RNTPC Paper No. A/TM-SKW/105A For Consideration by the Rural and New Town Planning Committee on 18.12.2020

FURTHER CONSIDERATION OF APPLICATION NO. A/TM-SKW/105 UNDER SECTION 16 OF THE TOWN PLANNING ORDINANCE

Proposed Public Utility Installation (Solar Energy System) in "Green Belt" Zone, Lot 37 in D.D. 383, So Kwun Wat, Tuen Mun, New Territories

1. Background

- 1.1 On 30.9.2019, the applicant submitted an application seeking planning permission for the proposed installation of solar energy system on the application site (the Site) which falls within an area zoned "Green Belt" ("GB") on the approved So Kwun Wat Outline Zoning Plan (OZP) No. S/TM-SKW/13 (Plan FA-1). According to the Notes of the OZP, the proposed solar energy system, which is regarded as 'Public Utility Installation' use, within the "GB" zone requires planning permission from the Town Planning Board (the Board). Currently, the Site is mostly covered by meadow with some trees and two structures for storage use (Plan FA-3 and FA-4a).
- 1.2 According to the applicant, the proposed system involves 616 solar panels (each about 1.65m long x 0.992m wide x 0.035m thick) installed on stands (with the total height of 1.262m) and two converted containers (each about 6.06m long x 2.44m wide x 2.59m high) for accommodating electricity metres (**Drawings FA-1 and FA-2**). The proposed system will be connected to the existing electrical power network of CLP Power Hong Kong Limited (CLP) under the 'Renewal Energy Feed-in Tariff Scheme' (FiT Scheme). The amount of electricity expected to be generated is about 225,666 kW per year which will be sold to CLP on commercial basis. No parking and loading/unloading space is proposed.
- 1.3 The application was first submitted to the Rural and New Town Planning Committee (the Committee) of the Board for consideration at its meeting on 29.11.2019. At the meeting, the Committee considered another application (No. A/NE-KLH/578) for installation of solar energy system in "Agriculture" zone and was of the view that some assessment criteria should be formulated to facilitate assessment of such applications by the Committee. The Committee then decided to defer consideration of all such applications in the same meeting (including the current application) pending the formulation of assessment criteria on applications for installation of solar energy system. The assessment criteria was promulgated on 21.7.2020 and details of these are set out in paragraph 2 below.
- 1.4 For Members' reference, the following documents are attached:
 - (a) RNTPC Paper No. A/TM-SKW/105

- (b) Extract of minutes of the Committee's meeting held on 29.11.2019 (Appendix F-II)
- (c) Secretary of the Board's letter dated 13.12.2019 (Appendix F-III) informing the applicant of the Committee's decision

2. Further Information Submitted by the Applicant

- 2.1 According to the applicant, an application to CLP for participation in the FiT Scheme has been submitted but the 'Acknowledgement Letter' from CLP, as referred in paragraph 3(a) below, has yet to be obtained. Nevertheless, in response to paragraph 6(a) of the 'Assessment Criteria for Considering Applications for Solar Photovoltaic System' (Appendix F-IV) regarding the technical feasibility of the proposed scheme, the applicant submitted a further information (FI) on 19.10.2020 providing a letter from CLP in relation to the necessary network reinforcement works for his participation in the FiT Scheme, which will be carried out by CLP subject to the conditions stated in the letter (Appendix F-Va).
- 2.2 On 27.11.2020, the applicant further clarified the height of the solar panels with stands is 1.262m (**Appendix F-Vb**).

3. Assessment Criteria for Considering Applications for Solar Photovoltaic System

The set of assessment criteria for considering applications for Solar Photovoltaic (SPV) system made under Section 16 of the Town Planning Ordinance was approved by the Board on 3.7.2020 and promulgated on 21.7.2020 (**Appendix F-IV**). The relevant assessment criteria are summarised as follows:

- (a) It is a prerequisite for the applicant to obtain the 'Consent Letter' or 'Acknowledgement Letter' from the Hongkong Electric Company, Limited and CLP respectively and submit a copy of the document together with the application to demonstrate the technical feasibility of the scheme in terms of serviceability, electrical safety and output generated by the SPV system;
- (b) Unless with strong justifications, the SPV system, including the height of the proposed structures, should be in keeping with the surrounding area/developments and commensurate with the function(s) it performs.
- (c) It has to be demonstrated to the satisfaction of the relevant government departments that the SPV system will not have significant adverse impacts, including but not limited to those relating to the environment, drainage, sewerage, traffic, geotechnical safety, landscape and visual¹ and, where needed, appropriate measures are to be adopted to mitigate the impacts.

¹ The applicant has to demonstrate that the proposal would not affect the visual and landscape amenities/character of the area adversely by, for instance, causing a significant change of landscape resources/character, dwarfing the surrounding developments or catching the public's visual attention due to the scale and prominence of the proposed installation. Where appropriate, measures should be taken to mitigate the visual/landscape impact, for example, by peripheral screen planting.

- (d) Unless with strong justifications², proposals involving extensive site formation, vegetation clearance/ tree felling, excavation or filling of land/ pond are generally not supported.
- (e) Planning applications with proposed felling of existing Old and Valuable Trees (OVTs), potentially registrable OVTs, and trees of rare or protected species should not be supported. If tree removal is unavoidable, subject to the advice of relevant government departments, compensatory tree planting and/or landscape treatments should be provided within the application site as appropriate.
- (f) As there is a general presumption against development in "GB" zone, planning application within the "GB" zone is normally not supported unless with strong justifications. It has to be demonstrated to the satisfaction of the relevant government departments that the SPV system would not adversely affect the landscape character/ resources of the "GB" zone and jeopardise the integrity of the zone as a buffer.
- (g) All other statutory or non-statutory requirements of the relevant government departments must be met. Depending on the specific land use zoning of the application site, the relevant Town Planning Board guidelines should be observed, as appropriate.
- (h) Approval conditions to address the technical issues, if any, within a specified time and clauses to revoke the permission for non-compliance with approval conditions may be imposed as appropriate.

4. Comments from Relevant Government Departments

4.1 For the FI submitted by the applicant after the last deferment by the Committee as mentioned in paragraph 2 above, relevant government bureau/departments have been consulted. Their updated comments are summarised as follows:

Lands Administration

4.1.1. Comments of the District Lands Officer/ Tuen Mun, Lands Department (DLO/TM, LandsD):

- (a) The applicant has provided FI to relevant departments concerning the terms and conditions between CLP and the applicant under CLP Renewable Energy FiT Scheme. As the FI is outside the purview of his office and he shall defer to the relevant departments to comment.
- (b) In view of the above, he has no further comments and his previous comments in the relevant RNTPC paper remain valid except that para.10.1.1 of **Appendix F-I** should read 'notwithstanding the

² Ground-mounted SPV system is usually on steel frame or concrete plinth. It should normally not involve extensive site formation, excavation or filling of land.

above, his office reserves the right to take enforcement actions as may be considered appropriate against any unauthorized erection/extensions/alterations of the structures affected irrespective of whether planning permission will be given or not. Enforcement action will also be taken should any structures are found erected without any prior approval given by his office or any unauthorized occupation of Government land.'

4.2 The following government bureau/departments maintained their previous comments on the application as stated in paragraph 10 of **Appendix F-I**, which are recapitulated below:

Environment

- 4.2.1. Comments of the Secretary for the Environment (SEN):
 - (a) He strongly supports the development of RE systems, especially larger-scale systems such as the one proposed under the current application as they would be better able to meaningfully contribute to increase the use of RE in Hong Kong.
 - (b) Development of RE is an important part of his efforts in combating climate change. Increasing the use of RE, a zero-carbon energy, can help decarbonise electricity generation sector, which contributes to about two-thirds of the carbon emission in Hong Kong. In particular, if it is able to achieve a carbon reduction that is compliant with Paris Agreement's well below 2°C target in 2050, it is estimated that about 80% of electricity would need to come from zero-carbon energy sources. Therefore, promoting the development of RE has been an integral part of decarbonisation strategy.
 - (c) The policy is for the Government to take the lead in developing RE where technically and financially feasible and to create conditions that are conducive to community participation. For the private sector, he and the power companies have introduced the FiT Scheme, providing financial incentives which can encourage the private sector to invest in distributed RE. A series of measures have also been introduced to facilitate and support members of the public in developing RE. Example include relaxing the restrictions in relation to installation of PV systems at the rooftop of village houses and introducing a new scheme called 'Solar Harvest' to install small-scale RE systems for eligible schools and welfare non-Governmental organisations. Electrical and Mechanical Services Department (EMSD) has also revamped its 'HK RE Net' to provide useful information in respect of developing RE to the public.

Landscape

4.2.2. Comments of Chief Town Planner/Urban Design and Landscape, Planning Department (CTP/UD&L, PlanD)

- (a) He has reservation on the application from the landscape planning perspective.
- (b) The site area is about 1,650m², located near Pak Shek Hang, in an area of miscellaneous rural fringe landscape character surrounded by meadow and natural woodland (Plans FA-1 to FA-3). With reference to the site visit conducted on 16.10.2019 and aerial photos taken in 2015 and 2018, the Site is mostly covered by meadow (updated photos taken in November 2020 are in Plans FA-4a and FA-4b). A few existing trees of common species and some minor temporary structures are found within the Site. The applicant clarified (Appendix If of Appendix F-I) that the existing tree will be transplanted within the Site, however, the plinths of solar panel will impose adverse impact on the existing landscape resources. The rural fringe landscape character will also be altered inevitably due to the proposed development. The approval of such application would set an undesirable precedent for other similar applications within the "GB" zone, and would affect the integrity of the adjacent natural woodland.

Nature Conservation

- 4.2.3. Comments of Director of Agriculture, Fisheries and Conservation (DAFC):
 - (a) It is noted from the applicant's further information (**Appendix Ig of Appendix F-I**) that jib crane would be used to transport solar panels and containers to the Site, and would not cause adverse impacts on the stream to the south-east of the Site. The applicant also revealed that no vegetation clearance would be carried out.
 - (b) However, the Site is located 100m (**Plans FA-1 and FA-3**) downhill of the MacLehose Trail and the Tai Lam Country Park (TLCP). The applicant shall provide information to demonstrate if the proposed system would induce any indirect environmental impacts including visual impacts on the surrounding TLCP, and if mitigation measure(s) such as the use of non-reflective solar panels, would be adopted under the project.

Electrical Installation

- 4.2.4. Comments of Director of Electrical and Mechanical Services (DEMS):
 - (a) He has no objection to the application.
 - (b) All fixed electrical installations of the solar energy system shall comply with the Electricity Ordinance (Cap. 406) and its subsidiary regulations.
- 4.3 The following government departments maintain their previous comments on the application as stated in paragraph 10 of **Appendix F-I**:

- (a) Commissioner for Transport (C for T);
- (b) Chief Highway Engineer/New Territories West, Highways Department (CHE/NTW, HyD);
- (c) Director of Environmental Protection (DEP);
- (d) Chief Engineer/Mainland North, Drainage Services Department (CE/MN, DSD);
- (e) Chief Building Surveyor/New Territories West, Buildings Department (CBS/NTW, BD);
- (f) Director of Fire Services (D of FS);
- (g) Chief Engineer/Construction, Water Supplies Department (CE/C, WSD); and
- (h) District Officer (Tuen Mun), Home Affairs Department (DO(TM), HAD).
- 4.4 The following government departments maintain their previous views of having no objection to/comments on the application:
 - (a) Project Manager (West), Civil Engineering and Development Department (PM(W), CEDD);
 - (b) Head of the Geotechnical Engineering Office, CEDD (H(GEO), CEDD);
 - (c) Director of Leisure and Cultural Services (DLCS);
 - (d) Director of Health (D of H);
 - (e) Commissioner of Police (C of P);
 - (f) Director of Food and Environmental Hygiene (DFEH); and
 - (g) Executive Secretary (Antiquities and Monuments), Antiquities and Monuments Office (ES(A&M), AMO).

5. Planning Considerations and Assessments

- 5.1 The application is for proposed public utility installation (solar energy system), involving 616 solar panels (each 1.65m (L) x 0.992m (W) x 0.035m (H)) installed on stands (with the total height of 1.262m) and two containers (each 6.06m (L) x 2.44m (W) x 2.59m (H)) for meter installation at a site of about 1,650m² within an area zoned "GB" (**Drawings FA-1 and FA-2**). The planning intention of "GB" zone is primarily for defining the limits of urban and sub-urban development areas by natural features and to contain urban sprawl as well as to provide passive recreational outlets. There is a general presumption against development within this zone.
- 5.2 At the Committee meeting on 29.11.2019, Members decided to defer consideration of the application pending the formulation of the assessment criteria for considering applications for SPV system. The assessment criteria was promulgated on 21.7.2020 (Appendix F-IV). According to the applicant, the 'Acknowledgement Letter' from CLP, as a prerequisite under the assessment criteria, has yet to be obtained. However, to demonstrate the technical feasibility of the proposed solar energy system as requested by the assessment criteria, the applicant has submitted a letter from CLP informing that subject to the applicant's acceptance of the relevant terms and conditions (Appendix F-Va), CLP will carry out the network reinforcement works for the applicant to participate in the FiT Scheme. Nevertheless, the proposed use is not in line with the planning intention

- of "GB" zone and no strong justification has been given in the applicant's submission for a departure from the planning intention of "GB" zone.
- 5.3 As the surrounding area of the Site is predominately rural in nature with goat farm, abandoned farmland and vegetated hillslope linking to Tai Lam Country Park (TLCP) and MacLehose Section 10 (Plans FA-2 and FA-3), the proposed solar energy system with 616 solar panels and two converted containers covering most of the Site will inevitably altered the rural fringe landscape character of the Site.
- 5.4 The applicant did not provide further information to address concerns of CTP/UD&L, PlanD and DAFC on the potential impact on the rural fringe landscape character and the existing landscape, and the indirect environmental impacts, including visual impacts, on TLCP respectively. CTP/UD&L, PlanD maintains his reservation on the application from the landscape planning perspective while DAFC's concerns have not been addressed. The application does not meet the Town Planning Board Guidelines for 'Application for Development within the Green Belt zone under Section 16 of the Town Planning Ordinance' (TPB PG-No. 10) as it will affect the existing landscape and cause adverse visual impact. Moreover, the applicant still fails to demonstrate that the proposed system is essential and there is no alternative site available.
- 5.5 The proposed development does not fulfil the assessment criteria for considering application for SPV system in that there are adverse comments from relevant Government departments on visual and landscape aspects, and the applicant has failed to demonstrate that the proposed system would not adversely affect the landscape character/ resources of the "GB" zone and jeopardise the integrity of the zone as a buffer. As there is a general presumption against development in "GB" zone, planning application for SPV system within the "GB" zone is normally not supported unless with strong justifications.
- 5.6 SEN supports the development of renewable energy. DEP and DEMS have no objection to the application. Other Government departments consulted, including C for T, CE/MN of DSD, CBS/NTW of BD, D of FS and D of Health, have no objection to or adverse comments on the application.
- 5.7 There is no similar application for solar energy system within the "GB" zone on the same OZP. Approval of the application would set an undesirable precedent for similar uses to proliferate in the "GB" zone. The cumulative effect of approving such similar applications would result in a general degradation of the rural environment and landscape quality of the area.

6. Planning Department's View

- 6.1 Based on the assessment made in paragraph 5 above, the Planning Department maintains its previous view of <u>not supporting</u> the application for the following reasons:
 - (a) the proposed development is not in line with the planning intention of the "GB" zone, which is primarily intended for defining the limits of urban and sub-urban development areas by natural features and to contain urban sprawl,

as well as to provide passive recreational outlets. There is a general presumption against development within this zone. There is no strong planning justification in the submission for a departure from the planning intention;

- (b) the proposed development is not in line with the Town Planning Board Guidelines for 'Application for Development within the Green Belt zone under Section 16 of the Town Planning Ordinance' (TPB PG-No. 10) in that the applicant fails to demonstrate that the proposed system is essential, no alternative site is available for the proposed system, and there will be no adverse landscape and visual impacts on the surrounding areas and Tai Lam Country Park;
- (c) the proposed development does not fulfil the 'Assessment Criteria for Considering Applications for Solar Photovoltaic System made under Section 16 of the Town Planning Ordinance' in that the applicant fails to demonstrate that the proposed SPV system would not adversely affect the landscape character of the "GB" zone; and
- (d) the approval of the application would set an undesirable precedent for similar applications in the area. The cumulative effect of approving such similar applications would result in a general degradation of the natural environment and landscape quality of the "GB" zone.
- 6.2 Alternatively, should the Committee decide to approve the application, it is suggested that the permission shall be valid until **18.12.2024**, and after the said date, the permission shall cease to have effect unless prior to the said date either the development hereby permitted is commenced or this permission is renewed. The following condition of approval and advisory clauses are suggested for Members' reference:

Approval Conditions

- (a) the submission and implementation of fire services installation proposal to the satisfaction of the Director of Fire Services or of the Town Planning Board; and
- (b) the submission and implementation of drainage proposal to the satisfaction of the Director of Drainage Services or of the Town Planning Board.

Advisory Clauses

The recommended advisory clauses are attached at **Appendix F-VI**.

7. Decision Sought

7.1 The Committee is invited to consider the application and decide whether to grant or refuse to grant permission.

- 7.2 Should the Committee decide to reject the application, Members are invited to advise what reason(s) for rejection should be given to the applicant.
- 7.3 Alternatively, should the Committee decide to approve the application, Members are invited to consider the approval condition(s) and advisory clause(s), if any, to be attached to the permission, and the date when the validity of the permission should expire.

8. Attachments

Appendix F-I RNTPC Paper No. A/TM-SKW/105

Appendix F-II Extract of minutes of the RNTPC meeting held on 29.11.2019

Appendix F-III Secretary of the Board's letter dated 13.12.2019 informing the

applicant of the Committee's decision

Appendix F-IV Assessment Criteria for Considering Applications for Solar

Photovoltaic System

Appendix F-Va Letter received on 19.10.2020

Appendix F-Vb Applicant's email dated on 27.11.2020

Appendix F-VI Advisory Clauses

Drawing FA-1 Layout Plan

Drawing FA-2 Schematic drawing for the proposed system and solar panel

Plan FA-1 Location plan

Plan FA-2 Site plan

Plan FA-3 Aerial photo

Plans FA-4a to 4b Site photos

PLANNING DEPARTMENT DECEMBER 2020