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Our Ref: OM-LA/005

12 March 1999

MEMORANDUM

To: All Engineering Staff

From: Tan L S

RE: 1. COMPLIANCE WITH SINGAPORE STANDARD CP 5 : 1998
2. NOTES OF MEETING BETWEEN ACES/IES/PUB/POWERGRID/ POWER SUPPLY HELD ON 22 JANUARY 1999

I am attaching the following for your information and compliance:

(a) PUB Circular to Licensed Electrical Workers & Contractors entitled "Compliance with Singapore Standard CP 5 : 1998".

(b) Notes of Meeting between ACES/IES/PUB/PowerGrid/Power Supply held on 22 January 1999.

Tan L S

cc Notice Board

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PUBLIC UTILITIES BOARD · SINGAPORE
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Our Ref:

Circular No: RD/E01/1999
Date of issue: 1 Feb 1999

Your Ref:

To: All Licensed Electrical Workers & Contractors

Dear Sirs

COMPLIANCE WITH SINGAPORE STANDARD CP5: 1998

Under the Public Utilities (Electricity) Regulations, all electrical installations are required to comply with the Singapore Standard CP5.

2 The Singapore Standard CP5: 1988 Code of Practice for Wiring of Electrical Equipment of Buildings has recently been revised by the Singapore Productivity & Standards Board. Following the revision, the title of this code of practice has been renamed Singapore Standard CP5: 1998 Code of Practice for Electrical Installations.

3 Consequently, all electrical installations for new projects must meet the requirements of CP5: 1998 with effect from 1 Jan 2000. This is to allow licensed electrical workers some time to familiarise themselves with the CP5: 1998. To avoid affecting adversely the construction of those electrical installations currently in progress, licensed electrical workers are allowed to use CP5: 1988 for such ongoing projects for which the design of the electrical installation has been approved before 1 Jan 2000. You are advised to familiarise yourself with CP5: 1998 Code of Practice for Electrical Installations.

4 Should you need further clarification, please contact our officers at telephone number 7313085 or 7313661.

Yours faithfully

YEO YEK SENG
DIRECTOR
REGULATION DEPARTMENT

TURN IT OFF

MEETING BETWEEN ACES/IES/PUB/POWERGRID/POWER SUPPLY
NOTES OF MEEETING HELD ON 22 JAN 1999 AT 2.30 PM

RECEIVED
24 FEB 1999
REGULATION
DEPARTMENT
PUB

Venue: PUB Regulation Department Conference Room

Present:		
	Er Tan Lai Siong	ACES
	Er Leong Kok Yeong	ACES
	Er Lee Kian Chew	IES
	Er Timmy Mok	IES
	Er Ng Kong	PUB
	Er Cheng See Tau	PowerGrid
	Er Shen Sin Fon	PowerGrid
	Er Mohd Anwar Yunus	PowerGrid
	Er Pang Boon Kiat	Power Supply

Matters discussed:

1. **Confirmation of Previous Meeting Notes:**

The notes of previous meeting held on 23 Oct 98 were confirmed without amendment.

2. **Matters Arising:**

2.1 ADMD for Multi-Storey Residential Units

Matter closed.

2.2 Pilot Wire (PW) Commissioning of HT services

Matter closed.

2.3 1.5 MVA 22KV/LV Transformers for Condominium Projects

PG clarified that 1 MVA transformer is a standard size equipment for provision of LV supply. 1.5 MVA 22kV/LV transformers are intended for upgrading projects. The use of 1.5 MVA transformers enables upgrading of supply without the provision of additional transformer plinths. PG added that it would be very difficult for the MC to build additional transformer plinth once the development was completed.

Many requests had been received from developers and LEWs to install 1.5 MVA transformers for new condominium projects. PG had agreed to consider the request subject to the LEW declaring that the applied load is adequate to cater for the ultimate requirement of the development and is unlikely to require further upgrading of load in the future. LEW should state his design assumptions in his declaration.

ACES & IES agreed to the proposal.

2.4 Isolator for Controlling Air-Conditioner at Rooftop of Apartment Unit

Matter closed.

2.5 New Electricity Tariff Structure

ACES pointed out that new HT consumers usually require lower supply capacity in the initial period and gradually increase the supply capacity to full operation. The old tariff structure had offered 50% buffer for the declared demand charge, but now the HT consumer have to pay for the full contracted capacity charge under the new electricity tariff structure. ACES enquired whether certain buffer could be granted for contracted capacity for new HT consumer. PS clarified that for new premises taking EHT or HT supply, consumers are allowed to declare the contracted capacity in two steps. The first step of lower contracted capacity may be declared for an initial period of not more than 12 months and the second step shall be the ultimate contracted capacity for the remainder of a 5-year period.

2.6 Metal Bath Tubs

ACES enquired whether metal bath tubs coated with epoxy powder are required to be provided with supplementary bonding. PS commented that metal bath tubs coated with epoxy powder cannot be considered as properly insulated as it is not tested to the requirement of insulation. As the metal bath tub installed in a bathroom is classified as extraneous conductive part, therefore supplementary bonding is required to be provided.

2.7 Implementation of New CP5:1998

ACES enquired when will be the implementation date for new CP5:1998. PUB mentioned that it has announced in the launching seminar of the new CP5 on 11/12/98 that the new CP5:1998 will be made mandatory from 1 Jan 2000. PUB will issue circular to inform all the LEW/LEC.

2.8 Construction Site

IES enquired whether a large construction site could have electricity supply from the PowerGrid source as well as generator supply to serve different areas. PUB replied that it is possible to have an "Electrical Installation Licence" for supply from the PowerGrid source to serve one service area and another "Supply Installation Licence" for generator supply to serve another service area provided it is clearly indicated and segregated.

3 The next meeting has been scheduled on 23 Apr 1999, 2.30 pm at PUB 15th Storey Conference Room.

Brief Notes of Dialogue Session ACES/IES/PUB/Power Supply/PowerGrid Held on 22 January 1999

1. 1.5 MVA Transformer for New Residential Project

PowerGrid insisted that the letter of undertaking (i.e. the ultimate maximum demand of the project will not exceed the transformer capacity) must be given by the design LEW in-charge of the project. The LEW would have to insert whatever qualifications necessary in the letter; PowerGrid did not appear to have any objection to this suggestion of qualification.

2. Cut-Off Date for Implementation of CP5 : 1998 "Code of Practice for Electrical Installations"

PUB (Ng Kong) mentioned that this code will not be imposed on existing Electrical Installation where the Single Line Diagram is approved by Power Supply before 1 January 2000 but Power Supply (Pang B K) was not entirely happy over this suggesting that the new Code should be applicable to those areas of electrical installations (e.g. swimming pool, fountains etc.) which are not clearly covered by the existing Code i.e. CP5 : 1988.

(Note: For our new electrical designs, we should immediately comply with the new code, so long as they are not finalised, unless there are problems in doing so in which event this should be brought up for discussion with RT or TLS.)

3. Earthing of Bath Tubs and Other Metallic Accessories in the Bathrooms

Power Supply would not waive this requirement.

(Note: We should ensure that this requirement is complied with for all our projects (residential, hotel etc.) currently in progress i.e. 1018, 1043, 1078, 1083, 1151, 1153, 1154, 1163, 1165, 1199 etc.)

4. Socket Outlets in Kitchens

Power Supply clarified that socket outlet in kitchen area can be as close as 800 mm from water tap so long as it is located at a level higher than the latter.

5. Socket Outlets in Service Yard

Weatherproof type socket outlet should be used if it is mounted beyond the 45° angle of the horizontal edge beam above the yard.

6. Earthing of Standby Generator

Power Supply clarified that they do not require the standby generator to have separate earthing.

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7. Temporary Supply to Construction Site

PUB would only licensed one electrical installation for each construction site i.e. if a licence for temporary supply is already given to the Main Contractor for a site, no other supply/licence will be given/issued to the Sub-Contractor within the same job site.

8. Sale of Electricity to Small Consumers

Todate only Power Supply Ltd hold the licence (issued by PUB) to do this. Therefore in say a shopping mall, the developer/ landlord will not be permitted to resale electricities to the tenants.

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