



Terms of Reference for Cascading Power Sources (CPS)

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Disclaimer

All data, information, process flow, and timeline outlined in this Terms of Reference (TOR) (including but not limited to the Sarawak Generation and Transmission Map) (“Information”) are for general reference and informational purposes only, and do not constitute legal, financial or professional advice.

SEB reserves the right to modify, update or remove any such Information at its sole discretion without prior notice.

Interested Participants (“Participant”) are advised to exercise their own judgement and conduct independent assessment when utilising any part of the Information in any manner. It is the Participant’s responsibility to acquaint itself with the Information contained in this TOR and all other information that it may need to know to prepare its proposal. SEB does not make any representation or warranty, express or implied, as to the accuracy, completeness or reasonableness of the Information contained in this TOR, Request for Proposal (RFP) or any modification, corrigendum or addendum issued thereto, or any other written statement which is otherwise communicated or made available to the Participant, whether by or on behalf of SEB.

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Acronyms and Abbreviations

CAPEX	Capital Expenditures Cost Estimates
COD	Commercial Operation Date
CPS	Cascading Hydropower Sources
CV	Curriculum Vitae
DCF	Discounted Cash Flow
DSCR	Debt Service Coverage Ratio
EIRR	Equity Internal Rate of Return
EPC	Engineering, Procurement and Construction
ESG	Environmental, Social and Governance
FID	Final Investment Decision
FPIC	Free, Prior and Informed Consent
GW	Gigawatt
HSS	Hydropower Sustainability Standard
IFC	International Finance Corporation
JDA	Joint Development Agreement
JSA	Joint Study Agreement
JVA	Joint Venture Agreement
KYC	Know your Counterparty
LCOE	Levelised Cost of Electricity
NPV	Net Present Value
OPEX	Operational Expenditures Cost Estimates
PIRR	Project Internal Rate of Return
PPA	Power Purchase Agreement
RFP	Request for Proposal(s)
RM	Ringgit Malaysia
SB	Single Buyer (as defined in the Electricity Ordinance (Cap. 50))
SEB	Sarawak Energy Berhad
SEBP	SEB Power Sdn Bhd
SESCO	Syarikat SESCO Berhad
SCORE	Sarawak Corridor of Renewable Energy
SPV	Special Purpose Vehicle
SSM	Suruhanjaya Syarikat Malaysia
TOR	Terms of Reference

SECTION 1: INTRODUCTION AND BACKGROUND

Introduction

- 1.1 Sarawak is committed to advancing sustainable and renewable energy development to meet growing electricity demand and support the State of Sarawak's ("State") long-term socio-economic progress. In line with this commitment, SEB, through its Single Buyer (SB) function, is initiating the Cascading Power Sources (CPS) developments as part of the State's renewable energy strategy.
- 1.2 This TOR outlines the overarching framework for conducting feasibility studies on potential CPS developments within the State. It also serves as a formal invitation to potential Participant to submit proposals to undertake the feasibility study for the identified river basins.
- 1.3 The objective of this study is to identify CPS projects ("Project") that are technically, environmentally, socially, and financially viable, contributing to the State's long-term energy security, sustainability goals, and economic growth. This initiative supports the State's vision of strengthening renewable capacity while ensuring that power development remains efficient, inclusive, and aligned with national and State's policies.

Background and Rationale

- 1.4 The State's renewable energy development is anchored in the State's broader socio-economic vision to achieve developed, high-income status by 2030, underpinned by sustainable hydropower and responsible growth principles. The energy sector has long served as a cornerstone of this strategy, providing the foundation for energy-intensive industries under SCORE. Building on this foundation, the State is now broadening its energy portfolio to include diverse renewable sources, while integrating sustainability and Environmental, Social and Governance (ESG) values across all new developments.
- 1.5 The State's target of achieving 15 Gigawatt (GW) of installed generation capacity by 2035 reflects its dual commitment to meeting domestic demand growth and positioning the State as a reliable exporter of clean energy to regional markets. This is aligned with the ongoing regional integration efforts such as the ASEAN Power Grid initiative. Within this framework, renewable technologies such as solar, small hydro and CPS will play a pivotal role in supporting both local consumption and regional demand for green electricity.
- 1.6 The introduction of the Investor model under the Electricity (Amendment) Ordinance, 2023 has further strengthened this direction by enabling private sector participation in power generation. Through this model, the State seeks to attract credible Investors with proven technical expertise and financial capacity to develop viable renewable energy related projects, consistent with the State's strategic objectives.

1.7 CPS development aims to optimize untapped hydropower potential through the coordinated development of multiple hydropower plants within a single river basin. This cascading approach is aimed to maximize energy extraction from the rivers, improving overall system efficiency, and increasing renewable energy generation.

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SECTION 2: INSTRUCTIONS TO PARTICIPANT

Overview

- 2.1 This Section 2 outlines the submission format, communication protocols and administrative procedures for participating in this RFP which shall be complied with by all Participant.
- 2.2 The Detail Process Flow as per *Appendix 2* outlines this sequence of activities—from announcement of RFP through feasibility assessment, commercial negotiations, and final investment decision leading to project commissioning. This process provides transparency, consistency, and procedural clarity, providing a clear roadmap for Participant to participate in Sarawak's CPS development programme.
- 2.3 All fees stated in this Section 2 payable by the Participant to SEBP shall be made in full and without any deduction for taxes, duties, or similar charges imposed by any jurisdiction. If any such deduction is required by law in Participant's jurisdiction, the Participant shall gross up the payment so that SEBP receives the full amount of fees specified in this TOR.

Pre-RFP Documents

- 2.4 Prior to the sharing of the RFP documents by SEB to Participant, the following must be completed and submitted by the Participant: -
 - i. *Appendix 5 – CPS Registration Form* (to be submitted online);
 - ii. *Appendix 6 – Confidentiality Agreement* (to be submitted online);
 - iii. *Appendix 7 – KYC Questionnaires Form* and
 - iv. Any Payment Remittance (Registration Fee)

The documents referred to in Section 2.4 (i) and (ii) are available for download from SEB's website. Unless otherwise requested by SEB, the duly completed documents must be submitted in accordance with Section 2.25 (Mode of Submission).

Registration Fee

- 2.5 To participate in this RFP, each Participant shall pay a non-refundable registration fee of Ringgit Malaysia One Hundred Thousand (RM 100,000.00) ("Registration Fee"). The Registration Fee shall be made payable to SEBP through online transfer to the designated bank account (details to be provided after registration is completed). Proof of transfer shall be emailed to treasuryoperations@sarawakenergy.com, with a copy to single.buyer@sarawakenergy.com, no later than three (3) working days after payment is made.
- 2.6 Failure to pay the Registration Fee may result in disqualification from the RFP process.

Registration Deadline

2.7 The deadline of registration shall be by **12.00 Noon, 28th February 2026**.

Costs of Participation

2.8 All costs associated with the preparation and submission of proposals shall be borne solely by Participant and no claims for any reimbursement of costs or expenses incurred, direct or indirect damages or losses will be considered by SEB and/or SEBP regardless of the acceptance or rejection of any proposals.

2.9 For any financing arrangement required for the Project, Participant must ensure full compliance with SEB Group's current and future financing covenants.

Data Access and Management

2.10 Upon registration and execution of the Confidentiality Agreement, SEB will grant Participant access to relevant datasets required for preparation of the feasibility study. Data will be shared exclusively through a secured platform, which serves as the official data-sharing platform for this RFP.

2.11 The Participant shall be given a series of general datasets sourced from government and public agencies (e.g. hydrological, topographical, geological, and environmental data) for preliminary feasibility assessment.

2.12 All data accessed through the platform shall be handled strictly in accordance with the Confidentiality Agreement. Redistribution, or unauthorised use of proprietary datasets is prohibited.

2.13 SEB reserves the right to revise or restrict data access from time to time to ensure data integrity and compliance with internal governance requirements.

2.14 SEB is not obliged to disclose internal standards, operating procedures, or proprietary information beyond materials made available for the RFP.

Communication, Engagement and Clarifications

2.15 All communications, requests and enquiries shall be directed only to SEB. SEB may invite Participant to make presentations to SEB with regard to their proposals, if necessary. If SEB requests for written clarification with regard to any aspect of the Participant's proposal, the Participant shall use reasonable endeavours to provide full and comprehensive responses within seven (7) business days of such request.

2.16 To ensure streamlined communication and avoid conflicting directives, any request for engagement or clarification involving ministries or local authorities shall be submitted in writing to SEB, for review and coordination. The Participant shall not, under any circumstances, contact, engage, correspond or otherwise communicate directly with ministries, local authorities, or other government agencies without prior notice to SEB.

2.17 Participant is prohibited to engage with local communities or undertake site visits, field-level activities, or any form of on-ground interaction. Where such engagement is deemed necessary, a formal written request must be submitted to SEB for prior consent and approval.

2.18 Clarification requests shall be submitted in writing to SEB via email. SEB may, at its discretion, share clarifications with all registered Participants to ensure fairness and transparency.

2.19 Any contact or attempt to influence the evaluation process may result in immediate disqualification.

Integrity and Disqualification

2.20 Participant shall maintain the highest standards of integrity and adhere to all anti-corruption, and conflict-of-interest obligations throughout the RFP process.

2.21 SEB reserves the right to disqualify any Participant for:

- Misrepresentation or submission of falsified information;
- Unauthorised communication or lobbying with SEB's personnel;
- Breach of Confidentiality Agreement; and
- Non-compliance with the instructions as set out in this TOR.

2.22 SEB further reserves the right not to provide any debriefing or explanation to Participants that are unsuccessful at Stage 1, and all decisions made shall be final at the sole discretion of SEB and shall not be subject to appeal.

Proposal Submission Deadline

2.23 All proposals shall be submitted to SEB in the manner stipulated in this Section and received by no later than **12:00 noon, 31st August 2026** ("Closing Date"). Any proposals submitted and received after the Closing Date shall not be considered.

2.24 SEB will acknowledge receipt of the proposals within seven (7) business days from the date of receipt. Participant who does not receive acknowledgement must immediately notify SEB's SB unit.

Mode of Submission

2.25 Proposals may be submitted by the Participant in either softcopy or hardcopy form:-

i. Softcopy Submission

Submit via email to single.buyer@sarawakenergy.com in both Microsoft Word and PDF formats.

Where multiple emails are required (maximum 25 MB per email), each must be clearly indexed and labelled (e.g., Email 1 of 3, Email 2 of 3, etc.) to indicate its relation to the full proposal. All file names shall clearly state the Participant's name and proposal title.

ii. Hardcopy Submission

Deliver to:

Single Buyer Unit
Sarawak Energy Berhad
9th Floor, No. 1, The Isthmus
93050 Kuching, Sarawak, Malaysia

All envelopes shall be clearly marked with the Participant's name and address.

Validity of Proposals

2.26 Participant shall submit its proposal in accordance with all the requirements set out in this TOR. Incomplete submissions could be deemed invalid and may not be considered by SEB.

2.27 Proposals that have been submitted shall remain valid and binding for one hundred and eighty (180) days from the Closing Date.

2.28 Proposals shall neither be modified nor withdrawn after the Closing Date, unless approved by SEB.

Additional Rights of SEB

2.29 SEB may request further information or clarification from Participant at any time during the RFP process including at evaluation phase.

2.30 SEB reserves the right to reject any or all proposals, modify timelines, or cancel the RFP without obligation or liability and shall not be liable for any expenses or costs incurred by any Participant or any other person as a result thereof.

2.31 Participation in the RFP does not constitute a commitment by SEB to award a contract or enter into any agreement(s) (other than the Confidentiality Agreement) with Participant.

Confidentiality Agreement (Non-Disclosure Agreement)

2.32 Each Participant shall execute a Confidentiality Agreement (*Appendix 6*) with SEB during the starting of Stage 1 (*Feasibility Study*) prior to disclosure of information classified as confidential under the terms of the said Confidentiality Agreement that relates to the Project. Any such confidential information shall be bound by confidentiality obligations and shall not be disclosed to any third party without SEB's prior written consent, save and except where-

- (a) disclosure of such confidential information is necessary for the purposes of raising finance to undertake the obligations of Participant under this TOR;
- (b) disclosure of such confidential information is made to Participant's consultants, auditors or advisers only for the Project;
- (c) disclosure of such information is required by law or by any government agency or for the performance of any obligations under this TOR; or
- (d) the information has entered public domain.

2.33 Where information has been disclosed to third parties, Participant undertakes to ensure that such third parties comply with the terms of the Confidentiality Agreement.

2.34 The restrictions contained in this clause shall survive the termination of this TOR and shall continue to bind Participant without limitation in time.

Joint Study Agreement (JSA)

2.35 The shortlisted Participant may be required to execute a JSA with SEB, through its subsidiary, SEBP during starting of Stage 2 (*Commercial Power Purchase Agreement (PPA) Negotiation*) as part of the structured development process for the CPS initiative and represents the first formal collaboration between the parties.

2.36 The JSA will define, amongst others, matters pertaining to the governance, cost-sharing, data management, and confidentiality principles guiding both parties during the pre-engineering stage.

2.37 Under the JSA, SEBP and Participant will jointly carry out a series of pre-engineering and preparatory activities, including refinement of preliminary design parameters through hydrological, geological, and system-integration analyses; development of technical concepts and site configurations; completion of detailed environmental and social assessments; preparation of preliminary financial models and economic

evaluations; and compilation of documentation required for regulatory, environmental, and land-use approvals.

2.38 Upon successful completion of the study and mutual confirmation of project viability, the parties will progress to Stage 3 (*Final Investment Decision*) and execute a Joint Development Agreement (JDA) as further described below.

Power Purchase Agreement (PPA)

2.39 The shortlisted Participant (or where formation of Special Purpose Vehicle (SPV) is required in Stage 3), shall execute a PPA with SEB, through its subsidiary, SESCO, to govern the terms and conditions under which Participant will generate and supply electricity to SESCO. Such terms may include, but not limited to the following:

- PPA terms and structures (e.g. take-or-pay, or any other structures)
- PPA pricing and tariff mechanism (e.g. fixed and variable pricing components, escalations or indexation mechanism)
- Risk allocation
- Termination
- Dispute resolutions
- Green attributes

The above matters are indicative and not exhaustive. The detailed terms and conditions shall be further subject to mutual agreement of the parties.

2.40 The PPA shall be benchmarked against similar project(s) in regional and international hydropower practices to ensure Project's financial viability, aligns with the regulatory framework, and reflects market and affordability considerations.

Joint Development Agreement (JDA)

2.41 The shortlisted Participant shall execute a JDA with SEB, through its subsidiary, SEBP during Stage 3 (*Final Investment Decision*) which represents the next stage of collaboration between the parties following successful completion of the JSA and PPA.

2.42 The JDA establishes a structured pre-investment framework between SEBP and the shortlisted Participant for the joint development of the Project. While the JDA does not constitute a formal joint venture between SEBP and the shortlisted Participant, it generally provides a binding framework which sets out, amongst others, the scope of collaboration of the respective parties in respect of the Project, cost-sharing mechanism, risk allocation and dispute resolution mechanism that will guide both parties in advancing the Project toward the Final Investment Decision (FID).

- 2.43 Under the JDA, the parties may form an unincorporated partnership to jointly carry out detailed technical and financial assessments, refine engineering designs, prepare and submit proposals to the SEB, secure regulatory approvals, and conduct stakeholder engagement activities.
- 2.44 Upon successful completion of the joint development phase and a positive FID, the parties may formalize their partnership by forming a SPV under a subsequent Joint Venture Agreement (“JVA”) to implement, finance, construct, and operate the Project subject to terms and conditions of the JVA. Should the parties progress into JVA, the development costs incurred during the JDA phase will be recognised as part of each party’s equity contribution to the SPV. In this respect, if the PPA has been executed between Participant and SESCO prior to the JVA, any amendments to the PPA shall be discussed in good faith after the JVA is signed.
- 2.45 Should the parties decide not to proceed with project implementation after completion of the JDA, the JDA will be automatically terminated without further obligations of the parties, except for obligations that arises before termination

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SECTION 3: INFORMATION OF RIVER BASINS

3.1 The RFP represents the CPS development programme in Sarawak covering the assessment and development planning of five (5) designated river basins - Balui, Belaga, Danum, Gaat and Tutoh. The accompanying details outline potential sites within these basins with preliminary capacity potential for further evaluation.

Table 1 Details of Designated River Basins

No.	Basin	Potential Total Capacity (MW)	Potential Site(s)
1	Balui CPS	700 – 800	10 – 13
2	Belaga CPS	300 – 400	2 – 3
3	Danum CPS	200 – 300	3 – 4
4	Gaat CPS	50 – 70	3 – 5
5	Tutoh CPS	300 – 400	3 – 4

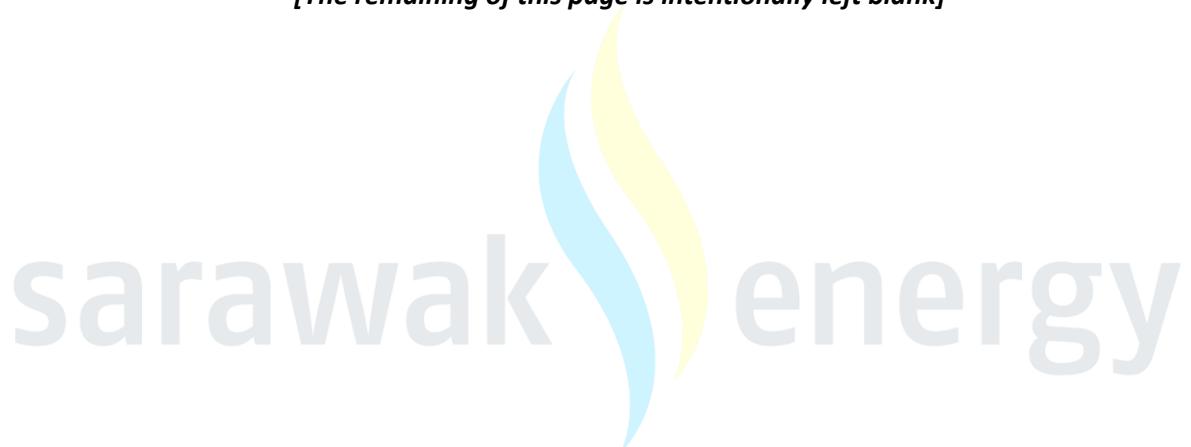
3.2 The potential integration schemes (shown below) are currently proposed for power evacuation for each respective river basin. These proposed potential integration schemes are the most technically and economically viable options.

Table 2: Potential Connection Point(s) for Respective River Basins

Options	CPS Integration Point	Voltage Level	Coordinates
Balui			
1	New Balui Junction Substation	275/132/33kV	2° 7'30.56"N, 114°30'21.23"E
2	Baleh HEP Substation	500kV	1°48'12.30"N, 113°46'23.04"E
Belaga			
1	Existing Murum Junction Substation	275/33kV	2°56'6.85"N, 114° 3'36.17"E
2	New Bakun Switching Substation	275kV	2°48'55.55"N, 114° 1'9.37"E
Danum			
1	Existing Murum Junction Substation	275/33kV	2°56'6.85"N, 114° 3'36.17"E
2	New Murum Switching Substation	275kV	2°41'56.73"N, 114°16'16.33"E

Gaat			
1	New Kapit Substation	132/33kV	2° 0'31.76"N, 112°54'33.67"E
2	New Tunoh Substation	132/33kV	2° 2'10.18"N, 113°39'53.07"E
Tutoh			
1	Existing Bunut Substation	(500)/275/33kV	3°43'45.65"N, 114° 9'35.77"E
2	New Tutoh Junction Substation	(500)/275/132/33kV	3°48'53.89"N, 114°56'51.47"E
3	New Long Bedian Substation	275/132/33kV	3°47'51.62"N, 114°44'42.61"E

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SECTION 4: SCOPE OF WORK FOR STAGE 1 FEASIBILITY STUDY

Technical Scope

4.1 At the Feasibility Study stage, the Participant may submit preliminary concepts and technical assessments according to internationally accepted practices for hydropower development. As the Project progresses, all design, engineering, and technical documentation must be prepared and endorsed by a Qualified Design Engineer certified and registered with the relevant professional engineering body in Malaysia (or equivalent). All future designs shall comply with applicable laws, regulations, codes, and industry standards.

Site Screening and Topographical Assessment

4.2 Participant shall review relevant existing datasets, including topographical maps, satellite imagery, and hydrological records, to identify and screen potential site(s). The assessment shall establish a preliminary inventory of feasible locations for either storage or run-of-river configurations. Participant shall conduct all necessary verification of available data to ensure the accuracy and reliability of the intended analysis.

4.3 Both storage and run-of-river options shall be considered in defining potential cascade developments. Each proposed site shall demonstrate a power density greater than 5 W/m² and shall not be located within 5 km of established communities or designated protected areas. A vertical buffer of not less than 5 meters from the defined affected zone shall be applied as a preliminary safeguard for environmental and social sensitivities. For areas of higher sensitivity and exceptional conservation value e.g. UNESCO World Heritage Sites a more conservative indicative buffer distance of 10 km shall apply. These distance and buffer criteria are intended for early-stage screening purposes and shall be subject to refinement, or revision through a project-specific Environmental and Social Impact Assessment (ESIA).

4.4 Participant shall conduct a preliminary desktop assessment to identify key potential environmental and social sensitivities at the proposed project site(s). The assessment shall highlight potential risks to ecosystems, aquatic life, wildlife, local communities, livelihoods, and cultural heritage, and demonstrate considerations of lower-risk site options.

4.5 The assessment shall prioritise locations that avoid community resettlement, encroachment on protected areas, and interference with sites of religious, cultural, or historical significance.

4.6 The information to be submitted shall include, but is not limited to:

- i. Project assessment summary and background.
- ii. Identification of potential sites including sites screening criteria for identified project(s).

Hydrological Assessment

4.7 Participant shall undertake a comprehensive hydrological assessment and preliminary energy modelling based on the best available hydrological data. The assessment shall include data verification to establish reliability, sensitivity, and confidence levels, ensuring that all hydrological parameters used for modelling are accurate and representative.

4.8 Participant shall also conduct flood studies to determine the magnitude and frequency of design floods. This shall include estimation of Probable Maximum Precipitation (PMP) and Probable Maximum Flood (PMF), providing sufficient basis for defining design and safety parameters of the proposed CPS.

4.9 The information to be submitted shall include, but is not limited to:

- i. Estimation of hydrological yield including long term
- ii. Flow Duration Curve for identified sites.

Geological and Seismic Assessment

4.10 Participant shall review all available geological and geotechnical data to identify key geological formations, land use characteristics, and site conditions within the CPS basin. This includes compiling and analysing regional geological information to establish a preliminary understanding of subsurface conditions relevant to potential development sites.

4.11 The assessment shall focus on available geological, geotechnical, and tectonic information, including regional and local geological studies, geomorphological data (where available), and seismic assessments. Participant shall evaluate potential geohazards such as fault zones, karstic limestone formations, landslides, and other geological risks that may affect project siting, design, or safety considerations.

4.12 The information to be submitted shall include, but is not limited to:

- i. Interpretation of geological insights with summaries e.g. site lithology (soil/rock type), foundation suitability etc.
- ii. Seismic assessment relevant to identified site(s).

Power and Energy Assessment

4.13 Participant shall evaluate the firm power (where applicable), storage potential, and energy generation capability of each proposed CPS site, including assessment of basin-wide optimisation. The analysis shall include the development of flow duration and power duration curves to support subsequent technical and economic evaluations.

4.14 The information to be submitted shall include, but is not limited to:

- Flow and Power Duration Curves for identified site(s).
- Estimation of potential installed capacity and annual energy generation (GWh/year) for identified site(s).

Preliminary Sizing and Layout of Main Structures and Arrangements

4.15 Participant shall develop a preliminary project configuration identifying the optimal scheme layout, including indicative sizing and arrangement of key structures such as intake, power waterways, electromechanical components, and associated appurtenant works. The assessment shall also outline the preliminary alignment of the transmission connection and switchyard locations to support future integration planning.

4.16 The information to be submitted shall include, but is not limited to:

- Preliminary sizing of main structures (i.e. Dam, Intakes and Powerhouse, Waterways, Spillways and others)
- Basis of design for each identified hydropower site and scheme (including main hydromechanical and Electromechanical components).
- Salient features of identified hydropower site(s) and schemes.
- Drawings of location, layout, arrangement and preliminary details and 3-dimensional images.

Power Evacuation

4.17 Participant shall prepare a preliminary power evacuation plan outlining the connection of the proposed CPS to the nearest suitable substations and transmission network. The plan shall consider multiple integration options apart from what was proposed in Item 3.2 above and evaluate preliminary transmission line routes, voltage levels, and associated interconnection requirements.

4.18 Participant will evaluate the current transmission system's capacity to support the proposed CPS generation and identify possible interconnection options among CPS sites within the basin to ensure the system reliability and flexibility. Should additional

information from SEB is required for this technical assessment, the Participant may request it accordingly.

4.19 Preliminary evaluation shall reference SEB's standard transmission voltage ratings of 500 kV, 275 kV, 132 kV, and 33 kV, where applicable, and conform to relevant SEB, national, and international electrical standards and regulations, including the Electricity Ordinance (Cap. 50) and Grid Code of Sarawak with reference to standards below:

- i. SEB Transmission Planning Criteria and Guidelines
- ii. SEB Transmission System Operation Standard
- iii. SESCO Distribution Planning Manual

4.20 The information to be submitted shall include, but is not limited to the following:

- iv. Power evacuation plan for the proposed CPS.
- v. Any additional technical assessment where applicable.

Commercial Scope

Tariff and Revenue Modelling

4.21 Participant shall develop a detailed financial model based on the discounted cash flow (DCF) methodology to assess the financial viability of the CPS. The model shall incorporate key parameters including projected energy generation, electricity sales, capital and operating expenditure (CAPEX and OPEX), hydrological variability, financing structure, tariff assumptions, taxation, and applicable incentives. For CAPEX, the Participant is to provide a clear breakdown of major cost components at minimum to include (i) Civil costs, (ii) Electromechanical costs, (iii) Hydromechanical costs and iv) Power Evacuation and other cost items deemed necessary.

4.22 The analysis shall compute key financial indicators such as Net Present Value (NPV), Project Internal Rate of Return (PIRR), Economic Internal Rate of Return (EIRR), Levelized Cost of Energy (LCOE), Debt Service Coverage Ratio (DSCR), and payback period. All financial outputs shall be presented in Ringgit Malaysia (RM).

4.23 Participant shall benchmark its financial and tariff assumptions against comparable hydropower projects of similar scale and technology, adjusted to reflect Sarawak's regulatory, fiscal, and operational context. The results shall be supported by clear justification, sensitivity analysis, and a summary report outlining methodology, key assumptions, and conclusions on project financial viability.

4.24 Participant shall also benchmark tariff and revenue assumptions against comparable hydropower projects of similar scale and technology, adjusted to reflect Sarawak's regulatory, fiscal, and operational context.

4.25 Based on this analysis, Participant shall determine realistic tariff rates and return assumptions, supported by clear justification and sensitivity analysis.

Sensitivity analysis

4.26 Participant shall conduct a sensitivity analysis to evaluate the impact of key project uncertainties on financial and technical viability of the CPS. The analysis shall examine the effects of variations in major parameters.

Environmental and Social Scope

4.27 The purpose of this section is to outline the guiding principles and compliance obligations that shall be observed throughout the feasibility study and subsequent project development phases.

a) Feasibility Stage Requirements

4.28 At the Feasibility Study stage, the Participant shall undertake preliminary environmental and social assessments in accordance with internationally accepted practices for hydropower development and sustainability. All future studies shall comply with applicable laws, regulations, and international standards, including the Hydropower Sustainability Standard and the International Finance Corporation (IFC) Performance Standards, World Bank Group EHS Guidelines.

b) Baseline Data Collection

4.29 Participant shall review and compile existing datasets, including biodiversity inventories, hydrological records, land-use maps, and socio-economic profiles, to establish a preliminary environmental and social baseline for the proposed site(s). The baseline shall cover:

- Environmental Parameters: Terrestrial and aquatic biodiversity, water quality, sediment transport, greenhouse gas emissions, and climate conditions.
- Social Parameters: Demographics, livelihoods, cultural heritage, Indigenous Peoples, gender dynamics, and vulnerable groups.

c) Impact Identification and Risk Screening

4.30 Participant shall conduct a preliminary desktop assessment to identify key potential environmental and social sensitivities at the proposed project site(s).

- 4.31 Participant shall utilize the HydroSelect tool (or equivalent internationally recognized risk assessment tool) to systematically evaluate environmental and social risks across multiple dimensions, including biodiversity, resettlement, cultural heritage, and cumulative impacts.
- 4.32 The output shall inform site selection and prioritization of mitigation measures. Locations that require community resettlement, encroach on protected areas, or interfere with sites of religious, cultural, or historical significance shall be avoided.

d) Assessment of Environmental and Social Opportunities

- 4.33 In addition to risk identification, Participant shall assess opportunities to enhance positive environmental and social outcomes. For example:
 - Watershed restoration, biodiversity enhancement, and ecosystem services improvement.
 - Livelihood enhancement, skills training, and benefit-sharing mechanisms.
 - Programs that promote equitable participation and access to project benefits.
- 4.34 Participant shall provide recommendations for integrating these opportunities into project design and implementation.

e) Stakeholder Engagement

- 4.35 Participant shall prepare a preliminary Stakeholder Engagement Plan consistent with the Hydropower Sustainability Standard requirements. The plan shall outline engagement strategies for affected communities and Indigenous Peoples, ensuring Free, Prior, and Informed Consent (FPIC) where applicable.
- 4.36 In addition, Participant shall establish a preliminary Grievance Handling Procedure for the feasibility stage to enable stakeholders to raise concerns during consultations. The procedure shall:
 - Provide accessible channels for submitting grievances (e.g., email, phone, in-person).
 - Define roles and responsibilities for grievance resolution.
 - Specify timelines for acknowledgment and response.
 - Commit to evolving into a full Grievance Redress Mechanism during detailed design and construction phases.

f) Compliance and Governance

4.37 Participant shall develop a compliance matrix mapping project requirements against Hydropower Sustainability Standard topics and IFC Performance Standards. The matrix shall identify gaps and propose strategies for alignment with international best practices and Sarawak regulatory requirements.

4.38 The information to be submitted shall include, but is not limited to:

- i. Key environmental and social issues scoping.
- ii. Comprehensive environmental and social baseline conditions.
- iii. Preliminary identification of significant impacts and proposed mitigation measures.
- iv. Analysis of opportunities for biodiversity enhancement and community benefits.
- v. Stakeholder Engagement Plan – Including FPIC protocol for indigenous Peoples and preliminary grievance handling procedure.
- vi. Compliance Matrix – Mapping projects requirements against IFC Performance Standards and HSS (Hydropower Sustainability Standard) criteria.
- vii. Risk Register and Mitigation Plan – Including climate resilience measures.
- viii. Clear recommendation on feasibility from ESG perspective.

Risk Management

4.39 During this stage, the Participant is required to identify and consider potential project risks under the **TECOPS Framework**—Technical, Environmental, Commercial, Organisational, Political, and Social—as part of their proposal.

4.40 Key examples include but not limited to technical risks (e.g. design complexity, data uncertainty, hydrological variability), environmental risks (e.g. biodiversity loss, sedimentation, water quality impacts), commercial risks (e.g. cost overruns, tariff viability, currency fluctuations), organisational risks (e.g. governance lapses, unclear role delineation, inadequate management capacity), political risks (e.g. regulatory or policy changes, permitting delays), and social risks (e.g. land disputes, resettlement, community acceptance).

4.41 The Participant is expected to demonstrate awareness of these risks, outline preliminary approaches to mitigate or manage them, and show that risk considerations have been integrated into project planning and financial modelling. A comprehensive risk assessment and mitigation plan will be required at a later stage of project development.

SECTION 5: PROJECT IMPLEMENTATION AND TIMELINE

- 5.1 This section outlines the indicative framework for project implementation and expected timelines. Each Participant shall propose its own development schedule based on project-specific considerations, permitting requirements, and readiness. The proposed schedule should align with Sarawak's indicative target for the initial Commercial Operation Date (COD) around 2034–2035, which serves as a guideline for planning purposes. However, Participant may propose an earlier COD if they are able to demonstrate technical and commercial feasibility supported by appropriate justification.
- 5.2 The Participant shall prepare a comprehensive Project Implementation Schedule covering all key milestones, deliverables, and decision gates from the feasibility study through commercial operation. The schedule shall demonstrate a logical sequence of activities across technical, environmental, regulatory, and financial components, identifying dependencies and critical path activities that may influence overall delivery.
- 5.3 The timeline shall include:
 - Key milestones for completion of feasibility studies, environmental and social assessments, and technical design; approval for construction, commercial operation date); and
 - Submission dates for major deliverables, including reports, evaluations, and stakeholder consultations.
 - Indicative durations for permitting and licensing processes.
 - Identification of critical path activities that may affect overall project delivery.
- 5.4 The approved implementation schedule will serve as the baseline for monitoring and reporting project progress. Any anticipated deviations, delays, or material changes shall be promptly communicated to SEB for review and concurrence.
- 5.5 The Participant shall submit a detailed Project Implementation Schedule, outlining all key milestones, dependencies, and indicative timelines from feasibility study through commissioning.
- 5.6 The information to be submitted shall include, but is not limited to:
 - i. Implementation schedule detailing key milestones including basis of assumptions and justification presented in Microsoft Excel, Microsoft Project and other comparable format agreed upon.

SECTION 6: REGULATORY AND LEGAL FRAMEWORK

- 6.1 This Section 6 outlines the legal and regulatory compliance obligations of Participant in respect of the Project. Participant shall comply with all applicable laws, regulations, guidelines, instructions, directions, orders and requirements issued to Participant by any relevant governmental authority(ies) in Malaysia, particularly Sarawak.
- 6.2 The validity, interpretation and performance of the RFP and any proposals submitted by the Participant in response to the RFP shall be governed by and construed in accordance with the laws of Malaysia and to the extent that the laws of Sarawak take precedence over such laws, the laws of Sarawak shall apply. By submitting a proposal, the Participant hereby irrevocably submits to the exclusive jurisdiction of the courts of Malaysia.

Compliance Obligations

- 6.3 Participant shall be responsible for identifying, reviewing, and maintaining up-to-date knowledge of all statutory and regulatory requirements relevant to the Project, including but not limited to:
 - the Electricity Ordinance (Cap. 50);
 - Natural Resources and Environment Ordinance (Cap. 84);
 - Land Code (Cap. 81);
 - Water Ordinance (Cap. 13);
 - Sarawak Forest Ordinance (Cap. 71); and
 - Occupational Safety and Health Act 1994.

Permits and Approvals

- 6.4 Participant shall identify all permits, licences, and approvals required for the Project, outlining application processes, indicative timelines, and inter-agency dependencies. A risk assessment of regulatory delays and procedural constraints shall be undertaken by the Participant, with proposed mitigation measures to ensure timely compliance. The Participant's project schedule and cost assumptions shall also reflect these regulatory requirements and anticipated approval lead times.

Intellectual Property and Data Governance

- 6.5 All data, reports, and materials provided by SEB remain its property and shall be used solely for the feasibility study. Deliverables produced under Stage 1 shall become SEB's property upon submission, with SEB granted a perpetual, royalty-free licence to use all outputs for project planning and development. Participant shall not use third-party

proprietary data without authorization and shall indemnify SEB against any related claims.

International Standards Compliance

6.6 Participant shall ensure that the Project is planned and developed in accordance with national and international standards of best practices for hydropower projects, including technical integrity, environmental and social safeguards, and responsible stakeholder engagement. Participant is responsible for adopting appropriate internal standards, systems, and procedures to meet these expectations, without reliance on or reference to SEB's internal guidelines or operational frameworks.

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SECTION 7: EVALUATION CRITERIA

7.1 This section outlines the evaluation framework and criteria that SEB will apply to assess RFP submissions by Participant, including technical capability, financial viability, compliance with project requirements, and overall value proposition. In addition, SEB may also use the information provided in the proposals to conduct diligence checks on the Participants, entities and/or persons related to the Project.

7.2 To ensure a resilient and secure energy supply for Sarawak and to promote competitive market outcomes, SEB may award the Project to various Participants to maintain supply diversity. SEB reserves the right to reject any proposal that does not support the State's diversification objectives or that may compromise competitive balance across multiple projects.

7.3 Proposals will be evaluated in a structured manner, based on the overall quality, completeness, and credibility of the submission. Each proposal will be reviewed across the following key dimensions:

- Experience in Hydropower Development
- Operational and Maintenance Excellence
- Financial Strength and Commercial Proposition
- Environmental, Social and Governance
- Organisational Experience and Project Delivery Capability

Experience in Hydropower Development

7.4 Evaluation will focus on the Participant's demonstrated track record in developing hydropower or cascading power projects, including successful delivery of feasibility studies, design development, construction, or operational works for projects of comparable scale and complexity.

7.5 Participant who can demonstrate prior involvement in multidisciplinary hydropower development—covering hydrological analysis, geological assessment, conceptual and detailed design, environmental and social considerations, project integration, and power evacuation planning—will be favourably considered. Experience working with reputable consultants and contractors, and a proven ability to deliver hydropower projects on time and to required technical standards, will be viewed as a significant advantage.

Operational and Maintenance Excellence

7.6 This criterion evaluates the Participant's capability to operate and maintain hydropower or similar generation assets in accordance with high technical, safety, and reliability standards throughout the asset lifecycle. The assessment will focus on

demonstrated experience in plant operations, preventive and predictive maintenance, and reliability management. The Participant should provide evidence of effective maintenance regimes that ensure sustained equipment availability, operational efficiency, and long-term performance integrity.

- 7.7 Evaluation will also consider the Participant's approach to implementing robust Health, Safety, Security, and Environment (HSSE) systems, including workforce competency, emergency preparedness, and compliance with recognised international standards. Participant with proven operational governance frameworks, documented performance indicators, and established digital or data-driven monitoring systems will be viewed favourably.
- 7.8 In addition, SEB will assess the Participant's readiness to adopt sustainable operational practices such as energy-efficient technologies, asset-lifecycle optimisation, and the integration of environmental and social considerations into operations. This ensures that CPS projects are managed responsibly and sustainably, consistent with Sarawak's broader ESG and sustainable-hydropower commitments.

Financial Strength and Commercial Proposition

- 7.9 This criterion assesses the Participant's financial strength and ability to support the development, implementation, and long-term operation of the CPS project. The Participant must demonstrate a sound financial position, with sufficient liquidity and capital resources to undertake large-scale renewable energy projects without undue dependence on external funding.
- 7.10 Evaluation will consider audited financial statements for the past three (3) financial years, evidence of access to credit facilities, and the Participant's creditworthiness as indicated by recognised financial institutions or rating agencies. Participant is expected to have a proven track record of meeting financial obligations and maintaining financial stability in comparable infrastructure or energy projects.
- 7.11 Further assessment will be made on the Participant's ability to mobilise equity investment and secure project financing within reasonable timelines. Preference will be given to Participant that can demonstrate readiness to commit capital during early development stages and show clear evidence of financial closing capabilities.
- 7.12 SEB will also consider the financial structure proposed for the project, including debt-to-equity ratio, funding strategy, and capacity to sustain long-term operational commitments. The Participant's financial resilience will be evaluated in the context of project risk management, ensuring that only credible and financially sound entities advance through the CPS development process.

Environmental, Social and Governance

7.13 This criterion assesses the Participant's capability to manage ESG obligations across the CPS development lifecycle, including the identification of material environmental and social risks, implementation of practical mitigation measures, and establishment of robust governance controls to ensure compliant and responsible project delivery.

7.14 Evaluation will consider the Participant's proposed approach to environmental and social risk screening at feasibility stage, including the adequacy of baseline data assumptions (e.g., biodiversity, hydrology/water quality, land use, community and livelihood impacts, cultural heritage) and the application of the mitigation hierarchy (avoid–minimise–restore–offset) where relevant.

7.15 Further assessment will be made on the Participant's readiness to meet applicable Sarawak/Malaysia regulatory requirements and alignment to recognised good industry practice and international safeguards (where applicable), supported by a clear compliance roadmap, deliverables plan, and resource mobilisation to execute ESG studies and management plans within the required timelines.

7.16 SEB will also consider the Participant's stakeholder engagement capability and social licence approach, including stakeholder mapping, consultation strategy (including Indigenous Peoples considerations where applicable), and the presence of a workable grievance handling mechanism appropriate for early-stage development.

7.17 The Participant's ESG governance and integrity arrangements will be evaluated, including HSSE management systems, contractor/supply chain controls, ethics and anti-corruption measures, reporting discipline, and evidence of successful ESG implementation on comparable hydropower or infrastructure projects. Preference will be given to Participants that demonstrate a credible ESG track record and clear accountability for managing ESG risks through to implementation and operation.

Organisational Experience and Project Delivery Capability

7.18 This criterion assesses the Participant's organisational capability, depth of relevant experience, and ability to reliably deliver the CPS project from feasibility through implementation and long-term operation. The Participant must demonstrate proven competence in developing and executing large-scale hydropower and/or comparable renewable energy infrastructure projects of similar complexity and context.

7.19 Evaluation will consider the Participant's track record over the past ten (10) years, including evidence of successful delivery (e.g., feasibility, permitting, financing, construction, commissioning, and operations), achievement of schedule and budget targets, and performance outcomes on comparable projects. References and verifiable project credentials will be required.

- 7.20 Further assessment will be made on the adequacy of the proposed project organisation structure, including the experience and availability of key personnel, clarity of roles and responsibilities, strength of governance and decision-making processes, and ability to mobilise multidisciplinary resources (technical, ESG, commercial, legal, and stakeholder management) within required timelines.
- 7.21 SEB will also consider the Participant's project management maturity and delivery systems, including use of established project controls (planning, cost, risk, quality, contract/procurement management), interface management across multiple workstreams, and the ability to manage contractors and partners effectively. Preference will be given to Participants that can demonstrate strong delivery discipline, robust risk management, and a credible plan to execute the CPS project safely and sustainably.

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SECTION 8: SUBMISSION REQUIREMENTS

Complete Proposal Submission

8.1 Participant shall submit a comprehensive proposal fully aligned with all requirements set out in *Section 4: Scope of Work*. All analyses, assumptions, methodologies, and deliverables shall be prepared and presented in the format and level of detail stipulated in this TOR.

Company Profile

8.2 Participant shall submit a complete company profile and supporting documents to demonstrate its legal standing, corporate structure, financial health, and relevant experience.

8.3 For locally incorporated company, Participant shall be required to submit their company profile and track records which include but not limited to: -

- a) Latest SSM search and certified true copies of statutory forms under the Companies Act 2016 (Section 17, Section 28 where applicable, Section 58, Section 78), company profile, and Constitution.
- b) Financial Statements for the last three (3) financial years (2022, 2023 and 2024). Track records of project undertaken with the project's contract value and commencement/completion date.

8.4 For foreign company, Participant shall be required to submit the company's incorporation documents and any relevant certificates to be certified by authority in the country of origin.

8.5 Participant shall also be required to fill in the Appendix 7 - Know your Counterparty (KYC) SELF DECLARATION Questionnaires ("KYC Questionnaires").

Company's Experience, Capacity and Track Record

8.6 This section outlines the minimum requirements for assessing the Participant's capability to undertake the CPS Stage 1 Feasibility Study. Evaluation will focus on the Participant's technical competence, organisational readiness, and demonstrated track record in delivering feasibility or pre-feasibility studies for hydropower, cascading power, or comparable renewable energy projects. The Participant is expected to demonstrate sufficient technical depth, appropriately qualified personnel, and access to the necessary analytical tools to produce a high-quality feasibility study aligned with SEB's requirements and standards.

8.7 In particular, the Participant shall provide evidence of relevant experience and successful completion of feasibility or technical assessments, including:

- a) Demonstrated experience in conducting feasibility or pre-feasibility studies for hydropower, cascading power, or other renewable energy projects of comparable scale;
- b) Proven ability to undertake hydrological, geological, social and environmental assessments and to develop conceptual design schemes based on site-specific data;
- c) Experience working with utilities, government agencies, or regulated energy markets, preferably within Southeast Asia or similar contexts; and
- d) Evidence of successful completion and acceptance of feasibility studies or technical assessments by credible clients or authorities.

Technical and Organizational Capacity

8.8 The Participant shall demonstrate adequate technical resources and organisational preparedness to manage the feasibility study, including:

- a) Availability of qualified technical staff including hydrologists, engineers, environmental specialists, and planners with direct experience in feasibility study assignments;
- b) Clear organizational structure and allocation of responsibilities within the project team;
- c) Access to specialized tools, software, and data analysis platforms (e.g., GIS, HEC-HMS, HEC-RAS, PLEXOS, or equivalent); and
- d) Availability of in-house or partnered subject matter experts for specific domains such as sedimentation analysis, energy yield estimation, or environmental modelling.

Project Management Capability

8.9 The Participant shall demonstrate the ability to manage multidisciplinary workstreams effectively, including:

- a) Demonstrated ability to manage multi-disciplinary teams and coordinate with multiple stakeholders, including government agencies and technical reviewers;
- b) Established quality assurance and control systems to ensure accuracy, reliability, and traceability of results; and
- c) Clear processes for reporting, review, and documentation aligned with SEB's governance requirements.

Supporting Documentation

8.10 Participant shall provide the following documentation to substantiate its experience and capacity:

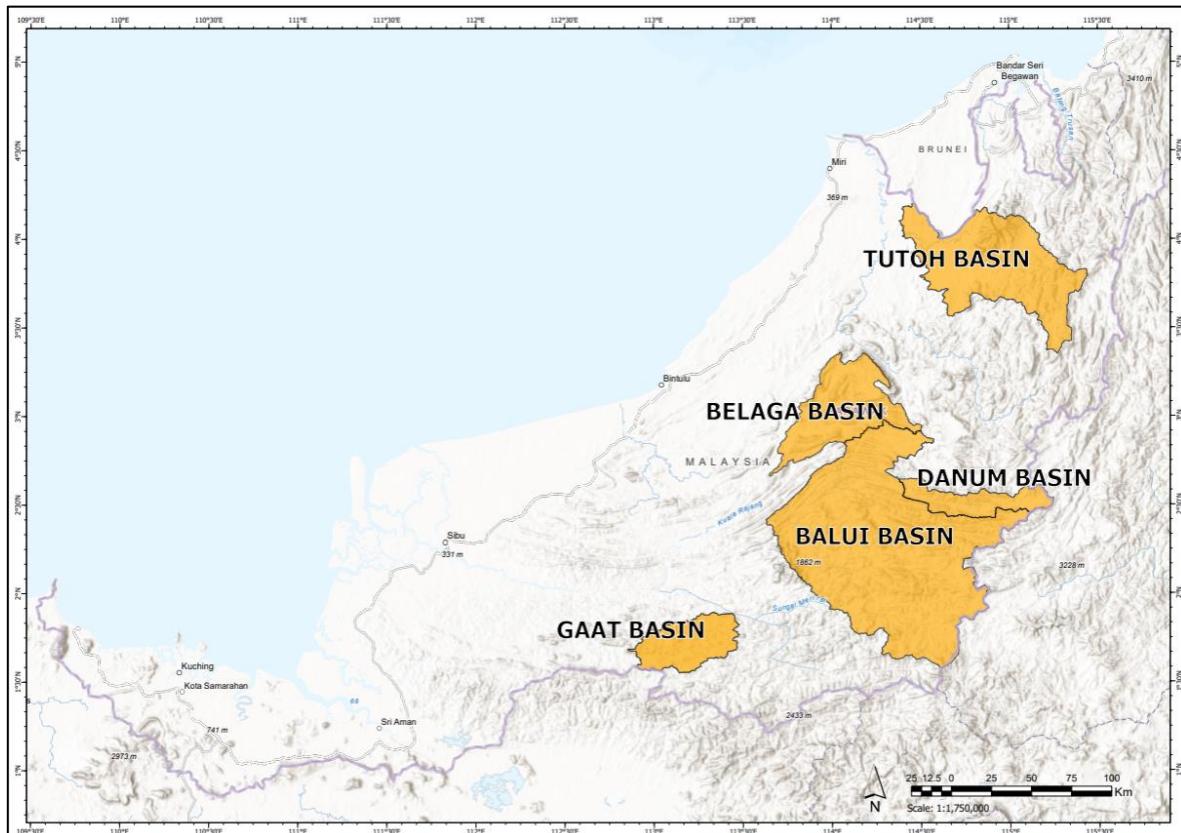
- a) Company profile and organizational chart;
- b) Summary of relevant completed and ongoing projects (indicating client, project type, capacity, location, and completion year);
- c) Curriculum Vitae (CVs) of key personnel proposed for the CPS feasibility study; and
- d) Copies of relevant certifications, professional licenses, or quality management accreditations.

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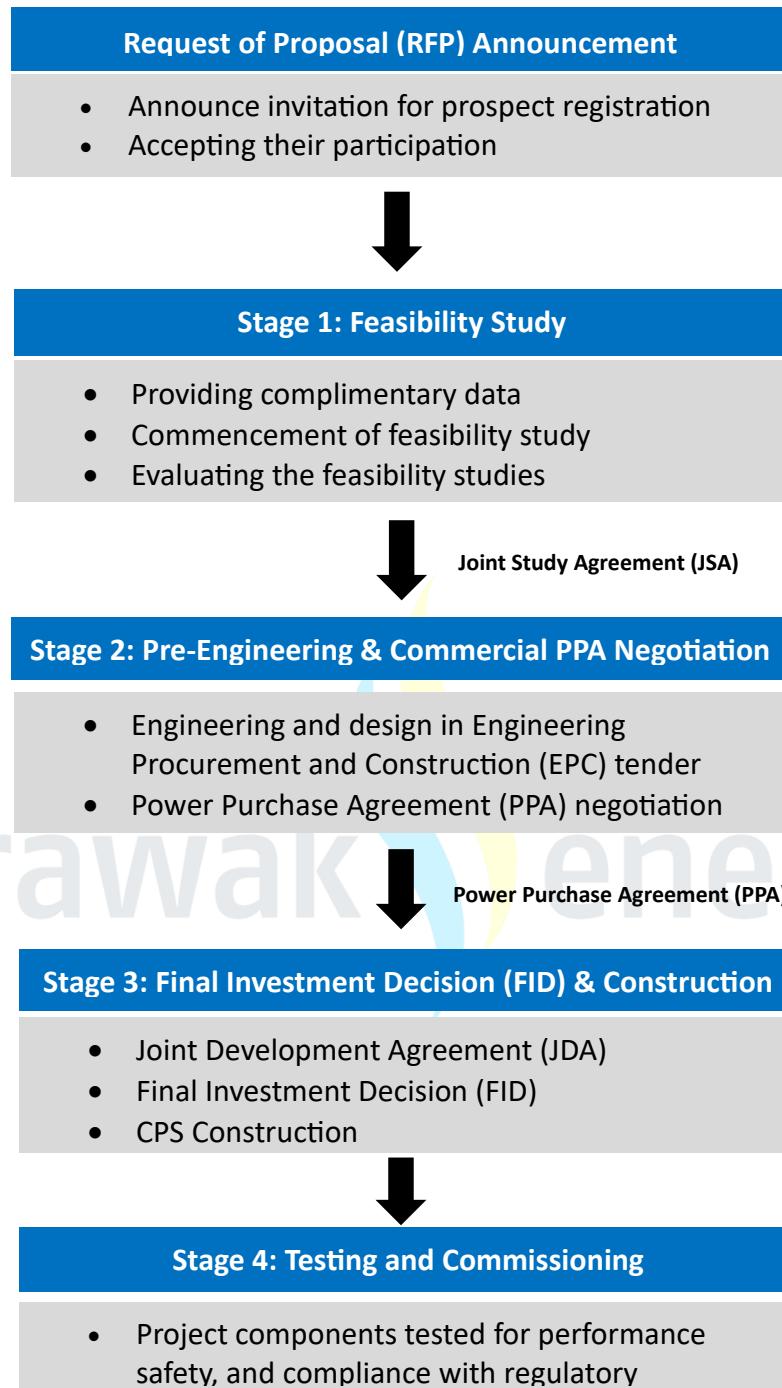


SECTION 9: APPENDICES

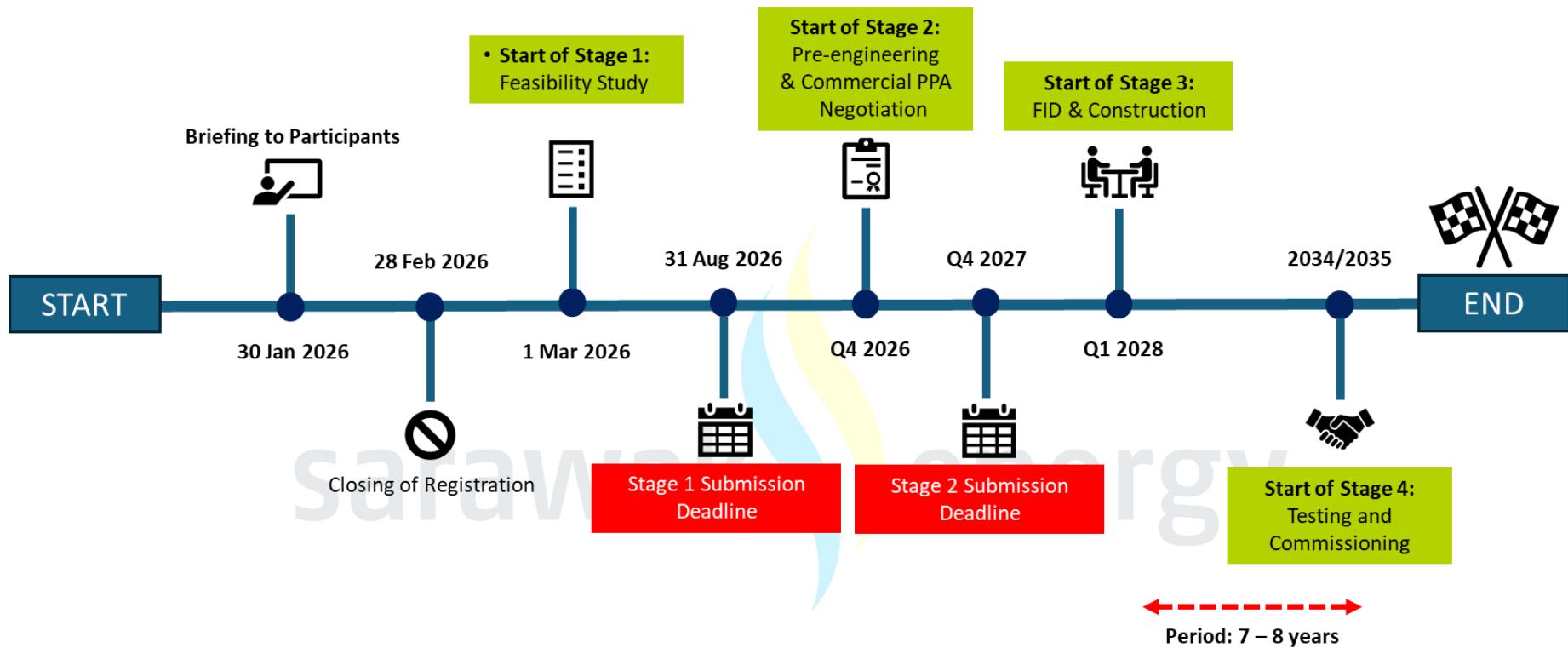
Appendix 1 - Map of the Study Area(s)



Appendix 2 - Detail Process Flow



Appendix 3 - Targeted Implementation Timeline for CPS Development



Appendix 4 - Summary of Cascade Power Sources Information

The information provided in this section is based on information available to date and may be subject to change as further details become available.

1. Hydrology
 - a. Rainfall data
 - b. Water level data
 - c. Evaporation data
2. Environmental and Social
 - a. Basic demographics data (where available)
 - b. Forest Management Unit (FMU) and Forest Plantation Management Unit (FPMU)
 - c. Sarawak HOB 2024 Publication Report
3. Geographical Information System
 - a. Shuttle Radar Topography Mission (SRTM)
 - b. Basin Boundary
4. General Information
 - a. Malaysia Dam Safety Management Guidelines (MyDAMS) 2017
 - b. Hydropower Sustainability Guidelines 2021
 - c. HydroSelect Tool
 - d. How-To-Guides:
 - i. Hydropower Erosion and Sedimentation
 - ii. Hydropower and Indigenous People
 - iii. Hydropower Infrastructure Safety
 - iv. Hydropower Labour and Working Conditions
 - v. Hydropower Environmental and Social Assessment and Management
 - vi. Hydropower Biodiversity and Invasive Species
 - vii. Hydropower Downstream Flow Regimes
 - viii. Hydropower Resettlement
 - ix. Hydropower Benefit Sharing
 - x. Hydropower Communications and Consultation
 - xi. Hydropower Climate Change Resilience
 - xii. Hydropower Climate Change Mitigation
 - e. Geology, Earthquake and Seismic Information:
 - i. Geological (Lithology) Map of Sarawak
 - ii. Earthquake info
 - iii. Seismic Hazard Map

Appendix 5 - CPS Registration Form

[The document is available for download via Sarawak Energy's official website]

Appendix 6 - Confidentiality Agreement (Mutual) to Confidentiality Agreement (NDA)

[The document is available for download via Sarawak Energy's official website]

Appendix 7 - KYC Questionnaires Form

[The document is available for download via Sarawak Energy's official website]

