

**Proposed Gazetting under Foreshore and Sea-bed (Reclamations) Ordinance (Chapter 127)**

**CLP 132kV Submarine Cables Circuits Connecting Upper Cheung Sha Beach and Shek Kwu Chau Artificial Island for Integrated Waste Management Facilities (IWMF)**

**Purpose**

1. This paper aims to provide information to Members and to seek their comments on the proposed submarine cables connecting Upper Cheung Sha Beach and Shek Kwu Chau Artificial Island for the Integrated Waste Management Facilities (IWMF) before gazettal under the Foreshore and Sea-bed (Reclamations) Ordinance (Chapter 127) (“the Ordinance”)

**Background**

2. Below is the background of proposed submarine cable project:  
The Environmental Protection Department of Hong Kong Special Administrative Region Government is constructing the Integrated Waste Management Facilities (IWMF) on Shek Kwu Chau Artificial Island, south of Lantau Island for the purpose of treating municipal solid waste and generating electricity from the waste treatment process for its own use and export of surplus electricity, if any, to the power grid, which in turn increase the use of renewable energy.
3. According to government estimates, about 480 million kilowatt-hours (kWh) of surplus electricity can be exported to power grid every year after the commissioning of IWMF. The surplus electricity will be sufficient for use by 100,000 households, that can help reduce carbon emissions and tackle climate change.
4. In order to provide reliable electricity supply to IWMF, CLP Power Hong Kong Limited (CLP Power) proposes to lay four submarine cables (being two 132kV power cables and two fibre optic cables) connecting Upper Cheung Sha Beach and Shek Kwu Chau Artificial Island. The proposed submarine cables will be approximately 7 kilometres in length and 200 millimetres in diameter per cable. Approximately 1.4 hectares (7km x 0.5m x 4 cables) of the foreshore and sea-bed area between Upper Cheung Sha Beach and Shek Kwu Chau will be affected by the proposed works.
5. Lands Department is now processing the gazettal and the application of the Licence for laying the proposed submarine cables. The proposed submarine cables will be gazetted for public inspection in accordance with the Ordinance. According to Section 6 of the Ordinance, any person who considers that he has an interest, right or easement in or over the foreshore and sea-bed may, by notice in writing delivered to the Director of Lands before the expiration of such time as shall be specified in the notice, object to the proposed cable installation and maintenance works.
6. For details of the proposed works, please refer to the attached Information Sheet prepared by CLP Power. Please contact Ms. Joey WONG at Tel No. 2678 6967 if further information is required.

## **Advice Sought**

7. If Members wish to provide comments to the proposed works, please fill in the reply slip and email to: [gendlouis@landsd.gov.hk](mailto:gendlouis@landsd.gov.hk) or by fax to 2850 5104 on or before 30.9.2020.

District Lands Office / Islands  
Lands Department  
September 2020

**CLP 132kV Submarine Cables Circuits Connecting Upper Cheung Sha Beach and Shek Kwu Chau Artificial Island for Integrated Waste Management Facilities (IWMF)**

**1. Purpose**

This paper provides information to the Islands District Council on the proposed submarine cables connecting Upper Cheung Sha Beach and Shek Kwu Chau Artificial Island for the Integrated Waste Management Facilities (IWMF) for seeking members' comment and solicit support on the proposed works ("Works").

**2. Background**

The Environmental Protection Department of Hong Kong Special Administrative Region Government is constructing the Integrated Waste Management Facilities (IWMF) on Shek Kwu Chau Artificial Island, south of Lantau Island for the purpose of treating municipal solid waste and generating electricity from the waste treatment process for its own use and export of surplus electricity, if any, to the power grid, which in turn increase the use of renewable energy.

According to government estimates, about 480 million kilowatt-hours (kWh) of surplus electricity can be exported to power grid every year after the commissioning of IWMF. The surplus electricity will be sufficient for use by 100,000 households, that can help reduce carbon emissions and tackle climate change.

In order to provide reliable electricity supply to IWMF, CLP Power Hong Kong Limited (CLP Power) proposes to lay four submarine cables (being two 132kV power cables and two fibre optic cables) connecting Upper Cheung Sha Beach and Shek Kwu Chau Artificial Island. The proposed submarine cables will be approximately 7 kilometres in length and 200 millimetres in diameter per cable. Approximately 1.4 hectares (7km x 0.5m x 4 cables) of the foreshore and sea-bed area between Upper Cheung Sha Beach and Shek Kwu Chau will be affected by the proposed works.

The alignment of the proposed submarine cables is shown on the attached drawing (Drawing No.: T-CHS-10650-D-E33-8000-01-S).

CLP Power has applied to the Lands Department for a licence to lay submarine cables and to gazette the Works under the Foreshore and Seabed (Reclamations) Ordinance (Cap. 127) to seek comments from the public.

### 3. Basic Information

- a. Project title : Proposed 132kV Submarine Cables Circuits Connecting Upper Cheung Sha Beach and Shek Kwu Chau Artificial Island for Integrated Waste Management Facilities (IWMF)
- b. Purpose and nature of the project : To lay four submarine cables (being two 132kV power cables and two fibre optic cables) to provide reliable and stable electricity supply to Shek Kwu Chau Artificial Island for IWMF and export of surplus electricity generated from waste treatment, if any, to electricity grid from IWMF.
- c. Name of project proponent : CLP Power Hong Kong Limited

### 4. Outline of Planning and Implementation Program

- a. Project time table : Submarine cable laying works are anticipated to commence in Q4 2023 and complete in Q1 2024.
- b. Interaction with others : The Environmental Protection Department supports the Works. Relevant Government Departments and Public Utility Undertakers were informed and so far no adverse comment or comments resolved.

CLP Power has applied to the Lands Department for gazettal of the Works under the Foreshore and Sea-bed (Reclamations) Ordinance to seek comments from the public.

In addition, CLP Power has communicated with green groups and district stakeholders to brief the Works and listen to their opinions.

## 5. Proposed Method

- a. Method of installation : The submarine cable laying work will be divided into 2 phases:
- Phase I - Submarine cables laying from Shek Kwu Chau Artificial Island to Upper Cheung Sha Beach by cable burying machine.
- Phase II - Shore-end cable laying using hand-held water jet.
- b. Required working corridors : The proposed working corridors are marked on the above quoted drawing.
- c. Size of proposed submarine cable : The proposed submarine cables will be approximately 7 kilometres in length and 200 millimetres in diameter per cable. The section of submarine cables to be laid near the sides of Upper Cheung Sha Beach and Shek Kwu Chau Artificial Island will be surrounded by cast iron sleeve pipes of 300 millimetres for protection.

## 6. Environmental Impact Assessment and Mitigation Measures

CLP Power has carried out detailed evaluation and technical study on the Works. According to the assessment of professional consultants, with the mitigation measures in place, there will have no substantial impact on the environment and the Works will be able to meet the requirements of the technical memorandum of the Environmental Impact Assessment process.

Category	Mitigation Measures
Water Quality	<ul style="list-style-type: none"> <li>• Establish water quality monitoring plan and set up water quality monitoring point at shore end</li> <li>• Install silt curtains, work in the enclosed area within the silt curtain.</li> </ul>
Ecology	<ul style="list-style-type: none"> <li>• Implement vessel operation rules to restrict the sailing range, route and speed of project vessels.</li> <li>• Set up an observation zone within a 250-meter radius of the work area. If marine mammals, especially the</li> </ul>

	<p>Finless Porpoise, are found in the area, the laying of submarine cables will be suspended.</p> <ul style="list-style-type: none"> <li>• Jetting works will be limited to day time only</li> </ul>
Fisheries	<ul style="list-style-type: none"> <li>• Implement vessel operation rules to restrict the sailing range, route and speed of project vessels.</li> <li>• Establish water quality monitoring plan</li> <li>• Install silt curtains, work in the enclosed area within the silt curtain.</li> </ul>

To enhance transparency and communication with the public, a Community Liaison Group comprising representatives of concerned stakeholders will be set up in accordance with the requirements of the environmental permit, to facilitate communications on the captioned submarine cable laying project. Relevant meeting minutes and documents will be uploaded for public viewing.

End

CLP Power Hong Kong Limited  
September 2020