	<p>-</p>	<p>Not applicable</p>	<p>Not applicable</p>		<p>Not applicable</p>	<p>No risk identified</p>
<p><i>Avoidance of human trafficking and forced labour</i>  (human rights) (SW12)</p>	<p>IPC prohibits recruiting, transporting, harboring, transferring a person for exploitation and slavery,</p>	<p>Indian Penal Code, 1860</p>	<p>Not applicable</p>	<p>-</p>	<p>-</p>	<p>Not applicable</p>	<p>Not applicable</p>		<p>Project proponent confirms that the project does not employ or keep any person in employment against their will</p>	<p>No risk identified</p>
<p><i>Avoidance of forced eviction and/or partial physical or economic displacement of IPLCs</i>  (human rights) (CW13)</p>	<p>Project activity is located in a non-forest, non-agricultural and non-human settlement area.</p>	<p>The Right to Fair Compensation and Transparency in Land Acquisition Rehabilitation and Resettlement Act, 2013</p>	<p>Not applicable</p>	<p>-</p>	<p>-</p>	<p>Not applicable</p>	<p>Not applicable</p>		<p>The project is located in non-forest, non-agricultural and non-human settlement area and hence the question of forced eviction or displacement of people does not arise</p>	<p>No risk identified</p>
<p><i>Provisions of resettlement and human settlement displacement</i>  (human rights) (CW14)</p>	<p>Project activity is located in a non-human settlement area without necessitating any displacement.</p>	<p>The Right to Fair Compensation and Transparency in Land Acquisition Rehabilitation and Resettlement Act, 2013</p>	<p>Not applicable</p>	<p>-</p>	<p>-</p>	<p>Not applicable</p>	<p>Not applicable</p>		<p>As the project is located in a non-human settlement area, the question of resettlement of people does not arise</p>	<p>No risk identified</p>

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<b>Net Score:</b>	+5
<b>Project Owner’s Conclusion in PSF:</b>	The Project Owner confirms that the Project Activity will not cause any net harm to society.
<b>GCC Project Verifier’s Opinion:</b>	The GCC Verifier certifies that the Project Activity is not likely to cause any net harm to society.

Appendix 7. United Nations Sustainable Development Goals (SDG)

UN-level SDGs	UN-level Target	Declared Country-level SDG	Defining Project-level SDGs				GCC Project Verifier’s Conclusion (To be included in Project Verification Report only)	
			Project-level SDGs	Project-level Targets/Actions	Contribution of Project-level Actions to SDG Targets	Monitoring	Verification Process	Are Goal/Targets Likely to be Achieved ?
<p><b>Describe UN SDG targets and indicators</b></p> <p>See: <a href="https://unstats.un.org/sdqs/indicators/indicators-list/">https://unstats.un.org/sdqs/indicators/indicators-list/</a></p>	Describe the UN-level target(s) and corresponding indicator no(s)	Has the host country declared the SDG to be a national priority? Indicate Yes or No	Define project-level SDGs by suitably modifying and customizing UN/ Country-level SDGs to the project scope or creating a new indicator(s). Refer to previous column of guidance.	Define project-level targets/actions in line with the indicators chosen. Define the target date by which the project Activity is expected to achieve the project-level SDG target(s).	Describe and justify how actions taken under the Project Activity are likely to result in a direct positive effect that contributes to achieving the defined project-level SDG targets	Describe the monitoring approach and the monitoring parameters to be applied for each project-level SDG indicator and its corresponding target, frequency of monitoring and data source	Describe how the GCC Verifier has verified the claims that the project is likely to achieve the identified Project level SDGs target(s).	Describe whether the project-level SDG target(s) is likely to be achieved by the target date (Yes or no)

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<b>Goal 1: End poverty in all its forms everywhere</b>	NA	NA	NA	NA	NA	NA	NA	NA
<b>Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture</b>	NA	NA	NA	NA	NA	NA	NA	NA
<b>Goal 3. Ensure healthy lives and promote well-being for all at all ages</b>	<p>3.8</p> <p>Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and //vaccines for all</p> <p>Indicators: 3.8.1</p>	Yes	<p>Achieve health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for the local stakeholders and employees.</p>	<p>Ensure health care services local stakeholders and employees by organising/conducting health related activities like medical camp. Clinical camp, distribution of medicines and vaccines, etc.</p> <p>Target is to organise/conduct atleast one health related activity in four years</p>	<p>Organizing Health camps, other health related activities periodically for stakeholders to increase efficiency of health services</p> <p>or</p> <p>Providing group health insurance to the employees</p> <p>Above actions result in a direct positive effect that contributes to achieving the defined project-level SDG targets</p>	<p>Monitored through welfare activity records</p> <p>Number of health related activities conducted for stakeholders per four years</p> <p>Records of group health insurance, health camps conducted and EHS training programs</p>	<p>The project owner will organize medical camps including distribution of medicines and vaccines for the local people. The number of health camps conducted, vaccines distributed, and Medicine distributed will be monitored once in four years and should be verified during ER verification stage.</p> <p>The parameter being monitored in the monitoring plan is found adequate. This has been discussed under section D.3.7 of this report.</p>	Yes
<b>Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all</b>	<p>4.4</p> <p>By 2030, substantially increase the number of youth and adults who have relevant skills, including</p>	Yes	<p>Substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for</p>	<p>To train the, local youth and adults with relevant skills through trainings during the operational phases of the project for getting decent jobs and provide</p>	<p>Empowering local stakeholders with digital literacy and training on relevant technologies. This action contributes to</p>	<p>Monitored through records of trainings and workshops conducted,</p> <p>Number of persons trained over</p>	<p>The project owner will conduct training on relevant technologies to empower local stakeholders with digital literacy. Records of trainings and workshops conducted should be</p>	Yes

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	<p>technical and vocational skills, for employment, decent jobs and entrepreneurship</p> <p>Indicators: 4.4.1</p>		<p>employment, decent jobs and entrepreneurship, from local stakeholders</p>	<p>entrepreneurship opportunities.</p> <p>Target is to provide training to atleast three individuals over the crediting period.</p>	<p>achieving the defined project level SDG targets</p>	<p>the crediting period.</p>	<p>verified during the ER Verification stage along with the number of people trained over the crediting period.</p> <p>The parameter being monitored in the monitoring plan is found adequate. This has been discussed under section D.3.7 of this report.</p>	
<b>Goal 5. Achieve gender equality and empower all women and girls</b>	NA	NA	NA	NA	NA	NA	NA	NA
<b>Goal 6. Ensure availability and sustainable management of water and sanitation for all</b>	NA	NA	NA	NA	NA	NA	NA	NA
<b>Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all</b>	<p>7.2 “By 2030, Increase substantially the share of renewable energy in the global energy mix”</p> <p>Indicator 7.2.1.</p>	Yes	<p>To increase the share of renewable energy in the National energy mix.</p>	<p>Targeted net electricity MWH supplied to the grid by the project activity in a year throughout the crediting period.</p>	<p>The solar Power project contributes directly to achieving the</p> <p>SDG target because the project activity delivers renewable energy, which would otherwise be generated by fossil fuel dominated grid connect power generating plants.</p>	<p>The net electricity supplied to the grid by the project activity is continuously monitored through energy meter and recorded in JMRs on monthly basis.</p> <p>Amount of energy supplied to Grid per year</p>	<p>The project activity is a bundled solar power project with an installed capacity of 87 MW and it generates electricity of 133,042 MWh per year. The project activity was commissioned on 11/02/2016 (earliest start date of operation amongst the project activities involved in the bundle) and it continues to provide clean energy, thereby increasing the renewable</p>	Yes

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							<p>energy share in the total final energy consumption thereby complying with the SDG target 7.2. The same was duly verified by the verification team from commission reports/8/ and electricity generation records /11/.</p> <p>The generated power is continuously monitored by the energy meters installed at the substation and details of the same are included in the PSF/1/ and found to be acceptable.</p>	
<p><b>Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</b></p>	<p>8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment</p> <p>Indicators: 8.8.1</p>	Yes	<p>Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, and those in precarious employment in the project activity.</p>	<p>Ensure to protect labour rights and have no occupational injuries.</p> <p>To achieve "0" (zero) major injuries</p>	<p>By implementing strict EHS policy to protect labour rights and through safety trainings, and display of safety posters/guidelines at project sites.</p> <p>The above actions result in direct positive effects that contribute to project-level SDG</p>	<p>Monitored through EHS/safety records maintained</p> <p>Fatal and non-fatal occupational injuries per year</p> <p>or</p> <p>Number of major accidents/incidents per year</p>	<p>PO will ensure to protect labour rights by implementing strict EHS policy and through safety trainings, and display of safety posters/guidelines at project sites. The number of major accidents/incidents will be monitored through EHS records which should be verified during ER Verification stage.</p>	Yes

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							The parameter being monitored in the monitoring plan is found adequate. This has been discussed under section D.3.7 of this report.	
<b>Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation</b>	9.2 Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries Indicators: 9.2.2	Yes	Promote inclusive and sustainable industrialization and significantly raise industry's share of employment by the project activity	Establishment of Project activity promotes sustainability (use of renewable energy) and also creates employment opportunities with target of 10 persons employed per year.	By providing employment opportunities to the eligible candidates for operations of the renewable energy related project activity.  The above actions result in direct positive effects that contribute to project-level SDG.	Monitored through employment records maintained  Number of persons employed per year.	The project will provide employment opportunities to at least 10 eligible candidates for operations of the renewable energy related project activity. This can be verified from the employment records maintained on site.  The parameter being monitored in the monitoring plan is found adequate. This has been discussed under section D.3.7 of this report.	Yes
<b>Goal 10. Reduce inequality within and among countries</b>	NA	NA	NA	NA	NA	NA	NA	NA
<b>Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable</b>	NA	NA	NA	NA	NA	NA	NA	NA
<b>Goal 12. Ensure sustainable consumption and production patterns</b>	NA	NA	NA	NA	NA	NA	NA	NA
<b>Goal 13. Take urgent action to combat climate change and its impacts</b>	13.2 Integrate climate change measures into national	Yes	To reduce GHG emissions	Reduce 224,781(tCO <sub>2</sub> /year) per annum through electricity	The project activity utilises the renewable source of energy to	Electricity produced by the renewable generating unit in records	The project is estimated to achieve GHG emission reduction of 123,793 tCO <sub>2</sub> e/year,	Yes

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	policies, strategies and planning			generation from renewable energy.	produce electricity that would be produced fossil-fuel based plants, thus the project leads to reduction in GHG emissions will combat climate change and contribute to positive effect on the project-level SDG	multiplied by an emission factor as recorded in ER sheet or this PSF  Number of emission reductions per year	thereby meeting the SDG target 13.2.  The generated power is continuously monitored by the energy meters installed at the substation and details of the same are included in the PSF/1/ and found to be acceptable.	
<b>Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development</b>	NA	NA	NA	NA	NA	NA	NA	NA
<b>Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss</b>	NA	NA	NA	NA	NA	NA	NA	NA
<b>Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels</b>	NA	NA	NA	NA	NA	NA	NA	NA
<b>Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development</b>	NA	NA	NA	NA	NA	NA	NA	NA
<b>SUMMARY</b>						<b>Targeted</b>		<b>Likely to be Achieved</b>
<b>Total Number of SDGs</b>						<b>+6</b>		<b>+6</b>
<b>Certification label (Bronze, Silver, Gold, Platinum, or Diamond) for the ACCs as defined in the PSF</b>						<b>Diamond</b>		<b>Diamond</b>

## DOCUMENT HISTORY

Version	Date	Comment
V 3.1	31/12/2020	<ul style="list-style-type: none"> <li>▪ The name of GCC Program’s emission units has been changed from “Approved Carbon Reductions” or ACRs to “Approved Carbon Credits” or ACCs.</li> </ul>
V 3.0	23/08/2020	<ul style="list-style-type: none"> <li>▪ Revised version released on approval by the Steering Committee as per the GCC Program Process;</li> <li>▪ Revised version contains the following changes: <ul style="list-style-type: none"> <li>○ Change of name from Global Carbon Trust (GCT) to Global Carbon Council (GCC);</li> <li>○ Considered and addressed comments raised by the Steering Committee: <ul style="list-style-type: none"> <li>➢ during physical meeting (SCM 01, dated 29 Oct 2019, Doha Qatar); and</li> <li>➢ electronic consultations EC01-Round 04 (17.08.2020 – 22.08.2020).</li> </ul> </li> </ul> </li> <li>▪ Feedback from the Technical Advisory Board (TAB) of ICAO on GCC submissions for approval under CORSIA<sup>10</sup>;</li> </ul>
V 2.0	25/06/2019	<ul style="list-style-type: none"> <li>▪ Revised version released for approval by the GCC Steering Committee.</li> <li>▪ This version contains details and information to be provided, consequent to the latest worldwide developments (e.g., CORSIA EUC).</li> </ul>
v1.0	01/11/2016	<ul style="list-style-type: none"> <li>▪ Initial version released for approval by the GCC Steering Committee under GCC Program Version 1</li> </ul>

<sup>10</sup>See ICAO recommendation for conditional approval of GCC at [https://www.icao.int/environmental-protection/CORSIA/Documents/TAB/Excerpt\\_TAB\\_Report\\_Jan\\_2020\\_final.pdf](https://www.icao.int/environmental-protection/CORSIA/Documents/TAB/Excerpt_TAB_Report_Jan_2020_final.pdf)



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