

FURTHER CONSIDERATION OF APPLICATION NO.A/YL-KTN/886
UNDER SECTION 16 OF TOWN PLANNING ORDINANCE

**Proposed Public Utility Installation (Solar Photovoltaic System) and
Filling of Land in “Agriculture” Zone
Lot 1471 S.B (Part) in D.D. 107, Shui Mei Tsuen, Yuen Long, New Territories**

1. Background

- 1.1 On 13.1.2023, the applicant, Future Electronics, submitted the subject application seeking planning permission for proposed public utility installation (solar photovoltaic (SPV) system) and filling of land at the application site (the Site) (**Plan FA-1**). The Site falls within an area zoned “Agriculture” (“AGR”) on the approved Kam Tin North Outline Zoning Plan (OZP) No. S/YL-KTN/11¹. According to the Notes of the OZP, ‘Public Utility Installation’ (‘PUI’) is a Column 2 use within the “AGR” zone, which requires planning permission from the Town Planning Board (the Board). Filling of land within “AGR” zone also requires planning permission from the Board.
- 1.2 According to the applicant, the proposed SPV system is to be operated under the Feed-in Tariff (FiT) Scheme until end 2033. The total capacity of the proposed SPV system is about 125kW and all electricity generated will be sold to the CLP Power Hong Kong Limited (CLP) on commercial basis. According to the submission, the proposed use comprises 272 SPV panels (2.278m (L) x 1.134m (W) each) which will be accommodated in three groups at areas namely Sites A, B and C (**Drawings FA-1 and FA-2**). The SPV panels at Sites A and C (30 nos. each) will be installed atop two container structures and one shelter shed with combined heights of not more than 3m (**Drawing FA-4**). The container structures and shelter shed with a total floor area of about 230.5m² are for accommodating ancillary E&M facilities and storage of equipment. The SPV panels at Site B (212 nos. in total) will be installed on supporting stands and plinths with combined heights of about 1.5m (**Drawing FA-5**). To facilitate the operation of the proposed SPV system, the proposed use also involves erecting two H-poles mounted with transformers with heights of 5m which would be maintained by CLP in the eastern portion of the Site (**Drawing FA-1**). For the purpose of site formation of the proposed container structures, filling of land for part of the Site (79.2m²/5.5%) at a depth of about 0.15m is proposed (**Drawing FA-6**). Majority of the Site, including areas underneath the SPV panels at Site B, will be planted with groundcover to prevent potential soil erosion; and climber planting will be provided at the periphery fencing of the Site (**Drawing FA-1**). The proposed

¹ The Site was zoned “AGR” on the draft Kam Tin North OZP No. S/YL-KTN/10 at the time of submission. There was no change to the zoning of the Site on the OZP currently in force.

SPV system will be decommissioned when the FiT Scheme terminates after 2033 and the Site would be reinstated for agricultural use.

- 1.3 On 13.10.2023, the application was considered by the Rural and New Town Planning Committee (The Committee) of the Board. At the meeting, whilst Members generally had no in-principle objection to the application, there were Members' concerns on the practicability of the applicant's planting proposal as the applicant did not provide the actual widths of separation between the rows of SPV panels at Site B for sunlight penetration, while the shading effect from the SPV panels might result in insufficient sunlight for the proposed plants. After deliberation, the Committee decided to defer a decision on the application pending the applicant's submission of supplementary information on the planting proposal for further consideration of the Committee.
- 1.4 Three sets of Further Information (FI) were then submitted by the applicant as detailed in paragraph 2 below. The development parameters of the proposed use are as follows:

Site Area	1,430m ²
Gross Floor Area (GFA)	230.5m ²
Height	Not more than 5m *
Number of SPV Panels	272 ^ Site A: 30 Site B: 212 Site C: 30
Number of Structures	3 #
Number of H-Poles	2
Annual Generation	About 178,394kWh (equivalent to about 54 domestic households' annual consumption)
Anticipated Completion Time	December 2024
Parking Spaces	
Private Car	3
Medium Goods Vehicle/ Heavy Goods Vehicle	1

* The overall height of SPV panels with supporting stands and plinths at Site B are about 1.5m; while the combined heights of SPV panels with structures underneath at Sites A and C are not more than 3m. Two H-poles with heights of 5m would be erected.

^ The proposed number of SPV panels remains the same before and after consideration by the Committee on 13.10.2023. The applicant has clarified on the exact number of SPV panels in the FI submitted after 13.10.2023.

Including two container structures and one shelter shed for ancillary E&M facilities and storage of equipment.

- 1.5 For Members' reference, the following documents are attached:

- (a) RNTPC Paper No. A/YL-KTN/886B considered on 13.10.2023 **(Appendix F-I)**
- (b) Extract of Minutes of the Committee's meeting held on 13.10.2023 **(Appendix F-II)**
- (c) Secretary of the Board's letter dated 27.10.2023 informing the applicant of the **(Appendix F-III)**

Committee' decision to defer a decision on the application

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| (d) | FI received on 14.3.2024* | (Appendix F-IVa) |
| (e) | FI received on 19.3.2024* | (Appendix F-IVb) |
| (f) | FI received on 2.5.2024* | (Appendix F-IVc) |

*accepted and exempted from publication and recounting requirements

2. **Further Information Submitted by the Applicant**

In response to Members' concerns, the applicant has submitted FI (**Appendices F-IVa to F-IVc**) to support the application which are summarised as follows:

- (a) The planting proposal has been revised in consultation with the Urban Design & Landscape Section of the Planning Department (PlanD). Under the revised planting proposal, *Nephrolepis auriculata* (腎蕨) is proposed underneath the SPV panels at Site B and underneath the shelter shed at Site C as the species is native and shade-tolerant requiring minimum and indirect light, while *Cynodon dactylon* (狗牙根) is proposed at the other uncovered areas at the Site as its limited height (about 30cm) can help prevent forming hotspots which trap heat and damage the SPV panels. Moreover, climber planting *Trachelospermum jasminoides* (絡石) would be provided at the periphery fencing of the Site (**Drawing FA-1**). The two existing trees near the south-eastern periphery at the Site will be retained and no new tree will be planted. The groundcover plantings would help stabilise erodible soil and serve as water and air channels in the soil.
- (b) The applicant has provided layout plan and section (**Drawings FA-2 and FA-5**) demonstrating that separation widths of 1m between rows of SPV panels at Site B can be achieved for sunlight penetration. In addition, the applicant has explored possibilities of using transparent SPV panels and different arrangements of the panels at Site B for increasing the unshaded area. The current proposed layout is considered appropriate taking into account factors of durability, cost effectiveness and structural stability of the SPV system as well as minimal land filling required for the supporting structures.
- (c) In order to demonstrate that plantation underneath SPV panels is feasible, the applicant has also provided information on comparable reference projects of agrivoltaic farms with similar geographical and climatic characteristics and adopting SPV panels of similar dimensions and technical specifications as those proposed under the current application.

3. **Assessment Criteria for Considering Applications for SPV System**

The set of Assessment Criteria for Considering Applications for SPV System made under Section 16 of the Town Planning Ordinance (Assessment Criteria) was first promulgated by the Board on 21.7.2020. The latest set of Assessment Criteria which was issued on 7.10.2022 is at **Appendix F-V**.

4. Comments from Relevant Government Departments

- 4.1 Comments on the application made by the relevant bureau/governments are stated in paragraph 10 of the RNTPC Paper No. A/YL-KTN/886B at **Appendix F-I**.
- 4.2 For the current FI submission, the following government departments have been consulted and their comments are summarised as follows:

Agriculture Development

- 4.2.1 Comments of the Director of Agriculture, Fisheries and Conservation (DAFC):
- (a) no comment on the FI submission; and
 - (b) his previous comments (paragraph 10.1.6 of RNTPC Paper No. A/YL-KTN/886B at **Appendix F-I**) from agricultural perspective are still valid.

Landscape

- 4.2.2 Comments of the Chief Town Planner/Urban Design & Landscape, PlanD (CTP/UD&L of PlanD):
- (a) no comment on the FI submission from landscape planning perspective; and
 - (b) it is noted that two existing trees in the south within the Site will be retained, and *Cynodon dactylon* and *Nephrolepis auriculata* are proposed in full sun area and shaded area under the SPV panels respectively.

5. Planning Considerations and Assessments

- 5.1 The application is for proposed SPV system and filling of land at the Site zoned “AGR” (**Plan FA-1**). In response to the Committee’s concerns at the meeting on 13.10.2023, the applicant submitted three sets of FI including revised planting proposal; respective layout plans and sections, and relevant information on the alternatives explored and the comparable reference projects to demonstrate the practicability of the planting proposal.
- 5.2 According to the FI submission, the rows of SPV panels at Site B will be separated with widths of 1m to allow sunlight penetration. Native and shade-tolerant groundcover species of *Nephrolepis auriculata* is proposed underneath the SPV panels at Site B. DAFC and CTP/UD&L of PlanD have no comment on the FI submission from agricultural and landscape planning perspectives respectively.
- 5.3 Other planning considerations and assessments on the application are set out in

paragraph 12 of RNTPC Paper No. A/YL-KTN/886B at **Appendix F-I**. The main points are summarised as follows:

- (a) the proposed use is not in line with the planning intention of the “AGR” zone, which is primarily to retain and safeguard good quality agricultural land/farm/fish ponds for agricultural purposes, and to retain fallow arable land with good potential for rehabilitation for cultivation and other agricultural purposes and DAFC does not support the application from agricultural perspective. Nevertheless, proposed use is for participation in the FiT Scheme jointly introduced by the Government and the two power companies for the private sector to invest in the renewable energy (RE). With the policy support of the Environment and Ecology Bureau (EEB), the proposed use is in line with the Government’s policy to promote the use of RE in Hong Kong, which forms part of the decarbonisation strategy in Hong Kong. The Secretary for Environment and Ecology (SEE) considers that approval of the application could put the vacant land to good use to generate RE which would help Hong Kong achieve the carbon neutrality target;
- (b) the Site has been abandoned and left mainly vacant. SEE considers that the proposed minimum hard paving will help retain the potential of agriculture rehabilitation of the Site. The applicant also proposes to retain the potential for future agricultural use at the Site by planting on the ground to prevent potential soil erosion. The proposed SPV system will be decommissioned when the FiT Scheme terminates after 2033 and the Site would be reinstated for agricultural use;
- (c) part of the Site (79.2m²/5.5%) is proposed to be filled for site formation. Filling of land within the “AGR” zone requires planning permission from the Board as it may cause adverse drainage and environmental impacts on the adjacent areas. In this regard, the Chief Engineer/Mainland North of the Drainage Services Department (CE/MN of DSD) and the Director of Environmental Protection (DEP) have no objection to the application from drainage and environmental perspectives;
- (d) the Site is situated in an area of rural inland plains landscape character mainly comprising hobby farms, farmland, plant nursery and storage yards. While there is concern that the landscape quality of the surrounding environment would be degraded, CTP/UD&L of PlanD considers that the proposed use is not incompatible with the surrounding landscape character, and significant adverse landscape impact is not anticipated;
- (e) the applicant has obtained the Network Reinforcement Condition Letter from CLP which demonstrates the technical feasibility of the proposed SPV system. The Director of Electrical and Mechanical Services and DEP have no objection to the application from electricity supply, RE and environmental perspectives. Other relevant departments consulted including the Commissioner for Transport and the Director of Fire Services have no objection to or no adverse comment on the application.

- (f) the proposed use is generally in line with the Assessment Criteria (**Appendix F-V**) in that the applicant has obtained CLP's confirmation letter to demonstrate the preliminary technical feasibility; the height of the proposed SPV system of not more than 5m is in keeping with the surrounding area and commensurate with the function it performs; relevant departments consulted in general have no adverse comments from various technical perspectives; and the long-term planning intention of the "AGR" zone would not be jeopardised. Taking into account the policy support from EEB, sympathetic consideration may be given to the application; and
- (g) there is one approved similar application (No. A/YL-KTN/785) within the same "AGR" zone. Approving the subject application is in line with the Committee's previous decision.

5.4 As the technical requirements on drainage proposal and provision of water supplies for fire-fighting and fire service installations within the Site could be monitored upon general building plan submission to the Building Authority, respective approval conditions would not be recommended.

6. Planning Department's Views

- 6.1 Based on the assessments made in paragraph 5 above, the Planning Department maintains its view of having no objection to the application.
- 6.2 Should the Committee decide to approve the application, it is suggested that the permission shall be valid until 10.5.2028, and after the said date, the permission shall cease to have effect unless before the said date, the development permitted is commenced or the permission is renewed. The recommended advisory clauses are attached at **Appendix F-VI**.
- 6.3 Alternatively, should the Committee decide to reject the application, the following reason for rejection is suggested for Members' reference:

the proposed use with filling of land is not in line with the planning intention of the "AGR" zone which is primarily to retain and safeguard good quality agricultural land/farm/fish ponds for agricultural purposes. It is also intended to retain fallow arable land with good potential for rehabilitation for cultivation and other agricultural purposes. There is no strong planning justification in the submission for a departure from the planning intention.

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 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.

- 7.3 Alternatively, should the Committee decide to reject the application, Members are invited to advise what reason(s) for rejection should be given to the applicant.

8. Attachments

Appendix F-I	RNTPC Paper No. A/YL-KTN/886B considered on 13.10.2023
Appendix F-II	Extract of Minutes of the Committee's meeting held on 13.10.2023
Appendix F-III	Secretary of the Board's letter dated 27.10.2023 informing the applicant of the Committee's decision to defer a decision on the application
Appendix F-IVa	FI received on 14.3.2024
Appendix F-IVb	FI received on 19.3.2024
Appendix F-IVc	FI received on 2.5.2024
Appendix F-V	Assessment Criteria For Considering Applications for Solar Photovoltaic System made under Section 16 of the Town Planning Ordinance
Appendix F-VI	Recommended advisory clauses
Drawings FA-1 and FA-2	Layout plans
Drawings FA-3 to FA-5	Sectional drawings
Drawing FA-6	Land filling plan
Plan FA-1	Location plan with similar application
Plan FA-2	Site plan
Plan FA-3	Aerial photo
Plan FA-4	Site photos

**PLANNING DEPARTMENT
MAY 2024**