

ANNEX H: EVALUATION PROCESS

1 Evaluation Process

1.1 Non-Conforming Proposals

- a) The Evaluation Committee will conduct an initial review of Proposals for completeness and conformity with the CFP, to determine whether a Proposal should be considered further.
- b) The Evaluation Committee may waive any minor non-conformity or irregularity in a Proposal which does not constitute a material deviation. The Evaluation Committee may determine in its absolute discretion what constitutes a material deviation for these purposes.
- c) A Proposal may, in the absolute discretion of The Evaluation Committee, be rejected if the Participant, without limitation:
 - i. Fails to submit the required information set out in Annex D,E, I;
 - ii. Fails to meet the minimum criteria set out in this CFP;
 - iii. Fails to comply with the procedures outlined in this CFP for preparation and submission of the Proposal.
- d) A Proposal will be rejected if the Participant or any person making up the Participant is debarred from submitting a Proposal or from participating in any IDA or Singapore Government tender.
- e) Compliant Proposals would qualify for the next stage of evaluation process.

1.2 Evaluation of Proposals

Through this evaluation, the Evaluation Committee aims to achieve the objective of deriving highest value for money in the form of most competitive Tariff for the Principal Agency and to deliver the Project within the time frame and in the manner contemplated in this CFP. Key to achieving these objectives would entail a robust technical proposal structured in a commercially viable framework reflecting the CFP's risk allocation, from a Participant with a demonstrated track record. This section presents a summary of the evaluation while the following sections elaborate the methodology in detail.

- a) Compliant Proposals are evaluated in two stages against Minimum Criteria and Critical Criteria.
- b) Minimum Criteria specifies the minimum criteria related to the strength of the Participant and the key technical parameters proposed for the Project, as elaborated in Section 1.3.
- c) Proposals which do not satisfy any of the Minimum Criteria shall not be considered for further evaluation.
- d) Proposals which satisfy all the Minimum Criteria would qualify for the next stage of evaluation process to be evaluated against the Critical Criteria.

- e) Critical Criteria evaluates the Proposal against criteria including, but not limited to, tariff and tariff components, proposed financial plan, quality of technical proposal and track record of developing similar projects.
- f) Details of Critical Criteria evaluation is elaborated in Section 1.4
- g) Participants scoring the highest evaluation points in the Critical Criteria evaluation would be declared as the successful Participant.

1.3 Stage I: Minimum Criteria

Participants need to satisfy each of the following criteria under the Minimum Criteria evaluation.

- a) **Compliance to CFP Conditions:** Participant would need to expressly confirm their acceptance of the terms and conditions of the CFP including but not limited to Technical Specifications and draft Concession Agreement.
- b) **Financial Strength:** Participant shall have a minimum tangible networth of Singapore Dollars \$15,000,000 (Fifteen Million Singapore Dollars) or equivalent. Participants would need to submit audited annual financial statements for the last two completed financial years. Participants can support their capability through credit rating received during the last 3 financial years (refer to Annex I Form 7).
- c) **Track Record:** Participant should have developed (from award to commencement of operation) at least one project of minimum 5,000 RT capacity based on the technology proposed for the Project during the last 5 years prior to Proposal Submission Deadline. Participant should provide evidence of such capability with completion certificates from clients (refer to Annex I Form 6).
- d) **Uptime:** The technology proposed and efficiency of the plant operation must have a minimum uptime of 99.75%.
- e) **Time to Restore:** The proposed technology shall ensure that the Project shall be capable of meeting time to restore full capacity of chilled water system of less than 4 hours.
- f) **Site Area:** The Project must be built within the given site of 3.8 Ha.
- g) **Completion Date:** Participants shall provide express commitment that project shall be able to commence commercial operation and supply chilled water to data centres in DCP within 24 months from award of the Project.

1.4 Stage 2: Critical Criteria

Proposals that satisfy all the criteria in the Minimum Criteria would be considered for Stage II evaluation. Stage II evaluation comprise evaluation of the Proposal and the Participant's track record against the following parameters. Points are assigned to each of the parameters as

summarised in the following table. The Participant whose Proposal scores the highest points shall be declared as the Successful Participant.

Parameters	Weightages
Business Proposal	70%
• Levelised Tariff	45%
• Minimum Load Factor	5%
• Financial Plan	20%
Technical Proposal	20%
Track Record	10%

Proposal Evaluation

a) Business Proposal

The Business Proposal evaluates primarily the attractiveness of the tariff and the robustness of the financial plan to be used for implementing the project. The parameter is sub-divided into three parameters the evaluation of each of which is explained below:

(i) Levelised Tariff

Levelised tariff shall be computed for each Participant based on the following load profile assuming Minimum Load Factor M at 100%:

Contract Years	Duration	Demand Requirement (RT)
1	January 1 2014 – December 31, 2014	5,000
2	January 1 2015 – December 31, 2015	10,000
3	January 1 2016 – December 31, 2016	20,000
4	January 1 2017 – December 31, 2017	28,000
5	January 1 2018 – December 31, 2018	38,000
6	January 1 2019 – December 31, 2019	46,000
7	January 1 2020 – December 31, 2020	53,500
8	January 1 2021 – December 31, 2021	59,000
9	January 1 2022 – December 31, 2022	61,500
10	January 1 2023 – December 31, 2023	63,000

Levelised Tariff shall be computed as follows:

(Present Value of Tariff Payments over Mandate Period) / (Present Value of Total Chilled Water Generated over Mandate Period)

The calculation of Tariff Payment shall be as per the Tariff Payment mechanism explained in Annex B and the Participant's Tariff Proposal as per Annex D.

The discount factor to be used for determining the present value shall be [8]%. The Participant with the lowest Levelised Tariff shall be scored with 100 points while other Participants would be normalised as below:

Points for Participant under evaluation = $100 \times [\text{Levelised Tariff of Participant with Lowest Levelised Tariff} / \text{Levelised Tariff for Participant under evaluation}]$

The Evaluation Committee shall use the following assumptions for computing the Levelised Tariff. Participants are to note that these assumptions are solely for the purposes of evaluation.

Water Index = 1.00069

Electricity Index = 1.014

Inflation Index = 1.005

(ii) Minimum Load Factor

The evaluation of Minimum Load Factor shall be based on evaluation of the Levelised Tariff for the load profile in the above table, for the Minimum Load Factor quoted by the Participant. The computation of Levelised Tariff and allotment of points shall be as explained in the above section 1.4 (a) (i).

(iii) Financing Plan

Evaluation of financial plan is envisaged to test the robustness and feasibility of the financing plan to be used for implementing the Project. The roles and responsibilities of the consortium members vis-a-vis their respective proposed shareholding in the Concession Company will be considered. The parameters to be evaluated include but not limited to:

- Funding mix
- Key ratios including ADSCR, LLCR
- Project and equity returns
- Cash sweep and balloon payment provisions
- Extent and status of commitments from banks
- Extent of equity exposure in LNTP and status of negotiations with EPC contractor(s)
- Impact of sensitivity analysis on key project parameters – LDs, cost and time overruns
- Potential refinancing benefits to the Principal Agency and end users
- Risk allocation and mitigation framework

b) Technical Proposal

Technical Proposal evaluates the compliance of the proposed technology to the CFP requirements and evaluation of key technical parameters including design, implementation schedule, construction program and service levels. A maximum of 100 points can be allocated, which will account for 20% of the overall project.

The Participants are also expected to provide:

No.	Key Performance Indicator	Weightage (pt)													
Section - 1 : Technical (100 points = 20% of overall project)															
1A.	Overall Chilled Water Plant System Performance (For Electric Chillers)	25													
	i. Electric Chillers - 1pt for every 0.01kW/RT efficiency improvement below 0.60kW/RT (max. 15pts)														
	<table border="1"> <thead> <tr> <th rowspan="2">Efficiency</th> <th colspan="3">Partial load¹</th> <th rowspan="2">Average efficiency (kW/RT)</th> </tr> <tr> <th>75%</th> <th>85%</th> <th>95%</th> </tr> </thead> <tbody> <tr> <td>kW/RT</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Efficiency	Partial load ¹			Average efficiency (kW/RT)	75%	85%	95%	kW/RT					
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	75%	85%	95%												
kW/RT															
	ii. Chilled Water and Condensing Water Pumps and Cooling Towers (kW/RT efficiency) 1pt for every 0.01kW/RT efficiency improvement below 0.25kW/RT (max. 10pts)														
1B.	Overall Chilled Water Plant System Performance (For Absorption Chillers)	5													
	i. Absorption Chillers - 0.75pt for every 0.05 COP improvement over 1.00 COP (max. 5pts)														
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2.	Scalability of cooling capacity output in increments of 3500RT to 5000RT, i.e. duration required (months)	25													
	X ≤ 6 months	25													
	6 < X ≤ 9 months	20													
	9 < X ≤ 12 months	15													
	12 < X ≤ 15 months	10													
	X > 15 months	5													
3	Reliability, Availability and Maintainability (availability of chilled water supply)	25													
	1pt for every 0.01% improvement over 99.75% availability														

No.	Key Performance Indicator	Weightage (pt)
	of the chilled water supply (max. 25pts)	
4	Time To Restore Full Chilled Water System [hour(s)]	15
	X ≤ 30min	15
	30minutes < X ≤ 1.0hr	12.5
	1.0 < X ≤ 1.5hrs	10
	1.5 < X ≤ 2hrs	7.5
	2.0 < X ≤ 2.5hrs	5
	2.5 < X ≤ 3hrs	2.5
	X > 3hrs	0
5	Environmental Sustainability (e.g. use of environmental friendly refrigerants, use of less water, less emissions than regulatory limits)	5
	Environmental friendly refrigerant	2
	Less water consumption	2
	Less emissions than regulatory limits	1
	Total	100

Notes:

1. Partial load efficiency shall be based on the same design condition, i.e. same chilled water temperature and condensing water temperature.

c) Track Record

The parameters to be evaluated under this parameter include Participant's past experience in developing and operating projects of similar nature. Participants would need to provide details development and operation expertise of similar projects which could include, but not limited to, installed capacity, operating capacity, number of projects and key technical aspects including service standards and reliability parameters. A maximum of 10 points can be allocated, which will account for 10% of the overall project.

The Participants are also expected to provide:

No.	Key Performance Indicator	Weightage (pt)
Section - 2 : Commercial (10 points = 10% of overall project)		

No.	Key Performance Indicator	Weightage (pt)
1	Track Record Numbers of plants² in commercial operation that is design in similar climatic conditions for the past 10 years (year(s))	10
	X ≥ 10	10
	6 ≤ X < 10	7
	3 ≤ X < 6	5
	X < 3	2

Notes:

2. In case of Consortium, the number of plants will be based on an average basis.