

TEMPLATE

DEVIATION REQUEST FORM

PUBLICATION DATE **14.1.2021**

Version **4.0**

A. To be completed by Gold Standard

1| Decision

1.1 | Date – 09/05/2023

1.2 | Decision

The deviation request is approved . The project developer shall:

- a. Ensure that the duration of the GS monitoring period is not more than three years from the date of remote/physical site visit by a VVB.
- b. Ensure that a continuity in the project's monitoring activities are maintained and project developer is able to justify that no monitoring gaps exist (especially for SDG parameters) within the Monitoring Period(s). However, if gap(s) exist, the project shall justify that conservative approach(es) have been applied in line with section 3 of the Deviation Approval Requirements and Procedures (version 1.2) and overarching GS principles (as applicable).
- c. Document the deviation request, its implications, and GS' decision in the appropriate section of the GS Monitoring Report (for the relevant MP).

The verifying VVB shall, confirm the date of site visit in the verification report and verify that the MP duration is not more than three years from this date and through appropriate means at its disposal, evaluate the project's compliance with the above-mentioned conditions and provide its opinion in the Verification Report.

SustainCert shall review both the PD's response and the VVB's assessment/opinion of the same and take appropriate steps.

1.3 | Is this decision applicable to other project activities under similar circumstances?

No

B. To be completed by the Project Developer/Coordinating and Managing Entity and/or VVB requesting deviation

2| Background information

Deviation Reference Number	DEV_407	
Date of decision	09/05/2023	
Precedent (YES/NO)	No	
Precedent details	NA	
Date of submission	28/02/2023	
Project/PoA/VPA	Project	ID – GS2298
	<input type="checkbox"/> PoA	ID – GSXXXX
	<input type="checkbox"/> VPA	ID – GSXXXX
Project/PoA/VPA title	Project Lumut Balai Unit 1-2 PT. Pertamina Geothermal Energy	
Location of project/PoA/VPA	Indonesia	
Scale of the project/PoA/VPA	<input type="checkbox"/> Microscale <input type="checkbox"/> Small scale <input checked="" type="checkbox"/> Large scale	
Gold Standard Impact Registry link of the project/PoA/VPA	https://registry.goldstandard.org/projects/details/316	
Status of the project/PoA/VPA	<input type="checkbox"/> New <input type="checkbox"/> Listed <input checked="" type="checkbox"/> Certified design <input type="checkbox"/> Certified project	
Title/subject of deviation	Deviation from mandatory first verification within first two years of project implementation date	
Specify applicable rule/requirements/methodology and version number	Gold Standard Principles & Requirements (Version 1.2), Section 5.1.29	
Specify the monitoring period for which the request is valid (if applicable)	Start date 01/09/2019 End date 31/12/2020	
Submitted by	Contact person name: Chetan Aggarwal Abdul Karim	
	Email ID: standards@southpole.com . c.aggarwal@southpole.com a.karim@southpole.com	
	Organisation: South Pole Carbon Asset Management Ltd.	
	Project participant: Yes <input checked="" type="checkbox"/> NO <input type="checkbox"/>	
Validation and Verification body (VVB opinion shall be included, where required by the	Yes <input type="checkbox"/> NO <input checked="" type="checkbox"/>	

applicable rules/requirements or request is submitted by the VVB).	If yes; VVB name: Auditor name:
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3| Deviation detail

3.1 | Description of the deviation:

3.1.1 | Deviation detail (to be completed by Project developer):

South Pole Carbon Asset Management is requesting deviation for the project ID GS2298 "Lumut Balai Unit 1-2 PT. Pertamina Geothermal energy". The project aims to utilize geothermal energy to generate electricity which is to be fed to grid.

According to the Gold Standard Principles & Requirements (v1.2) section 5.1.29 "Verification must occur at least once during the five-year Certification cycle with the first Verification completed within two years of project Implementation Date or Design Certification, whichever is later". But the project participant did not conduct the first verification within two years of commercial operation date (COD) of the power plant. The project COD was on 1st September 2019 and the first verification was done with monitoring period up to 31st December 2020.

Rationale of deviation

This deviation was happened due to the following reasons:

- Change in crediting period – PRC process:** The project has undergone post-registration changes (PRC) under CDM which started with validation process by DOE on 13th October 2021, then finished with published status on the UNFCCC interface on 27th December 2021. The PRC was completed with the approval from of CDM Executive Board (EB) on 9th February 2022. After approval by CDM EB, the project is currently seeking design change approval under Gold Standard. Therefore, it is only possible to conduct verification after the end of PRC process.
- Financial constraints:** The financial constraint was also one of the factor which contributed to the delay in conducting verification during the first two years of operation. This constraint affected mainly because the project had to delay the COD from 1st January 2015 to 1st September 2019 (this also led to PRC as described above). The delay was due to insufficient steam supply from the designated geothermal wells due to which the power plant was unable to supply the power capacity according to PPA (power purchase agreement) with PLN (national grid operator). As a result, the Project participant (PT. Pertamina Geothermal Energy / PGE) had to explore and drill more geothermal well to satisfy the steam supply, thereby increasing the capital expenses from the previous plan.
- Time constraints** due to contractual discussion and negotiation:

- (i) PGE had negotiated with PLN to adjust the electricity selling price a bit higher to mitigate the financial impact. PLN agreed to increase the electricity selling price from 75.3 cent USD/kWh to 116.0 cent USD/kWh. This agreement was signed in a Head of Agreement (HoA) along with other project within the same cooperation between PGE and PLN in 2014. But after the project achieved COD, the electricity selling price was not adjusted right away since the amendment to PPA is not finished yet. Even after years of operation, PLN still hasn't responded with an action to make an amendment to the PPA according to the HoA. PGE has sent a letter in 2019 asking PLN to arrange the PPA amendment, but PLN still has not responded until this deviation is requested.
 - (ii) PGE also sought a negotiation with South Pole Carbon Asset Management Ltd. with an intention to mitigate the financial impact from reduced electricity price. This proposal was started in 2017, followed by several meetings to discuss the new ERPA terms. However, until this deviation is requested, the new ERPA terms hasn't been signed yet due to changes in PGE board of directors and teams. Thus, affecting the ERPA amendment process further. The latest official letter sent from South Pole was on 12th January 2023.
4. **COVID – 19 delays:** Furthermore, there is a COVID-19 pandemic going on around the world including Indonesia and India (origin of DOE) which started in the early 2020 made the communication between parties difficult due to limited office hours and work from home policies. Therefore, resolving any findings for validation and verification involving parties from different departments became a challenge, along with conducting the site visits.

3.1.2 | VVB opinion (to be completed by VVB, if applicable):

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3.2 | Assessment of the deviation:

3.2.1 | Deviation assessment (to be completed by Project developer):

This deviation is for an incompliance with the mandatory first verification within two years of project implementation date. However, the project still complies with the requirement of verification that must occur at least once during the five-year certification (since this is GSCER project, it is seven-year cycle) even with financial constraints. The project also still complies with other principles as follows.

Principles	Justification
Environmental integrity: Gold Standard certified products e.g. GS VERs and/or statements shall not be overestimated as a result of the	The revised project annual estimated emission reduction value of 581,518 tCO ₂ has been approved under CDM without any

deviation, and conservativeness must be ensured	overestimation according to the validation report, thus conservativeness is ensured.
Contribution to the Sustainable Development Goals (SDGs): SDG contributions that the project is designed to achieve must be in line with GS4GG requirements and are not compromised	This project still follows previous version of GS version 2.2 which is undergoing transition to GS4GG before the 1st verification. However, the project has contributed to SDG 7, SDG 8, and SDG 13 as referred to in the submitted transition annex.
Safeguarding principles and requirements: Projects must be in line with Safeguarding principles and requirements of GS4GG	The project still upholds safeguarding principles and requirements, with the update on any relevant mitigation included in the submitted transition annex.
Compliance with host country regulations: Projects must not conflict with host country regulations	The project complies with Republic of Indonesia laws & regulations without any legal contest or disputes during project implementation.

Additionally, project owner and participant have continuously completed the task associated with the project as summarized in the following table:

Date	Actions
10 th June 2010	South Pole held a training for PGE personnel for guidelines in implementing CDM & GS monitoring plan
24 th April 2014	Head of Agreement (HoA) was signed between PGE & PLN to adjust electricity selling price and delay of power plant commercial operation date (COD)
19 th January 2017	PGE met with PLN to present about selling price adjustment verification result from the government (BPKP)
24 th August 2017	PGE communicated with South Pole to discuss about project implementation status and to propose an ERPA renegotiation
26 th October 2017	South Pole communicated with PGE about the response to the ERPA renegotiation proposal
5 th February 2018	PGE met with PLN to follow up about PPA amendment
25 th April 2018	South Pole communicated with PGE to discuss about GS CDM project status and new ERPA terms
30 th August 2019	PGE sent an official letter to PLN to follow up on PPA amendment progress
31 st August 2019	Unit 1 received SLO from ESDM
17 th September 2019	PGE received a letter from PLN that decided COD for Unit 1 was on 1 st September 2019
20 th December 2019	South Pole communicated with PGE to discuss about PRC process & verification plan
7 th August 2021	South Pole has officially contracted DOE to conduct combined GS CDM PRC validation & verification services

24 th September 2021	South Pole & PGE finished the CDM PDD & ER calculation revision and submitted to DOE for PRC revalidation
27 th December 2021	PRC documents published on UNFCCC website
9 th February 2022	PRC approved by CDM EB
13 th January 2023	Latest letter from South Pole about ERPA amendment

3.2.2 | VVB opinion (to be completed by VVB, if applicable):

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3.3 | Impact of the deviation:

3.3.1 | Impact assessment (to be completed by Project developer):

There is no impact on the project for this deviation aside from the incompliance with a Gold Standard requirement. Description of the impacts can be found table below.

Impact Assessment	Justification
Project Design	There is no change in the project design. The project is still a geothermal power plant with two units of power generator with net capacity of 55 MW each (total of 110 MW).
Safeguarding Principles Assessment	The project still upholds safeguarding principles as per registered GS passport (GS v2.2) and also as per the submitted transition annex with an update on the mitigation and monitoring.
SDG Assessment	The project is undergoing transition to GS4GG with selected SDG 7, SDG 8, and SDG 13 mentioned in the submitted transition annex.
Emissions Reductions	There is no impact on the emission reduction value as the deviation is not related to any baseline or project emission.
Monitoring Frequency	There is no impact on the monitoring frequency, although some monitoring frequencies were deviated but already covered in the CDM verification process with relevant conservative approaches approved.
Data Quality	No data quality is impacted. The project can still present any data or documentation with accuracy & transparency.
Potential Risk or Any Other Relevant Aspect	No other potential risk or any other relevant aspect as this is a one-time only deviation during first crediting period.

Monitoring Plan Implementation

Below table further justify that the project implemented the monitoring plan appropriately as per the latest approved CDM PDD and GS Passport with monitoring period from 1st September 2019 to 31st December 2020.

Monitoring Parameters	Frequency	Justification
CDM – Steam quantity	Continuous – Aggregated Monthly	There was no gap in monitoring.
CDM – Mass fraction of CO ₂ and CH ₄ in the NCG	Quarterly – Averaged Annually	There was a gap in monitoring, however this is not the result of this deviation request
CDM – Electricity generation	Continuous – Aggregated Monthly	There was no gap in monitoring.
CDM – Fuel consumption	Daily – Aggregated Monthly	There was no gap in monitoring
GS – Air Quality	Annually	There was no gap in monitoring
GS – Water quality & quantity	Annually	There was no gap in monitoring
GS – Soil condition	Annually	There was no gap in monitoring
GS – Other pollutants (noise)	Annually	There was no gap in monitoring
GS – Biodiversity	Annually	There was no gap in monitoring
GS – Quality of employment	Annually	There was no gap in monitoring
GS – Livelihood of the poor	Annually	There was no gap in monitoring
GS – Quantitative employment & income generation	Annually	There was no gap in monitoring

VVB opinion (to be completed by VVB, if applicable):

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Documents:

- 1) Head of Agreement between PGE & PLN, dated 24th April 2014 – **CONFIDENTIAL**
- 2) Letter from PGE to PLN regarding PPA amendment for the electricity price adjustment, dated 30th August 2019 – **CONFIDENTIAL**
- 3) Latest official letter sent from South Pole to PGE, Dated 12th January 2023 – **CONFIDENTIAL**
- 4) Original Power Purchase Agreement between PGE & PLN – **CONFIDENTIAL**
- 5) Link to Project Lumut Balai Unit 1-2 PT. Pertamina Geothermal Energy PRC Approval - <https://cdm.unfccc.int/PRCContainer/DB/prcp386866211/view>