Form DCS-4

(For Stage 4 – Handover of Pipe Trench and Substation)

Part A: Project Information	
A1. Submission Date	
A2. Revision (Initial Submission as Rev. 0)	
A3. Date of Last Approval	
A4. District Location/Area	
A5. Site/Lot No.	
A6. Name of Building	
A7. Consumer	
A8. Developer	
A9. Name of Authorized Person	
A10. Company of Authorized Person	
A11. Main Contractor	
A12. Name of RPE	
A13. Company of RPE	

Part B: Checklist of Information to be submitted (Please put a "✓" as appropriate)	
B1	☐ Summary of changes with reply to comments and previous inspection records (for resubmission only)
B2	☐ Approved General Building Plan indicating the following provisions • equipment delivery openings and wicket door are provided (TG 5.3.8.1) • anti-flooding kerb min 150mm (H) for substation located at basement or located near an inclined road, slope or sea front (*TG 5.3.1.4*) • floor level at least 150mm higher than outside pavement if substation is located at ground level (*TG 5.3.1.4*) • Showing floor gradient with minimum fall of 1:100 to nearest drain point
B3	☐ Drawings showing the flood mitigation measures have been incorporated as specified in flood risk assessment report (if applicable)
B4	☐ Drawings indicating the equipment delivery arrangement and maintenance route with the following provisions: • level access with sufficient space for equipment delivery is provided (*TG 5.3.1.6, Appendix C*) • sufficient clearance of each heat exchanger (among heat exchanger, and between heat exchanger and "wall") (*TG 5.3.6.1 and 5.3.6.2*) • hoisting beam / I-bolt is provided for each heat exchanger and MIMEP Module with information about safe working load (S.W.L.) (*TG 5.3.1.8*) • access and hoisting beam / I-bolt or other means of material delivery is provided equipment delivery for DCS substation located at basement (*TG 5.3.1.8, 5.3.1.3*)
B5	☐ Drawings indicating the following builders work provisions: • the emergency exit route is provided (*TG 5.3.5.2*) • adequate loading is allowed at floor, ceiling and walls (*TG 5.3.1.5, Appendix D*) • pipe trenches with adequate width and alignment are provided (*TG 5.2.2.6, Appendix D*) • adequate cable ducts and draw pits are provided (*TG 5.2.2.2, 5.2.2.3, 5.2.2.4*)

Part B: Checklist of Information to be submitted (Please put a "✓" in appropriate Box)	
B6	☐ Drawings (including schematic, layout, section, installation details within DCS Substation indicating the following building services installations: Ventilation System: • Equipment capacity (e.g. flow rate) • Location, dimension and effective area of ventilation inlet and outlet to free air • Type of filter and location • Control of mechanical ventilation fan(s) or air conditioning unit(s) Plumbing and Drainage System: • Location and size of cleansing water point • Location and size of floor drain within DCS substation room • Location of size of drain outlet with surface channel surrounding heat exchanger • Flooding alarm control Fire Services System: • Location of smoke / heat detectors • Location and capacity of fire extinguisher Lighting System: • Lighting layout showing the types and locations • The circuit connection to ensure the adjacent lighting fittings should be fed from different circuits of the distribution board Electrical and ELV: • Rating and location of power supply points and circuits with protective device • Telecommunication points

Remarks:

- All drawings submitted by the applicant/ approved consumer should be in one set of hardcopy and softcopy formats. The softcopy should be in ".dwg" format and compatible with either one of the latest three AutoCAD® versions. For submission using BIM model, the "BIM-AM Standards and Guidelines" issued by EMSD and "Guidelines for Using Building Information Modelling" issued by the Buildings Department should be followed.

Part C: Declaration (to be completed by the Designer of the installation(s) and Site Agent of the Building)		
C1	I, as the designer of the installation(s), confirm that the submitted information is accurate and that the design will be implemented as specified. Signature of Designer _____ Full Name of Designer _____ RPE Registration No of Designer (*Building Services / Mechanical Engineering Discipline) _____ Company: _____ Tel. No: _____ Fax No.: _____ Email: _____ Corresponding Address: _____ Date: _____	Company Chop:
C2	I, as the Site Agent of the Building, hereby confirmed that the provisions of the substation have been checked in order and in accordance with the approved General Building Plan, Technical Guidelines for Connection to DCS and the District Cooling Services Supply Conditions. Signature of Site Agent _____ Full Name of Site Agent: _____ RPE Registration No of Site Agent (if Any): _____ Company: _____ Tel. No: _____ Fax No.: _____ Email: _____ Corresponding Address: _____ Date: _____	Company Chop:

Part D: Inspection Checklist (to be completed by EMSD / Operator)				
No.	**Item**	**Inspection Result**		**Remarks**
		Yes	**No**	
D1: General				
D1.1	Metal nameplate for substation is provided at main DCS Substation door			
D1.2	Sufficient space for maintenance is provided			
D1.3	All debris, floor water and temporary protective covers are removed			
D1.4	All conduit junction boxes are properly covered and labelled			
D1.5	No other installations such as drainage/water pipes, power cables, storage area, maintenance access etc are allowed within the DCS substation			
D2: Builder Works – DCS Substation				
D2.1	Door with secured key lock is provided *TG 5.3.8.1*			
D2.2	Wicket door is provided *TG 5.3.8.1*			
D2.3	Anti-flooding kerb min.150mm height is provided for substation located at basement or located near an inclined road, slope or sea front *TG 5.3.1.4*			
D2.4	Floor level at least 150mm higher than outside pavement if substation is located at ground level *TG 5.3.1.4*			
D2.5	Level access with sufficient space equipment delivery is provided *TG 5.3.1.6*			
D2.6	Emergency exit route is provided *TG 5.3.5.2*			
D2.7	Walls and ceiling are cement and sand plaster with suitable paint *TG 5.3.9.1*			
D2.8	Floor is oil resistant, non-slip finished *TG 5.3.9.1*			
D2.9	Mininmum clearance around the heat exchanger are maintained: • 1000mm on the back side • 1500mm between wall and heat exchanger • 1500mm between each heat exchanger *TG 5.3.6.1 to 2*			
D2.10	Adequate loading is allowed at ceiling and walls *TG 5.3.1.5*			

Part D: Inspection Checklist (to be completed by EMSD / Operator)				
No.	**Item**	**Inspection Result**		**Remarks**
		Yes	**No**	
D3: Builder Works – Lead in Pipe Trench				
D3.1	Pipe trenches are suitably backfilled *TG 5.2.2.1*			
D3.2	Bedding of compacted sand of thickness not less than 100mm is provided in pipe trenches *TG 5.2.2.2*			
D3.3	Pipe trenches with adequate width and alignment are provided *TG 5.2.2.6, Appendix D*			
D3.4	Adequate cable ducts and draw pits are provided TG 5.2.2.2, 5.2.2.4, 5.3.10.1			
D4: Hoisting Facilities and Delivery				
D4.1	Hoisting beam / I-bolt is provided for each heat exchanger and MIMEP module. Safe working load (S.W.L.) and statutory required certificate is displayed *TG 5.3.1.8*			
D4.2	For DCS substation and basement, access and hoisting beam/ I-Bolt or other means of material delivery is provided for heat exchangers transportation to ground level *TG 5.3.1.3, 5.3.1.8*			
D5: MEP Provisions – Ventilation				
D5.1	Ventilation or air conditioning system is provided to maintain required temperature and humidity condition *TG 5.5.2.2*			
D5.2	Ventilation louvre bottom level is at least 2.5m above floor level. Exhaust air discharge is not directed towards pedestrians *TG 5.5.2.3*			
D5.3	Intake louvre is installed and equipped with air filter *TG 5.5.2.4*			

Part D: Inspection Checklist (to be completed by EMSD / Operator)				
No.	**Item**	**Inspection Result**		**Remarks**
		Yes	**No**	
D5: MEP Provisions – Ventilation				
D5.4	Intake air louvre is not positioned near any sources of air pollution or other exhaust *TG 5.5.2.3*			
D5.5	Outside air louvres are provided to screen out rodents, birds and pests. Proper sealing methods and materials shall be applied, and the louvre design shall be weatherproof incorporating anti-water seepage features *TG 5.5.2.3*			
D5.6	Air duct is painted with "While" Color and labelled with air-flow direction *TG 5.5.2.5*			
D5.7	Ventilation fan is operated by temperature sensing device and by local manual and on/off timer *TG 5.5.2.6*			
D6: MEP Provisions – Plumbing and Drainage				
D6.1	5.5.3.3 One cleansing trough with faucet of 25mm water inlet point fed from the building's water supply system should be provided and tested *TG 5.5.3.3*			
D6.2	Floor is laid to fall of minimum fall of 1:100 to nearest drain point *TG 5.5.3.4*			
D6.3	Floor drain(s) with a minimum size of 100 mm in diameter discharging to the building's drainage system for proper floor wash down and drainage should be provided *TG 5.5.3.2 & Appendix D*			
D6.4	Minimum 150mm wide surface channel with suitable cast iron grating and minimum 2 nos. 100mm diameter drain outlets with dome gratings and connecting to the drainage system of the building surrounding each heat exchanger should be provided *TG 5.5.3.6*			

Part D: Inspection Checklist (to be completed by EMSD / Operator)				
D6: MEP Provisions – Plumbing and Drainage				
No.	**Item**	**Inspection Result**		**Remarks**
		Yes	**No**	
D6: MEP Provisions – Plumbing and Drainage				
D6.5	Flooding alarm system with sensor, control panel and flashing light is provided Repeated signal contacts are provided for DCS operator's connection *TG 5.5.3.5*			
D7: MEP Provisions – Fire Services				
D7.1	Fire extinguisher(s) is provided *TG 5.5.4.1*			
D7.2	Heat / Smoke detectors are provided, and all temporary protective plastic covers are removed *TG 5.5.4.1*			
D7.3	Building fire alarm is audible within the DCS substation *TG 5.5.4.1*			
D8: MEP Provisions – Lighting				
D8.1	Lux Level on floor level is not less than 200 lux *TG 5.5.5.1*			
D8.2	Twin batten 1.2m Long T5 fluorescent tubes /LED with IP54 are provided. Adjacent lighting fittings are fed from different circuits *TG 5.5.5.2, 5.5.5.3*			
D8.3	2 hrs battery operated lighting and exit sign are provided for emergency *TG 5.5.5.4*			
D9: MEP Provisions – Power Supply and Control				
D9.1	A 32A SPN power supply with backup power supply is located near the main access door *TG 5.5.6.1*			
D9.2	Wiring diagram of MCB board is posted in MCB board *TG 5.5.6.1*			

Part D: Inspection Checklist (to be completed by EMSD / Operator)				
No.	**Item**	**Inspection Result**		**Remarks**
		Yes	**No**	
D9: MEP Provisions – Power Supply and Control				
D9.3	Signal cables are protected by separate metal trunking or conduit *TG 5.5.6.1*			
D9.4	Sufficient number of 13A single phase socket outlets are provided and be tested *TG 5.5.6.1*			
D9.5	All electrical equipment are constructed to a minimum of IP54 protection *TG 5.5.6.1*			
D9.6	Earthing terminal connecting points and equipotential earth bonding for all metallic parts are provided (including metal door) *TG 5.5.8.1*			
D9.7	Junction box with a pair of dry contacts for common signal of the approved consumer's chilled water pumps ON/OFF signal *TG 6.2.1c)*			
D9.8	Labels for lighting switch; socket outlet; power cables; earth bonding and MCB board are provided *TG 5.5.6.1*			
D10: MEP Provisions – Telecom Facilities				
D10.1	A fixed telephone line and socket is provided *TG 5.5.7.1*			
D10.2	Mobile phone signal coverage is provided *TG 5.5.7.1*			

Part D: Inspection Checklist (to be completed by EMSD / Operator)				
D11: Temporary Facilities and Building Services During Installation				
No.	**Item**	**Inspection Result**		**Remarks**
		Yes	**No**	
D11.1	Temporary power of one no.60A TPN and one no. 20A TPN *TG 5.6.1*			
D11.2	Temporary water supply and dewatering pumps, pipes and associated controls *TG 5.6.1*			
D11.3	Fire Services provisions for construction sites *TG 5.6.1*			
D11.4	Security for the substation *TG 5.6.1*			
D11.5	Storage area of DCServ pipe, equipment and tools *TG 5.6.1*			
D12: Others				
D12.1	Flood mitigation measures, such as flood gate, have been incorporated in substation in high flood risk areas or projects under classification of "Critical Infrastructure"			
D12.2	For substations situated in "high flood risk areas" or under projects classified as "critical infrastructure", additional water leakage detection sensors shall be provided at each entrance.			
	Others required by EMSD:			

Part E: Inspection Review Result (To be Completed by EMSD)		
Item		**Remarks**
Review Result	☐ Approved ☐ Approved with conditions ☐ Rejected	
Officer Name		
Officer Endorsement		
Email Address		
Phone Number		
Date		

重要聲明

任何人士試圖向任何政府人員提供利益(按照香港法例第 201 章《防止賄賂條例》中對利益的定義)，以影響本申請的結果，即構成《防止賄賂條例》下的罪行，並導致有關申請無效，而機電工程署會把個案向廉政公署報告。如任何政府人員或其代理人就本申請向你索取利益，你應向廉政公署舉報(電話號碼：2526 6366)。

個人資料私隱聲明

收集個人資料的目的

1. 在本表格所提供的個人資料，政府會用於下列目的：

(a) 進行與處理在本表格所作呈交有關的工作；

(b) 進行與《區域供冷服務條例》所訂規定有關的工作；以及

(c) 方便政府與你通訊。

受讓人的類別

2. 當收到你所呈交的資料後，在本表格及隨本表格呈交的所有文件收集到的所有個人資料會備存於機電工程署，並會向部門的資料使用者披露。

3. 本署收集及使用的資料，可能會轉交代理或關連公司，以便提供所需服務及產品。

查閱個人資料

4. 根據《個人資料（私隱）條列》第 18 及第 22 條，以及附表 1 第 6 原則的規定，你有權查閱及改正個人資料。你的查閱權包括索取在本表格所提供個人資料的副本。

查詢

5. 任何關於本表格所收集個人資料的查詢，包括要求查閱及改正資料，請以書面形式向機電工程署署長提出，地址為：香港九龍啟成街 3 號機電工程署。至於其他一般查詢，請致電政府熱線 1823。

Important Disclaimer

"Any attempt to offer advantage (as defined in the Prevention of Bribery Ordinance ("POBO") (Chapter 201 of the Laws of Hong Kong)) to any Government officer with a view to influencing the outcome of this application constitutes an offence under the POBO and renders the application invalid. The case will be reported to the Independent Commission against Corruption. You should report to the ICAC (Telephone No.: 2526-6366) if any government officers or their agents solicits an advantage from you in relation to this application."

Personal Data Privacy Statement

1. The personal data provided by means of this form will be used by the Government for the following purposes:

(a) activities relating to the processing of the submission in this form;

(b) activities relating to the requirements stipulated in the District Cooling Services Ordinance; and

(c) facilitating communication between the Government and yourself.

Classes of Transferees

2. Upon receipt of your information submission, all personal data collected in this form and all documents submitted along with this form will be kept at the Electrical and Mechanical Services Department and will be disclosed to the data users of the department.

3. The data collected and used by us may be transferred to agents and related companies for the purpose of offering services and products that may require.

Access to Personal Data

4. You have a right of access and correction with respect to personal data as provided for in sections 18 and 22, and Principle 6 of Schedule 1 of the Personal Data (Privacy) Ordinance. Your right of access includes the right to obtain a copy of your personal data provided by this form.

5. Enquiries concerning the personal data collected by means of this form, including the making of access and correction, should be submitted in writing and addressed to the Director of Electrical and Mechanical Services, Electrical and Mechanical Services Department, 3 Kai Shing Street, Kowloon, Hong Kong. For other general enquiries, please dial the Citizen's Easy Link 1823.