

First Request for Proposal (RFP1) to Appoint Electricity Importers – Attachment A

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Legend

✘	Not developed
✓ (Indicative)	Partially developed
✓	Fully developed

A1

Singapore Deliverability Expertise

A1.1 Previous Experience

A1.1.1 Compilation of Relevant Projects

Objective

The Participant must demonstrate to the EMA that it:

- Is experienced in the design, delivery, operation and maintenance of large and complex projects
- Is experienced in the management of energy assets
- Understands the Singaporean and regional energy market

- A description of the overall scope, including indication of assets' size
- The Participant's role in the delivery of the scope

Submission Document Requirements

Type of Submission Document

The Participant must submit a Word document / PDF using the template provided by the EMA. Each project example shall be limited to 1 page.

Submission Document Content

The Submission Document to be provided by the Participant must include:

- Up to 5 examples of the development and/or delivery of large/complex energy projects (preference for Singapore market projects)
- Up to 2 examples of the operation and management of 2 large energy assets/systems (preference for Singapore market projects)

The examples provided must include:

- Project name and location
- Cost and timeframe (only applicable for development/delivery examples)

Note to Participants: *in case of partnerships, the Participant can use experience from all partner organisations.*

If a Participant cannot provide valid examples to demonstrate relevant experience, an explanation shall be provided on how this is intended to be mitigated.

Initial Bid vs Final Bid Requirements

Initial Bid	Final Bid
✓	✓

Submission Document Template

The Participant shall provide its response by completing the template **A1.1.1 – Compilation of Relevant Projects** provided with this Corrigendum.

A1.2 Capabilities

A1.2.1 The Participant's Organisation

Objective

The Participant must demonstrate to the EMA that its organisation has:

- The right capabilities for the delivery of the project
- The right capabilities for the operation of the assets/system
- Sufficient capacity for the delivery of the proposed project

- CVs for key project members, including but not limited to:

- Project Director or equivalent
- Project Manager or equivalent
- Technical Lead or equivalent
- Permits and Consent Lead or equivalent

Submission Document Requirements

Type of Submission Document

The Participant must submit a Word document / PDF of a maximum of 10 pages (excluding CVs; CVs will be considered as supporting evidence and shall be a maximum of 2 pages each and there is not a limit to the number that can be provide).

Submission Document Content

The Submission Document to be provided by the Participant must include:

- A summary of the Participant's organisation, including business sectors, locations and size
- An overview of the organisation's teams expected to be involved in the development and delivery of the project
- Indication of the Participant's base (location) for the development of the project

Note to Participants: *in case of partnerships, the Participant can combine the capabilities and capacity of all partner organisations.*

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓ (Indicative)	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

A2

Technical Feasibility

A2.1 Overall System Design

A2.1.1 Overall Project Summary

Objective

To provide the EMA with an overview of the proposed entire import facility (including HVDC/HVAC system if applicable) from the generation source to the point of connection at Singapore Grid.

Submission Document Requirements

Type of Submission Document

The Participant must submit a Word document / PDF of a minimum of 5 pages and a maximum of 10 pages.

Submission Document Content

The Submission Document to be provided by The Participant must at least include the following content :

- Project description
- A schematic representing key assets, route and geographies
- Description of key assets, interfaces and technologies
- Key milestones

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

A2.1 Overall System Design

A2.1.2 Single Line Diagram

Objective

The Participant must demonstrate to the EMA:

- The import capacity
- The electrical topology and configuration of the proposed network
- Main items of electrical equipment
- Proposed staged delivery of the network, if applicable

Submission Document Requirements

Type of Submission Document

The Participant must submit a schematic SLD drawing in a PDF format .

Submission Document Content

The Submission Document to be provided by The Participant must at least include the following content:

- Import capacity from generation source to the point of connection at the Singapore grid.
- Key electrical components (including switchgear configuration at generation switchhouse), including as a minimum their power rating, nominal current, voltage and fault level withstand
- Number of circuits, cabling type and approximate lengths
- Key equipment type and make
- Key interface boundaries with the TSO/ Grid operator and other potential point(s) of connection
- Itemised drawing legend

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

A2.1 Overall System Design

A2.1.3 Non-Intermittency Management

Objective

The Participant must demonstrate to the EMA the:

- Intent for intermittent or non-intermittent energy source
- If intermittent, whether an energy storage solution is being proposed
- Energy storage strategy and technology type if applicable
- Main items of equipment associated with the energy storage system
- Operational strategy
- Previous experience with energy storage schemes for a similar technology or geographical location

Submission Document Requirements

Type of Submission Document

The Participant must submit a written report of a maximum of 10 pages in a PDF format

Submission Document Content

The Submission Document to be provided by the Participant must at least include the following content:

If the proposed energy source is intermittent

- Intent for energy storage
- Energy Storage summary strategy
- Energy storage sizing methodology and calculation documents.
- Design & technical specification for energy storage for

proposed import profile and its control strategy

- Energy Storage capacity (MWh)
- Storage main items of electrical equipment and topology/ interfaces with the electrical network
- Operational timeframes
- Charging and discharging times

If the proposed energy source is non-intermittent

- Explanation on how the energy source is able to meet the non-intermittency requirement

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

A2.1 Overall System Design

A2.1.4 Energy Availability Analysis

Objective

The Participant must demonstrate to the EMA the:

- Availability of the electrical import over time
- Weather availability analysis if the import strategy is reliant upon this
- Resilience strategy including alternatives to network expansion such as energy storage installations
- Anticipated capacity factor of the electrical import
- Due diligence used to confirm the availability of the electrical import against other similar technologies deployed in similar geographical locations
- Anticipated network efficiency

Submission Document Requirements

Type of Submission Document

The Participant must submit a written report of a maximum 10 pages in a PDF format.

Submission Document Content

The Submission Document to be provided by The Participant must at least include the following content:

- Energy availability calculations of the whole proposed system and its individual components/assets
- Capacity factor
- Resilience considerations on system’s design
- Anticipated solution efficiency, such as an estimate for the overall electrical network losses or conversion losses per GWh
- Clearly identified assumptions and data sources

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

A2.1 Overall System Design

A2.1.5 Design Philosophy

Objective

The Participant must demonstrate to the EMA the anticipated:

- Import capacity
- Key design considerations
- Key risks and risk mitigation
- Resilience considerations
- Site location and existing Infrastructure
- Environmental constraints and considerations
- Key regulatory and transmission operator requirements and standards
- Phasing/ deployment of the network
- Anticipated control and protection systems
- Anticipated future desktop and site surveys

- Equipment Material Take Off (MTO).
- Anticipated location for points of connection and landfall locations if applicable.
- Maintainability and asset life considerations.
- Risk Register.

Submission Document Requirements

Type of Submission Document

The Participant must submit a written report of a maximum 30 pages and supporting drawings in a PDF format

Submission Document Content

The Submission Document to be provided by the Participant must include:

- Overall Basis of Design (BoD) for the system capturing the above points.
- Availability and redundancy analysis.
- High level site plan.

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

A2.1 Overall System Design

A2.1.6 Grid Connection Timeline

Objective

The Participant must demonstrate to the EMA the:

- Key activities and milestones for acquiring a grid connection within Singapore and if applicable respective connecting countries
- Anticipated programme illustrating the above items and critical path
- Internal and external organisations/ stakeholders required during the grid connection process
- Interfaces with external organisations
- Anticipated Grid connection location(s)

Submission Document Requirements

Type of Submission Document

The Participant must submit a paper of a maximum of 5 pages in a PDF format.

Submission Document Content

The Submission Document to be provided by The Participant must at least include the following content :

- High level description of the grid connection assessment and methodology, based upon the relevant grid operators standards and procedures.
- Previous experience of any grid application projects completed for a similar proposal (technology) in the same geographical location.
- Identification of land/site considerations and internal

and external stakeholders required. This can include letters of support from any corresponding authorities, if available.

- Indication of technical analysis to be undertaken, e.g.:
 - SSR and Torsional Interaction Analysis
 - Harmonic Performance Assessment
 - Electromagnetic Transient Assessment
 - Protection and Control Facilities
 - Safety and Operational Interlocking Arrangement
- Key grid connection dates/milestones, including but not limited to expected:
 - Completion of substation bay design requirements
 - Procurement of EPC Contractors/long-lead items
 - Connection date
 - This include a letter from relevant grid operator / grid owner indicating the bidder has a pre-consultation with them.

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

A2.2 Constructability

A2.2.1 Route Options

Objective

The Participant must demonstrate to the EMA that:

- The proposed cable route is feasible, recognises the expected permitting requirements, can be installed with available industry technology, will be reliable and provide the required interconnector availability over the proposed service life as stated by the Participant.

Submission Document Requirements

Type of Submission Document

The Participant must submit a technical proposal with adequate detail to support the objective.

Submission Document Content

The Submission Document to be provided by the Participant must at least include the following content:

- To submit up to 3 proposed feasible cable routes, including 1 recommended cable route to be implemented.
- Desk top study (DTS) equal to ICPC recommendation #9 “Minimum Technical Requirement for a Desktop Study” including cable route position list.
- Cable burial assessment.
- Study of marine traffic and other hazards.
- Reliability calculations.

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

A2.2 Constructability

A2.2.2 List of Surveys

Objective

The Participant must demonstrate to the EMA that:

- The Participant will perform an industry standard cable route survey to confirm or amend the proposed cable route identified in the DTS.
- It has considered onshore surveys.

Submission Document Requirements

Type of Submission Document

The Participant must submit an Excel register using the template provided by the EMA.

Submission Document Content

The Submission Document to be provided by The Participant must include:

- Clear indication of the type of surveys, their objectives and location (i.e. onshore/offshore, territory/country, asset).
- Narrative on planned standard of surveys (e.g. proposed cable route survey scope of work compliant with ICPC recommendation #18 “Minimum Technical Requirement for the Acquisition and Reporting of Submarine Cable Route Surveys”)

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓ (Indicative)	✓

Submission Document Template

The Participant shall provide its response by completing the template **A2.2.2 – List of Surveys** provided with this Corrigendum.

A2.2 Constructability

A2.2.3 Key Construction Activities

Objective

The Participant must demonstrate to the EMA that:

- The proposed design meets the energy transmission objectives of this RFP
- Understands the whole extent of on-site activities that are expected to be required
- Appropriate and adequate installation resources are being planned for

- Descriptions of proposed logistics activities (including cable transportation, if applicable)
- Indication of installation activities and resources
- Details of expected test plan through to commissioning
- Link between selected procurement strategy and interface during construction and commissioning

Submission Document Requirements

Type of Submission Document

The Participant must submit a detailed technical proposal of at least the following content.

Submission Document Content

The Submission Document to be provided by The Participant must include:

- A narrative overview, to complement the Construction Phase Schedule, articulating its approach to construction activities covering the entirety of the construction phase scope for the totality of the proposed import system
- Potential early/enabling works requirements
- Identification of long lead items and an understanding of the programme constraints associated with their procurement
- Links between design phase scope, construction activities and the procurement & contract strategy

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✘	✔

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

A2.2 Constructability

A2.2.4 Major Construction Constraints

Objective

The Participant must demonstrate to the EMA that:

- They have identified major constraints, including geographical elements and interfaces with other major assets (e.g. crossings)
- Have engaged with supply chain to consider construction capability and experience that may influence construction constraints (e.g. ship operational limits – depth, weather conditions, etc.)
- Have recognised likely consenting or regulatory constraints that may restrict construction (e.g. Working hours, exclusion zones, fishing rights, noise, etc.)

Submission Document Requirements

Type of Submission Document

The Participant must submit a Word document / PDF of a minimum of 3 pages and a maximum of 5 pages (excluding cross referenced documents to be provided)

Submission Document Content

The Submission Document to be provided by the Participant must include:

- Narrative description of each constraint.
- Cross reference to Risk register explaining impact and mitigation associated with constraint.
- Narrative on relevant management plans.
- Cross reference to project schedule and associated activities.

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓ (Indicative)	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

A2.3 Technologies

A2.3.1 Equipment Datasheets

Objective

The Participant must demonstrate to the EMA the:

- High level performance capabilities of the main import technology (generator or interconnector)
- High level performance capabilities of the main items of electrical equipment, including any anticipated energy storage.
 - Insulation properties
 - Impedance
- Spatial considerations:
 - Dimensions: L x W x H (m)
 - Access and maintenance
 - Total weight

Submission Document Requirements

Type of Submission Document

The Participant shall submit a completed equipment data sheet for each key item of main electrical equipment summarised.

Submission Document Content

The Submission Document to be provided by the Participant must include as a minimum the equipment:

- Description and function, including type of technology
- Electrical performance criteria, such as:
 - Nominal voltage
 - Impulse withstand voltage
 - Voltage regulation
 - Power rating
 - Storage capacity
 - Fault contribution/ withstand
 - Construction make-up
 - Cooling arrangement
 - Cooling fluids
 - Arching medium

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

A2.3 Constructability

A2.3.2 Technology Readiness

Objective

The Participant must demonstrate to the EMA the:

- Rationale for selection of the proposed technology choices.
- Generation technology manufacturer
- Electrical system manufacturer
- Current equipment capability
- Future equipment capability and developments along with a timescale roadmap
- Project examples of equipment/ system installation
- Individual equipment failure rates

Submission Document Requirements

Type of Submission Document

The Participant must submit a written report of a maximum of 10 pages in a PDF format.

Submission Document Content

The Submission Document to be provided by the Participant must include:

- Original Equipment Manufacturer combined report that includes the above objectives
- Technology Readiness Assessment that examines program concepts, technology requirements, and demonstrated technology capabilities similar in principle to the ENTSO-E: TRL scoring matrix (<https://www.entsoe.eu/Technopedia/trls/>)

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
x	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

A2.4 Transmission Code Compliance

A2.4.1 Transmission Code Compliance Capability

Objective

The Participant must demonstrate to the EMA that:

- The proposed entire import facility from the generation source to the point of connection at Singapore Grid (including HVDC system if applicable) complies with the Transmission Code
- Sufficient consideration has been given to the process required for demonstrating Transmission Code compliance

Submission Document Requirements

Type of Submission Document

The Participant must submit a Word document / PDF of a minimum of 05 pages and a maximum of 15 pages. The Word document / PDF must include relevant cross-references to the Transmission Code requirements (e.g. tables/diagrams with frequency and voltage ranges).

Submission Document Content

The Submission Document to be provided by The Participant shall describe the entire import facility from the generation source to the point of connection at Singapore Grid (including HVDC system if applicable), including equipment, facilities and services which shall enable it to meet the performance requirements and other obligations specified in the Transmission Code. Content shall consist of:

- Narrative on technical solution capability to meet

Transmission Code requirements, including but not limited to:

- Ratings
- System voltage management
- Reactive power
- Frequency response
- Harmonic performance
- Provision of Primary and Contingency reserve
- N-1 criteria
- Outline of simulation studies and testing to be performed to demonstrate Transmission Code compliance

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

A3

Design Phase

A3.1 Planning and Permitting

A3.1.1 List of Required Permits

Objective

The Participant must demonstrate to the EMA that:

- It has a clear understanding of the permitting scope for all different geographical locations and asset types
- Activities and associated timeframes needed for securing required permits are clear and planned for
- Permitting approach is based on quality data resulting from official guidance, liaison with relevant authorities/other stakeholders and previous projects experience

Submission Document Requirements

Type of Submission Document

The Participant must submit an Excel register using the template provided by the EMA.

Submission Document Content

The Submission Document to be provided by the Participant must include:

- List of all required permits (primary and secondary) classified by geography and asset type
- Timeframes and key steps (e.g. information requirements) for securing the required permits
- Progress achieved to date (including engagement with authorities)
- Analysis of criticality of permit related requirements (permits' critical path)
- Permitting strategy, including Participant's approach to increase likelihood of success

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓	✓

Submission Document Template

The Participant shall provide its response by completing the template **A3.1.1 – List of Required Permits** provided with this Corrigendum.

A3.1 Planning and Permitting

A3.1.2 Land Access Strategy

Objective

The Participant must demonstrate to the EMA that:

- Consideration has been given to the project's land requirements
- Understands the process for purchasing land and securing the required land access rights at different geographical locations
- A plan is in place to identify land requirements and satisfy them

Submission Document Requirements

Type of Submission Document

The Participant must submit a Word document / PDF of a minimum of 3 pages and a maximum of 5 pages.

Submission Document Content

The Submission Document to be provided by the Participant must include:

- Identification of current land requirements classified by geography and asset type
- Definition of land use requirements (e.g. partial access during construction, partial access during operation, permanent access, etc.)
- Description of intended strategy to secure land access (e.g. purchase, lease, easement, etc.)
- Description of plan to refine and confirm land access requirements

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

A3.2 Regulatory

A3.2.1 Regulatory Requirements Overview

Objective

The Participant must demonstrate to the EMA that:

- Understands the full extent of the relevant regulatory frameworks, in particular those unrelated to the EMA.

Submission Document Requirements

Type of Submission Document

The Participant must submit a Word document / PDF of a minimum of 2 pages and a maximum of 5 pages.

Submission Document Content

The Submission Document to be provided by the Participant must include:

- Outline of applicable regulatory regimes
- Description of required regulatory submissions
- Definition of key activities/products predecessors of any regulatory submission and successors depending on them

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

A3.3 Design Phase Project Management

A3.3.1 Organisational Structure

Objective

The Participant must demonstrate to the EMA that:

- Understands the nature of the scope to be delivered
- Adequate consideration has been given to structure the design phase team
- The proposed structure is consistent with the totality of the defined scope and other elements of the submission (e.g. defined WBS), showing clear accountability for project activity.
- Support from sub-consultants and contractors have been identified

Submission Document Requirements

Type of Submission Document

The Participant must submit a hierarchical organisational breakdown structure (OBS) with clear identification of relationships and relative ranks of the defined workstreams and roles. This chart must be supplemented by a brief 1 page narrative explaining the rationale behind the proposed structure.

Submission Document Content

The Submission Document to be provided by the Participant must include:

- Definition of workstreams
- Definition of team member roles
- Clear identification of reporting lines
- Existing/expected consultants/sub-contractors
- Link to risk management and design phase schedule

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

A3.3 Design Phase Project Management

A3.3.2 Project Lifecycle

Objective

The Participant must demonstrate to the EMA that:

- They operate robust governance processes for project delivery
- Project leaders have opportunity to review and challenge project progress, and offer direction at key stages
- The intended project delivery process can be simply and effectively communicated to stakeholders

Submission Document Requirements

Type of Submission Document

The Participant must submit a short presentation (typically a Microsoft PowerPoint file, or equivalent) of a minimum of 2 pages and a maximum of 5 pages.

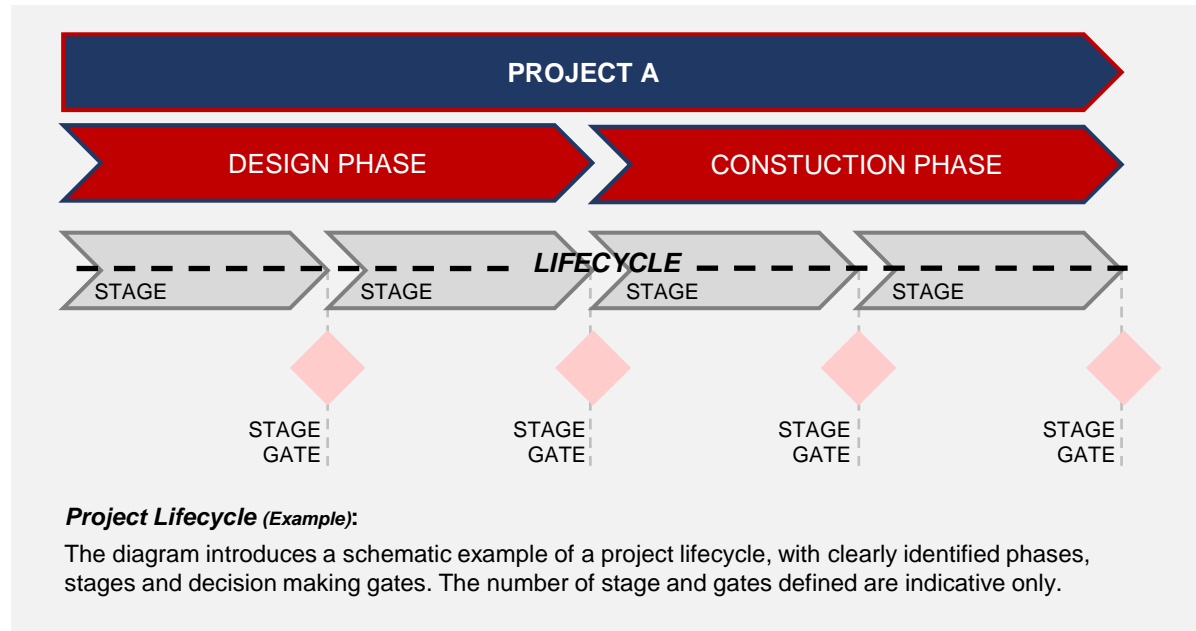
The document shall ensure the reader obtains a clear understanding of the outline process, and associated governance, to be undertaken by the Participant to efficiently deliver the full scope of the works.

The project lifecycle shall, at its highest level, align with the 2 phase (Design Phase and Construction Phase) approach of EMA.

Submission Document Content

The Submission Document to be provided by the Participant must include:

- A clear diagram summarising the project lifecycle
- A definition of each stage/phase of the lifecycle
- A definition of stage gates and their objectives
- The key deliverables at each stage/phase



Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

A3.3 Design Phase Project Management

A3.3.3 Governance Structure

Objective

The Participant must demonstrate to the EMA that:

- They operate robust governance processes for project delivery
- There is a clear process in place for project reporting and the communication of key project data
- There is a clear process in place for decision making
- Delegation of authority has been clearly identified

Submission Document Requirements

Type of Submission Document

The Participant must submit a Word document / PDF of a minimum of 3 pages and a maximum of 5 pages (excluding example documents to be provided).

Submission Document Content

The Submission Document to be provided by the Participant must include:

- Definition of different assurance and decision making bodies (e.g. project board, steering committees, etc.)
- Definition of delegation of authority
- Description and examples of the project's reporting
- Examples of board/committees decision making papers templates
- Diagram and narrative on decision making process, and how this maps to the lifecycle and stage gate process (A3.3.2)
- The project's reporting calendar

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
x	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

A3.3 Design Phase Project Management

A3.3.4 Design Phase Key Risks

Objective

The Participant must demonstrate to the EMA that:

- Understands the key risks associated to the development and delivery of the proposed project
- Significant effort has been placed in the identification of project risks
- Adequate management plans are being implemented to control key project risks

Submission Document Requirements

Type of Submission Document

The Participant must submit a completed risk register using the template provided by the EMA, supplemented by a 1-2 page narrative on the process followed for the identification and monitoring of project risks.

Submission Document Content

The Submission Document to be provided by the Participant must include:

- Clear description of the project's risk root causation and its potential consequences if it were to materialise
- An indicative assessment of the severity of the identified risks
- For risks identified as “High” and “Medium”:
 - A description of the potential range of outcomes (scenarios) in case of the risk occurring
 - An indication of the management plan in place to control the risks

Note to Participants: *risk register submissions have been split into two independent deliverables (A3.3.4 and A4.1.2) to account for the differences in the level of specificity expected in the data. The design phase risk register is expected to be of higher detail and include more specific information and better defined management plans. On the other hand, the construction phase risk register is expected to be more thematic in nature and the mitigations to focus on activities that can be implemented during the design phase.*

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓	✓

Submission Document Template

The Participant shall provide its response by completing the template **A3.3.4 – Design Phase Risks** provided with this Corrigendum.

A3.3 Design Phase Project Management

A3.3.5 Lessons Learnt

Objective

The Participant must demonstrate to the EMA that:

- Due-diligence has been undertaken when conceptualising the project
- Lessons learnt have been incorporated into the project's delivery strategy

Submission Document Requirements

Type of Submission Document

The Participant must submit a Word document / PDF of a minimum of one 1 page and a maximum of 3 pages.

Submission Document Content

The Submission Document to be provided by the Participant must include:

- A list of lessons learnt from projects of similar complexity (either delivered by the Participant or by another organisation)
- Information on how the identified lessons learnt have influenced the defined strategy for project development and delivery.

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

A3.3 Design Phase Project Management

A3.3.6 Stakeholder Management

Objective

The Participant must demonstrate to the EMA that:

- Key project's stakeholders have been identified
- There is a clear strategy in place to engage with key stakeholders
- Relevant progress has been made engaging with key stakeholders

Submission Document Requirements

Type of Submission Document

The Participant must submit a Word document / PDF of a minimum of 3 and a maximum of 5 pages. The Participant shall supplement its submission with a copy of its stakeholder management plan/register.

Submission Document Content

The Submission Document to be provided by the Participant must include:

- A list of key stakeholders classified by geography and asset type
- A narrative on how the identified key stakeholders influence the project
- A description of the strategy to be followed to engage with key stakeholders
- A narrative on the progress made to date engaging with key stakeholders

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
x	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

A3.4 Design Phase Plan

A3.4.1 Design Phase Schedule

Objective

The Participant must demonstrate to the EMA:

- That the scope of work is fully understood
- The sequencing of tasks required to deliver the required scope of work
- The timescale required to deliver the scope of work
- How the scope of work interfaces with other project participants
- That quality and robust data has been used to plan the project
- That it understands the process to reach FID/FC (see Submission Document A6.2.2)

Submission Document Requirements

Type of Submission Document

The Participant must submit a project schedule (activity table and Gantt chart) in native electronic and PDF formats, together with a supporting written narrative.

Microsoft Project or Primavera P6 (or equivalent) should be used to develop the project schedule. The Participant, applying critical path methodology to achieve a closed logic activity network, should identify a series of tasks and milestones to clearly demonstrate the sequencing required to complete the required scope of work.

Key interfaces to, and from, other participants should be clearly identifiable.

The detail included must be sufficient to demonstrate to the reader that all key tasks have been considered and to allow the reader to assess the proposed sequencing of activity.

The project schedule shall be developed using a consistent Work Breakdown Structure, equivalent to that

shown opposite. Additional Work Breakdown Structure levels below that shown, may be included at the Participants' discretion.

Submission Document Content

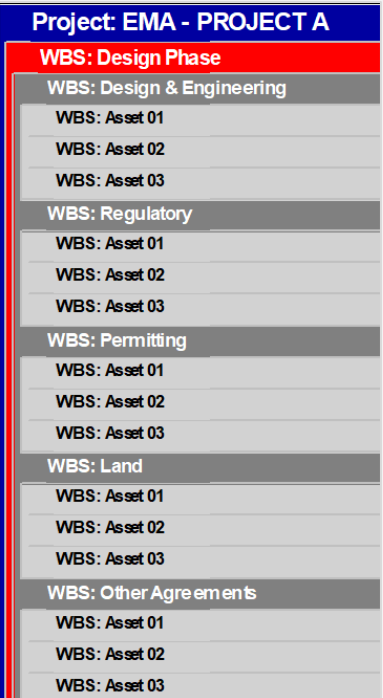
The Submission Document to be provided by The Participant must include:

- Project schedule native electronic file (.MPP / .XER)
- Project schedule in PDF format, clearly showing; Activity ID, Activity Name, Activity Duration, Earliest Start Date, Earliest Finish Date, Total Float (highlighting the activities that will be completed after conditional award and their expected completion date)
- Clearly identifiable interfaces to, and from, other third parties
- Supporting schedule narrative, explaining the critical path, and clarifying schedule constraints and assumptions, including data reference sources

Initial Bid vs Final Bid Requirements

Initial Bid	Final Bid
✓	✓

Note to Participants: *schedules submissions have been split into two independent deliverables (A3.4.1 and A4.2.1) to account for the differences in the level of detail, estimation approach and certainty expected in the plans. The design phase schedule is expected to be of higher detail and certainty than the construction one. It is also expected to have been planned following a bottom-up approach. On the other hand, the construction phase schedule is expected to be developed using parametric methods and/or intelligence from the supply chain.*



Project: EMA - PROJECT A	
WBS: Design Phase	
WBS: Design & Engineering	
WBS: Asset 01	
WBS: Asset 02	
WBS: Asset 03	
WBS: Regulatory	
WBS: Asset 01	
WBS: Asset 02	
WBS: Asset 03	
WBS: Permitting	
WBS: Asset 01	
WBS: Asset 02	
WBS: Asset 03	
WBS: Land	
WBS: Asset 01	
WBS: Asset 02	
WBS: Asset 03	
WBS: Other Agreements	
WBS: Asset 01	
WBS: Asset 02	
WBS: Asset 03	

Design phase WBS (Example):

The structure shown is clear and consistent grouping the activities by workstream and asset type.

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

A3.4 Design Phase Plan

A3.4.2 Design Phase Schedule Uncertainty Analysis

Objective

The Participant must demonstrate to the EMA that:

- Understands the range of potential outcomes (construction completion) for the proposed project
- Has accounted for uncertainty and optimism bias when planning the development and delivery of its project

Submission Document Requirements

Type of Submission Document

The Participant must submit either a simple Quantitative Schedule Risk Analysis (QSRA) of its proposed schedule or a Word document / PDF of a minimum of 3 pages and a maximum of 10 pages providing a scenario analysis of the projects critical path and other key activities with limited float.

Submission Document Content

The Submission Document to be provided by the Participant must include:

- Definition of ranges (best case, most likely and worst case) for the completion of key project activities
- Clear indication of best and worst case scenarios (dates) for the completion of the project
- Key contributors (risks) to a potential project delay
- Narrative on how this analysis is accounted for the project (e.g. correction of the project baseline, mitigations, etc)

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

A3.5 Procurement & Contract Strategy

A3.5.1 Supply Chain Analysis

Objective

The Participant must demonstrate to the EMA:

- Its understanding of the supply chain, and the associated technology options available, including drivers, constraints and resilience inherent within it
- Demonstration of competition within the supply chain to maximise value for money and ensure security of project delivery timescales
- Its engagement with, and support to, the supply chain and its approach to coordinating supply chain activity

- The Participant shall describe its proposed subcontractor assessment system and give examples of how this has been successfully deployed on previous projects.
- The Participant shall provide its Key Subcontracts Plan and associated Supply Chain Management Plan. Please demonstrate how this has been implemented on previous similar projects.

Submission Document Requirements

Type of Submission Document

The Participant must submit a Word document / PDF of a minimum of 4 pages and a maximum of 10 pages, excluding any additional supporting evidence it deems necessary.

Submission Document Content

The Submission Document to be provided by the Participant must include:

- The activities it has undertaken to date, and those activities it plans to undertake, to engage with the supply chain for the provision of construction phase and operations phase suppliers.
- Methods or processes it has implemented, or intends to implement, to ensure open and positive engagement with the supply chain, e.g. tender design, contract terms, business model, procurement and contracting strategy, digital tools (BIM, digital twins etc.)

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓ (Indicative)	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

A3.5 Procurement & Contract Strategy

A3.5.2 Procurement & Contract Strategy

Objective

The Participant must demonstrate to the EMA its:

- Understanding of tendering and procurement strategies, and the suitability of chosen procurement strategies to the supply chain it is engaging with. This should consider the balance of the Participant's requirements to balance cost, quality and time risks, and demonstrate that the Participant has considered the best value for money for the whole life of the asset.
- Approach to procuring all components of the project during construction and operations.
- Organisational arrangements to how it intends to manage procurements of all components of the project during construction and operations.
- Appreciation of the complexity of the project and the technology choices
- Alignment between the chosen procurement strategy, the balance of risk between the Participant and the supply chain, and the link to the intended financing strategy.

Submission Document Requirements

Type of Submission Document

The Participant must submit a Word document / PDF of a minimum of 10 pages and a maximum of 30 pages.

Submission Document Content

The Submission Document to be provided by the Participant must include:

- Procurement routes considered and rationale for the chosen one, including how it complements the supply chain
- Procurement strategy, lotting and how this addresses the understanding of the supply chain, its constraints and technology options available
- Demonstration of how it intends to evaluate and compare first tier suppliers capabilities, as well as consideration given to evaluation of tenders
- Demonstration of competitiveness, transparency and equal treatment of supply chain partners
- Risk transfer objectives and an overview of the contract strategy
- Integration of procurement activities within the development phase programme activities.
- Any considerations on the supply chain for new technologies (as relevant)

Note to Participants: *when new technologies are offered, a high level of technology readiness shall be demonstrated (Submission Document A2.3.2)*

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

A4

Construction Phase

A4.1 Construction Phase PM

A4.1.1 Delivery Model/Strategy

Objective

The Participant must demonstrate to the EMA that:

- The competence and structure of the Participant's delivery organisation is appropriate to manage construction phase scope and inherent risks.
- That the organisation structure respects the contract strategy, including contract responsibilities and Lot structure, and the resulting WBS.
- The design of the organisation will be reviewed to consider the assurance functions planned (E.g. Technical oversight, SHESQ, Commercial & Contract, PMO, etc)
- That each assurance function includes the composition of the roles to satisfy the function objectives.
- Key role responsibilities and experience requirements are understood.

Submission Document Requirements

Type of Submission Document

The Participant must submit a hierarchical organisational breakdown structure (OBS) with clear identification of relationships and relative ranks of the defined workstreams and roles. This chart must be supplemented by a brief narrative of a minimum of 1 page and a maximum of 3 pages explaining the rationale behind the proposed structure. In addition, at initial bid a paragraph description of each key role (leadership roles) should be included.

Submission Document Content

The Submission Document to be provided by the Participant must include:

- Definition of the delivery model/high level organisational structure intended to be used during the construction phase. This should include key workstreams and expected sub-consultants.
- Organisation structure narrative.
- Key role (leadership role) descriptions/profiles
- Key Role CVs (Final Bid only)

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓ (Indicative)	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

A4.1 Construction Phase PM

A4.1.2 Construction Phase Key Risks

Objective

The Participant must demonstrate to the EMA that:

- Understands the key risks associated to the development and delivery of the proposed project
- Significant effort has been placed in the identification of project risks
- Adequate management plans are being implemented to control key project risks

Submission Document Requirements

Type of Submission Document

The Participant must submit a completed risk register using the template provided by the EMA.

Submission Document Content

The Submission Document to be provided by the Participant must include:

- Clear description of the project’s risk root causation and its potential consequences if it were to materialise
- An indicative assessment of the severity of the identified risks
- For risks identified as “High” and “Medium”:
 - A description of the potential range of outcomes (scenarios) in case of the risk occurring
 - An indication of the control actions planned to be completed during the design phase to de-risk construction

Note to Participants: *risk register submissions have been split into two independent deliverables (A3.3.4 and A4.1.2) to account for the differences in the level of specificity expected in the data. The design phase risk register is expected to be of higher detail and include more specific information and better defined management plans. On the other hand, the construction phase risk register is expected to be more thematic in nature and the mitigations to focus on activities that can be implemented during the design phase.*

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓	✓

Submission Document Template

The Participant shall provide its response by completing the template **A4.1.2 – Construction Phase Risks** provided with this Corrigendum.

A4.2 Construction Phase Plan

A4.2.1 Construction Phase Schedule

Objective

The Participant must demonstrate to the EMA:

- That the scope of work is fully understood
- The sequencing of tasks required to deliver the required scope of work
- The timescale required to deliver the scope of work
- How the scope of work interfaces with other project participants
- That quality and robust data has been used to plan the project

Submission Document Requirements

Type of Submission Document

The Participant must submit a project schedule (activity table and Gantt chart) in native electronic and PDF formats, together with a supporting written narrative.

Microsoft Project or Primavera P6 (or equivalent) should be used to develop the project schedule. The Participant, applying critical path methodology to achieve a closed logic activity network, should identify a series of tasks and milestones to clearly demonstrate the sequencing required to complete the required scope of work.

Key interfaces to, and from, other participants should be clearly identifiable.

The detail included must be sufficient to demonstrate to the reader that all key tasks have been considered and to allow the reader to assess the proposed sequencing of activity.

The project schedule should be developed using a consistent Work Breakdown Structure, equivalent to that shown opposite. Additional Work Breakdown Structure

levels below that shown, may be included at the Participants' discretion.

Submission Document Content

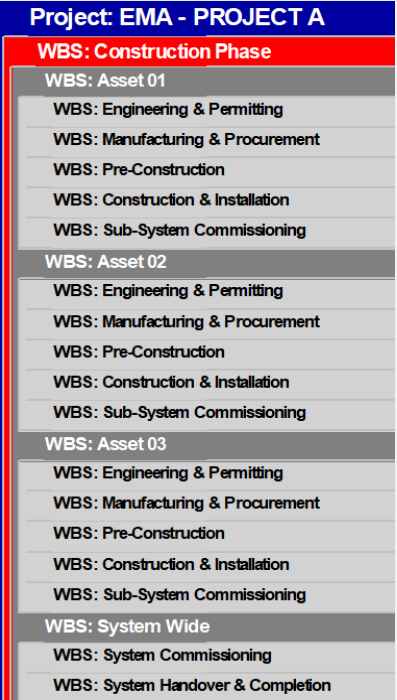
The Submission Document to be provided by the Participant must include:

- Project schedule native electronic file (.MPP / .XER)
- Project schedule in PDF format, clearly showing; Activity ID, Activity Name, Activity Duration, Earliest Start Date, Earliest Finish Date, Total Float, Critical Path
- Clearly identifiable interfaces to, and from, other third parties
- Supporting schedule narrative, explaining the critical path, and clarifying schedule constraints and assumptions, including data reference sources

Initial Bid vs Final Bid Requirements

Initial Bid	Final Bid
✓	✓

Note to Participants: *schedules submissions have been split into two independent deliverables (A3.4.1 and A4.2.1) to account for the differences in the level of detail, estimation approach and certainty expected in the plans. The design phase schedule is expected to be of higher detail and certainty than the construction one. It is also expected to have been planned following a bottom-up approach. On the other hand, the construction phase schedule is expected to be developed using parametric methods and/or intelligence from the supply chain.*



Project: EMA - PROJECT A	
WBS: Construction Phase	
WBS: Asset 01	
WBS: Engineering & Permitting	
WBS: Manufacturing & Procurement	
WBS: Pre-Construction	
WBS: Construction & Installation	
WBS: Sub-System Commissioning	
WBS: Asset 02	
WBS: Engineering & Permitting	
WBS: Manufacturing & Procurement	
WBS: Pre-Construction	
WBS: Construction & Installation	
WBS: Sub-System Commissioning	
WBS: Asset 03	
WBS: Engineering & Permitting	
WBS: Manufacturing & Procurement	
WBS: Pre-Construction	
WBS: Construction & Installation	
WBS: Sub-System Commissioning	
WBS: System Wide	
WBS: System Commissioning	
WBS: System Handover & Completion	

Construction phase WBS (Example):

The structure shown is clear and consistent grouping the activities by asset type and sub-phase.

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

A4.3 Safety, Health, Environment & Quality

A4.3.1 SHEQ Competence

Objective

The Participant must demonstrate to the EMA that:

- They are competent to manage all SHEQ aspects of the project through all engineering (design), procurement and construction tasks
- They have defined the SHEQ management strategy, including allocation of responsibilities (RACI)
- They have defined SHEQ management systems which have been accredited to international standards
- Have identified and defined the SHEQ legislative standards that will apply and adhered to.

- SHEQ Records and Statistics of main project participants, as set out in the Submission Document template. (Minimum 3 years)

Submission Document Requirements

Type of Submission Document

The Participant must submit a SHEQ management strategy report, including allocation of responsibilities in a Word document / PDF of a minimum of 3 and a maximum of 5 pages, excluding attachments (certificates etc.).

Submission Document Content

The Submission Document to be provided by the Participant must include:

- SHEQ Accreditation / Certification including corporate policies and procedures
- Preliminary or example project SHEQ Management Plans and associated templates
- Org / RACI / CVs of key SHEQ roles

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

A5

Operation & Maintenance

A5.1 O&M Strategy

A5.1.1 O&M Strategy

Objective

The Participant must demonstrate to the EMA that:

- It has a structured and costed organisational model for operating and maintaining the proposed assets in a way that will support reliability and associated high levels of availability;
- It understands the high level maintenance requirements, frequencies and likely durations of maintenance requiring outage for each different asset category; and
- It has a defined strategy and approach to managing the operation and maintenance of each of the key asset groups (covering preventative, predictive and reactive approaches as appropriate).

Submission Document Requirements

Type of Submission Document

The Participant must submit:

- A high level organisational structure chart showing the operation and maintenance arrangements that it expects to be in place during commercial operation of the assets. This should show both directly employed and contracted resource.
- A table (maximum of 5 pages) breaking the system down into key asset groups. Against each asset group it will capture the main maintenance activities, frequencies and duration of expected planned maintenance activities. It will also outline, against each asset group, the external support arrangements and contracts that will be required to effectively manage operations and maintenance activities.
- An organisational chart supplemented with a narrative

(no more than 5 pages) articulating the rationale for the proposed structure, key interfaces and split of responsibilities between different roles and delivery organisations. This should acknowledge the proposed relationship between generation and transmission asset operations. Where the Participant will own the generation assets there may be a different and separate organisational structure required to that which will operate and maintain the connection assets.

Submission Document Content

The Submission Document to be provided by the Participant must include:

- A hierarchical organisation chart showing resource numbers and split of inhouse and contractor roles with high level role descriptions.
- An articulation of the proposed high level operations and maintenance organisational structure.
- An overview of the processes and systems that will be put in place to manage operational, maintenance and defect workload
- A table showing the main asset groups and describing for each asset group:
 - an outline maintenance approach,
 - the frequency and duration of planned maintenance
 - how much of the planned maintenance will require asset shutdown (duration)
 - spares management strategy

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

A5.2 Energy Availability

A5.2.1 Asset Failure Causation

Objective

The Participant must demonstrate to the EMA that:

- It has a grasp and understanding of the main operational and asset related risks which could lead to unavailability and interruption of supply;
- It has a credible approach to mitigating the key risks that could threaten reliable operation of its assets and associated energy supply;
- It has an organisation structure and related support contracts that will allow it to respond in a timely manner and minimise unplanned asset unavailability; and
- It understands the range of timescales that could be involved in returning the asset to service following credible asset failures.

Submission Document Requirements

Type of Submission Document

The Participant must submit a risk register of no more than 10 pages with a clear articulation of generic and specific risks for each main asset group. The risk register should outline key risks that could result in unplanned asset failure and show mitigation it plans to put in place to reduce risks to a level that are 'as low as reasonably practicable'

When considering the impact of each risk the Participant response should indicate a time range for the duration of asset unavailability before being able to return to service.

Submission Document Content

The Submission Document to be provided by the Participant must include:

- A risk register detailing credible risk to asset availability. This shall cover generic as well as asset specific risks. Mitigating actions should cover both proactive preventative measures (such as maintenance); predictive measures (such as asset monitoring) and preparation for reactive measures that will support the prompt return to service following unforeseen failures (such as call out contracts with specialist contractors).
- A brief narrative on potential links to insurance strategy

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓	✓

Template Submission Document

The Participant shall provide its response by completing the template **A5.2.1 – Asset Failure Causation** provided with this Corrigendum. Other references can be provided using the Participant's preferred template.

A5.2 Energy Availability

A5.2.2 Mean Time to Repair

Objective

The Participant must demonstrate to the EMA that:

- The availability objective stated by the Participant is supported by a clear understanding of corrective maintenance requirements.

Submission Document Requirements

Type of Submission Document

The Participant must submit a Word document/pdf of a minimum of 3 pages and a maximum of 10 pages.

Submission Document Content

The Submission Document to be provided by the Participant must include:

- An analysis of a range of asset failure repair scenario
- Calculation/justification of the mean time to repair per asset type.

Initial Bid vs Final Bid Requirements

The Participants must provide this Submission Document both as part of their Initial and Final Bid.

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

A5.3 Decommissioning Strategy

A5.3.1 Decommissioning Assumptions

Objective

The Participant must demonstrate to the EMA that:

- The scope of decommissioning activities is being considered as the project is developed

Submission Document Requirements

Type of Submission Document

The Participant must submit a 1 page Word document / PDF outlining the assumptions made for the decommissioning of the asset.

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
x	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

A6

Financial Deliverability

A6.1 Financing Strategy

A6.1.1 Financing strategy & supporting analysis

Objective

The Participant must demonstrate to the EMA that:

- Development of the financing strategy for the project is adequately progressed, in the context of the overall project delivery plan.

RFP Submission Requirements

Type of Submission

The Participant must submit a Word or PDF document of a maximum of 8 pages.

Submission Content

The Submission Document to be provided by the Participant must include:

- A description of the intended financing strategy for the import project. The description should include the intended capital structure and sources of funding for the import project, as well as a statement on the rationale for the intended financing strategy.
- A table setting out the intended sources and uses of funds (debt and equity). This must be consistent with the financial model included in response to B5.1.
- A statement on the maturity of the financing strategy and any associated uncertainties. For example, this may apply if the Participant has not yet settled on a preferred financing strategy.

- A description of the steps the Participant has taken to progress the implementation of its intended financing strategy at the time of Initial Bid and Final Bid submission. For example, this could include a description of engagement with debt or equity providers, if any.
- **For the Final Bid only:** A description of any supporting analysis that the Participant has undertaken to define or develop its intended financing strategy. This could include analysis undertaken by the Participant and/or external advisors (for example, identifying and/or assessing alternative financing options).

Note to Participants: A high quality response to this submission requirement would include an independent view from a well regarded external financial advisor, demonstrating that in their view the proposed approach is viable.

Initial Bid vs Final Bid Requirements

Initial Bid	Final Bid
✓	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

A6.2 Implementation of the Financing Strategy

A6.2.1 Participant’s Financing Track Record

Objective

The Participant must demonstrate to the EMA that:

- It has the capacity to successfully implement its plan to achieve a final investment decision (FID) / financial close (FC), as evidenced by its past experience in securing financing of a similar type and magnitude.

RFP Submission Requirements

Type of Submission

The Submission to be provided by the Participant must include the completed Submission Template in Word or PDF format.

Submission Content

See Submission Template. The submission should include at least 3 and no more than 10 relevant examples.

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓	✓

Submission Template

The Participant shall provide its response by completing the template **A6.2.1 - Financing Track Record** provided with this Corrigendum.

A6.2 Implementation of the Financing Strategy

A6.2.2 FID/FC Requirements & Plan

Objective

The Participant must demonstrate to the EMA that:

- It understands the process and requirements (conditions precedent) to reach a final investment decision (FID) and/or financial close (FC).
- It has an adequate understanding of the activities and resources required to achieve the conditions precedent to reach FID / FC in the required timeframe.

RFP Submission Requirements

Type of Submission

The Participant must submit a Word or PDF document of a maximum of 8 pages that provides a concise supporting narrative on the Participant’s process and plan to reach FID/FC.

In addition, the Participant must submit the completed Submission Template in Excel format.

Submission Content

The Submission Template requires the Participant to list:

- key condition precedents for FID/FC;
- the date when completion is expected; and
- a brief update on the status at the moment of submission of the Participant’s Bid.

The supporting narrative should address the key activities across all workstreams (e.g., legal, regulatory, financial, commercial, engineering, consents etc) to achieve FID/FC. The supporting narrative should:

- explain how these activities support the FID/FC conditions precedent;
- identify the key risks and uncertainties associated with

achieving the FID/FC conditions precedent by the expected dates; and

- explain how the Participant plans to manage these risks / uncertainties.

Note to Participants: Broadly, FID/FC the conditions precedent are expected to include the Participant’s financial approvals and agreements, regulatory approvals, and contractual agreements, among others.

The EMA expects that the specific conditions precedent required to reach FID / FC may vary across proposals, as Participants may take different approaches to financing their project (for example, corporate finance or project finance approaches). The Participant should therefore identify the conditions precedent that it considers are relevant to its plan to reach FID / FC. For example, completion of Lender’s Due Diligence may be relevant for a project finance approach.

The key activities required to achieve FID / FC shall be reflected in the Gantt chart to be provided as part of Submission Document A3.4.1.

For the supporting narrative, the Participant is encouraged to provide as much detail as it can within the Submission length limit, as this will assist in demonstrating that the Participant has an adequate understanding of the activities and resources needed to implement its financing strategy.

Initial Bid vs Final Bid Requirements

Initial Bid	Final Bid
✓	✓

Submission Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met. This includes incorporating the template **A6.2.2 FID/FC Requirements**.

A6.3 Insurance Strategy

A6.3.1 Insurance Strategy

Objective

The Participant must demonstrate to the EMA that:

- It has a satisfactory understanding of the insurance requirements for its project at the different stages of development, and how to implement these requirements.

RFP Submission Requirements

Type of Submission

The Participant must submit a Word or PDF document of a maximum length of 3 pages.

Submission Content

The Submission to be provided by the Participant must include:

- An overview of the insurance arrangements that it expects to put in place for the import project at different stages of its development. This overview should:
 - Explain why the proposed arrangements are appropriate.
 - Highlight any uncertainties related to the proposed strategy.
- An overview of the process that the Participant plans

to follow to finalise its insurance strategy and procure insurance for the import project. The Participant should:

- Include indicative timing for the process.
- Explain how the process and timing is consistent with the FID/FC plan submitted in A6.2.2.

Note to Participants: *A high quality response would be supported by a letter or short report from a well regarded insurance advisor or broker, stating that in their expert view, the proposed insurance solution was appropriate.*

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
x	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

B

Commercial Section

B1 Duration of Electricity Importer Licence

B1.1 Duration of Electricity Importer Licence

Objective

The Participant must demonstrate to the EMA that:

- It has provided reasonable justification for the requested duration of the Electricity Importer Licence.

RFP Submission Requirements

Type of Submission

The Participant must submit a Word or PDF document of a maximum length of 1 page.

Submission Content

- The requested duration of the Electricity Importer Licence, from Final Award.
- The rationale for the requested duration.

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

B2 Commercial Power Purchase Agreements (PPAs)

B2.1 Proof of Commercial PPAs

Objective

The Participant must demonstrate to the EMA that:

- It has firm commitments in place with offtakers for the volume of electricity that the Participant states will be covered by commercial PPAs.

RFP Submission Requirements

Type of Submission

The Participant must submit a Word or PDF document. There is no length limit for this submission.

In addition, the Participant must submit the completed Submission Template in Word or PDF format.

Submission Content

The Submission to be provided by the Participant must include:

- A statement of the Participant’s proposed trading strategy for the expected level of electricity imports. This should state the percentage of the project’s annual electricity output that is:
 - Already covered by binding commercial PPAs;
 - Covered by a request for revenue support;
 - Subject to merchant risk (i.e. the Participant intends to trade these volumes through the wholesale market and/or make available to future offtakers under the Baseline Offer terms). The participant to state why its intended trading strategy is viable.
- Firm commitment from offtakers in Singapore should be demonstrated through the submission of binding

commercial PPAs between the Participant and its offtakers that is complete and unredacted with key terms, subject to appropriate conditions precedents such as the award of an electricity importer licence. Letters of Intent and/or correspondence that only express an indicative interest to procure electricity, and that lack detailed terms, should not be submitted; the EMA will not consider these as proof of firm commercial commitments.

- A summary table of the submitted contracts/term sheets.
- A statement on how quantities currently covered by firm offtaker commitments are expected to be treated after the PPAs have expired (i.e. what is the Participant’s trading strategy for these volumes beyond the anticipated PPA expiry date).

Note to Participants: *The EMA appreciates that importers may not have achieved firm commitments at the Initial Bid stage. Therefore, the information submitted for the Initial Bid may be more indicative.*

Given that there are a range of financial instruments for hedging, and to ensure that there is no double counting or offsetting of volumes, EMA will only accept virtual PPAs (vPPAs) if the consumer provides a declaration that apart from the proposed contract (e.g. CfD arrangement), there are no other financial instruments used for the purpose of hedging the said volumes in the submitted PPAs.

Initial Bid vs Final Bid Requirements

Initial Bid	Final Bid
✓ (Indicative)	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met. This includes incorporating the template **B2.1 – Summary of offtaker commitments.**

B3 Revenue Support

B3.1 Request for Revenue Support

Objective

The Participant must demonstrate to the EMA that:

- It has submitted a compliant request for revenue support, within the parameters described in the RFP.
- It has a reasonable basis for requesting the nominated level of revenue support.

RFP Submission Requirements

Type of Submission

The Participant must submit the completed Submission Template in Word or PDF format.

Submission Content

See the Submission Template, which requires Participants to provide:

- A statement on the level of revenue support that they wish to request, if any.
- A statement on how the level of revenue support would vary, based on alternative delivery dates and decarbonisation trajectories.
- A statement on the rationale for the level of revenue support requested.
- A statement on uncertain cost items that the Participant requests be covered under the revenue support mechanism.

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓	✓

Submission Template

The Participant shall provide its response by completing the template **B3.1 – Request for Revenue Support** provided with this Corrigendum.

If the Participant is not requesting any revenue support, it must still complete the template.

B4 Merchant Quantities

B4.1 Baseline Offer

Objective

The Participant must demonstrate to the EMA that:

- It has provided a compliant Baseline Offer (BO) as required by the RFP

Note to Participants: *The EMA appreciates that importers may not have fully developed the BO terms at the Initial Bid stage. Therefore, the information submitted for the Initial Bid may be a draft.*

RFP Submission Requirements

Type of Submission

The Participant must submit a Word or PDF document. There is no length limit for this submission.

Submission Content

The Participant must submit a BO term sheet that shall be made available to parties interested to purchase electricity from the import project via a new commercial PPA. The BO term sheet:

- Will state an initial offer that will apply for a period of 5 years from the Conditional Approval Date.
- Will minimally comprise:
 - Sales price of electricity - For avoidance of doubt, this price should include the price of RECs that may be bundled with the sales of electricity;
 - Contract duration (e.g. minimum contract duration); and
 - Quantity requirements (e.g. minimum quantities)
- The BO may also include other terms that the Participant deems relevant (e.g. credit support required from consumers, termination charges etc).

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓ (Indicative)	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

B5 Underlying Assumptions

B5.1 Project Financial Model

Objective

The Participant must provide the EMA with sufficient information to understand the assumptions and calculations that underpin :

- the Participant’s request for revenue support, including projects for which no revenue support is requested.
- the Participant’s Baseline Offer.

RFP Submission Requirements

Type of Submission

The Participant must submit a fully populated financial model for their import project in Microsoft Excel (version 2007 or later).

Financial Model Content

The model to be provided by the Participant must include:

- A single worksheet incorporating the populated tables in Part 1 or Part 2 of the template **B3.1 Request for Revenue Support** The model must allow the EMA to see the assumptions and calculations that underpin the requested revenue support.
- A single worksheet incorporating the price included in the Participant’s Baseline Offer provided in response to B4.1. The model must allow the EMA to see the supporting assumptions and calculations that underpin the Baseline Offer price.
- A single worksheet incorporating the **B5.1 - Proposed HVDC System Whole-Life Costs**

provided with this corrigendum. The model must allow the EMA to see how the template has been populated from the financial model (i.e. the inputs to the template must be linked, not hardcoded).

- Annual forecast for Uniform Singapore Energy Price (USEP) per MWh, minimally for 15 years from COD
- **For the Final Bid only:** The financial model should include a single ‘Version Control’ worksheet that describes the changes made to the model between Initial Bid and Final Bid and the impact of these changes on the (i) requested revenue support and (ii) Baseline Offer.

Aside from the mandatory requirements listed above, the structure of the financial model is the responsibility of the Participant. However, the EMA expects that the financial model will:

- Include standard information necessary to demonstrate the financial robustness of the import project. This would include: financial statements (profit and loss/income statement, cash flow statement, balance sheet); key financial ratios (as appropriate for the intended financing strategy described in the response to A6.1.1); key financing parameters, including expected / required rates of return on equity and the assumed level of leverage.
- Follow good practice conventions, including a logical calculation flow from inputs to outputs, and consistent use of formatting.

Note to Participants: *The integrity of the financial model (including, but not limited to, all inputs, calculations and outputs) and the assumptions applied within the financial model are the responsibility of the Participant. Any errors (including incorrect assumptions) or omissions discovered in the financial model that would increase the requested cost of revenue support will be at the risk of Participants. The awarded level of revenue support (if any) will not be increased to accommodate any errors or omissions that are discovered after submission of the Final Bid*

Initial Bid vs Final Bid Requirements

Initial Bid	Final Bid
✓	✓

Submission Document Template

The Participant can provide its financial model using its preferred format, ensuring that all outlined requirements are met. This includes incorporating the template **B5.1 – Proposed System Whole-Life Costs** within the financial model.

B5 Underlying Assumptions

B5.2 Financial Model Supporting Documentation

Objective

The Participant must provide the EMA with sufficient information to:

- Assess the basis and robustness of the assumptions that underpin the Participant’s financial model.
- Understand the operation of the Participant’s financial model.

RFP Submission Requirements

Type of Submission

The Participant must submit a Word or PDF document. There is no length limit for this submission.

Submission Content

The Submission to be provided by The Participant must include:

- A financial model manual that explains the operation of the model. The model manual should include:
 - An overview of the financial model and its structure. For example, this may be in the form of a flow chart showing the logic of the model from inputs through to outputs.
 - A model key, describing how the formatting applied in the financial model should be interpreted (for example, differentiating hard coded inputs from formulae).
 - The procedure for running the model, including any steps required to enable the model to function correctly. For example, this would cover instructions for running different scenarios, such as alternative levels of revenue support coverage.

- The procedure should:
 - Note the details of any macros and visual basic code.
 - Include a statement on any ‘add-ins’ and options that should be activated in Excel prior to the model being used.
 - Allow the EMA to reproduce the revenue support levels and Baseline Offer stated in the Proposal.

- A financial model assumptions book that explains the basis of all assumptions applied in the financial model. This should:

- Include a description of the sources and/or rationale underpinning these assumptions. The Participant may provide links to supporting information (where this is available online) and/or supporting documents in an appendix to this submission (for example, copies of consultant reports that support the assumptions used).
- Follow a logical structure that is consistent with the financial model.

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.

C

Carbon Section

C1 Carbon

C1.1 Carbon Emissions

Objective

The Participant must demonstrate to the EMA that:

- The expected carbon emissions associated of the import project are robust and underpinned by an appropriate calculation methodology.
- The expected carbon emissions of the import project meet the minimum requirements specified in the RFP.

RFP Submission Requirements

Type of Submission

The Participant must submit a Word or PDF document of a maximum length of 3 pages (excluding supporting data/information).

Submission Content

This Submission must include:

- A summary table showing, for each year of the import project's operating life:
 - (a) Annual energy (MWh) measured at the point of injection (i.e. the Importer's SPPA meter) into Singapore's grid.
 - (b) Annual carbon emissions (tCO₂e) measured at the source using methodologies that are commensurate with international standards for the respective energy source.
- Average carbon emissions per MWh delivered (tCO₂e/MWh) over the import project's operating life
- A description of the assumptions and methodology used to derive the carbon emissions set out in the

summary table. The Participant should ensure that the assumptions are consistent with the information provided in the Technical Section. The Participant may submit supporting data and calculations to demonstrate how its methodology and assumptions produce the information included in the summary table.

- A description of how the Participant will comply with EMA's approach to RECs as stated in the RFP document (4.10 to 4.15). This includes how the Participant would submit relevant RECs to the EMA for verification.

Note to Participants: Please visit [Singapore Standards webpage](#) for more information on RECs.

Initial Bid vs Final Bid Requirements

<i>Initial Bid</i>	<i>Final Bid</i>
✓	✓

Submission Document Template

The Participant can provide its Submission Document using its preferred template, ensuring that all outlined requirements are met.