SPgroup
Empowering the Future of Energy

Topic 4a
Energisation of Non-Domestic Consumers' Electrical Installations With Approved Load Exceeding 45 kVA

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Energisation of Service Connection

- Readiness for Energisation
- Roles of LEW
- Typical Lead Time
- Documents Involved
- Fast Track Projects
- Salient Points

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Readiness for Energisation

Prior to energisation, ensure that the following items are ready:

- Sign Consumer Connection Agreement (Contestable)
- Sign Supply Agreement (Non-contestable with substation)
- Pay Connection Charges
- Obtain Licence for Electrical Installation (EI) from EMA
- Open Account with Market Support Services Licensee (MSSL)
- Pay Security Deposit

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Roles of LEW

- Supervise and ensure that the electrical installation is in accordance with the relevant Codes of Practice (CP), Singapore Standards (SS) and Regulations
- Ensure that equipment (inclusive of protection system) is adequately tested, with safety inspection conducted
- Arrange for meter fixing and testing by Meter Section
- Submit Certificate of Compliance (COC) when arranging appointment for Energisation

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Roles of LEW

On the day of supply turn-on, prior to energisation

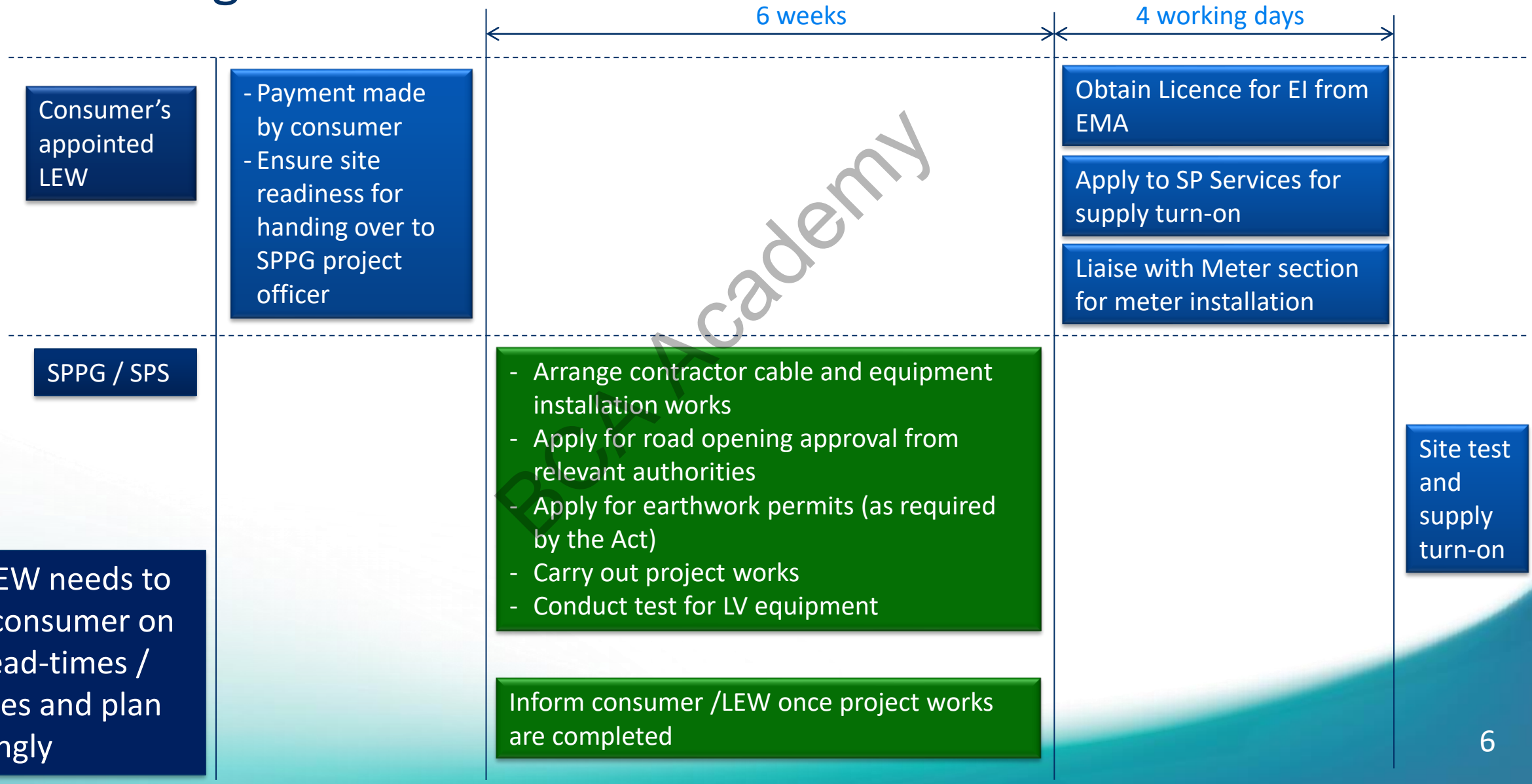
- Submit Certificate of Readiness (COR) to SPPG's Officer
- Perform tripping and interlocking tests on incoming circuit breaker where required

Immediately after energisation

- Phase out incoming feeders
- Acknowledge on the Statement of Turn-on of Electricity (SOTO)

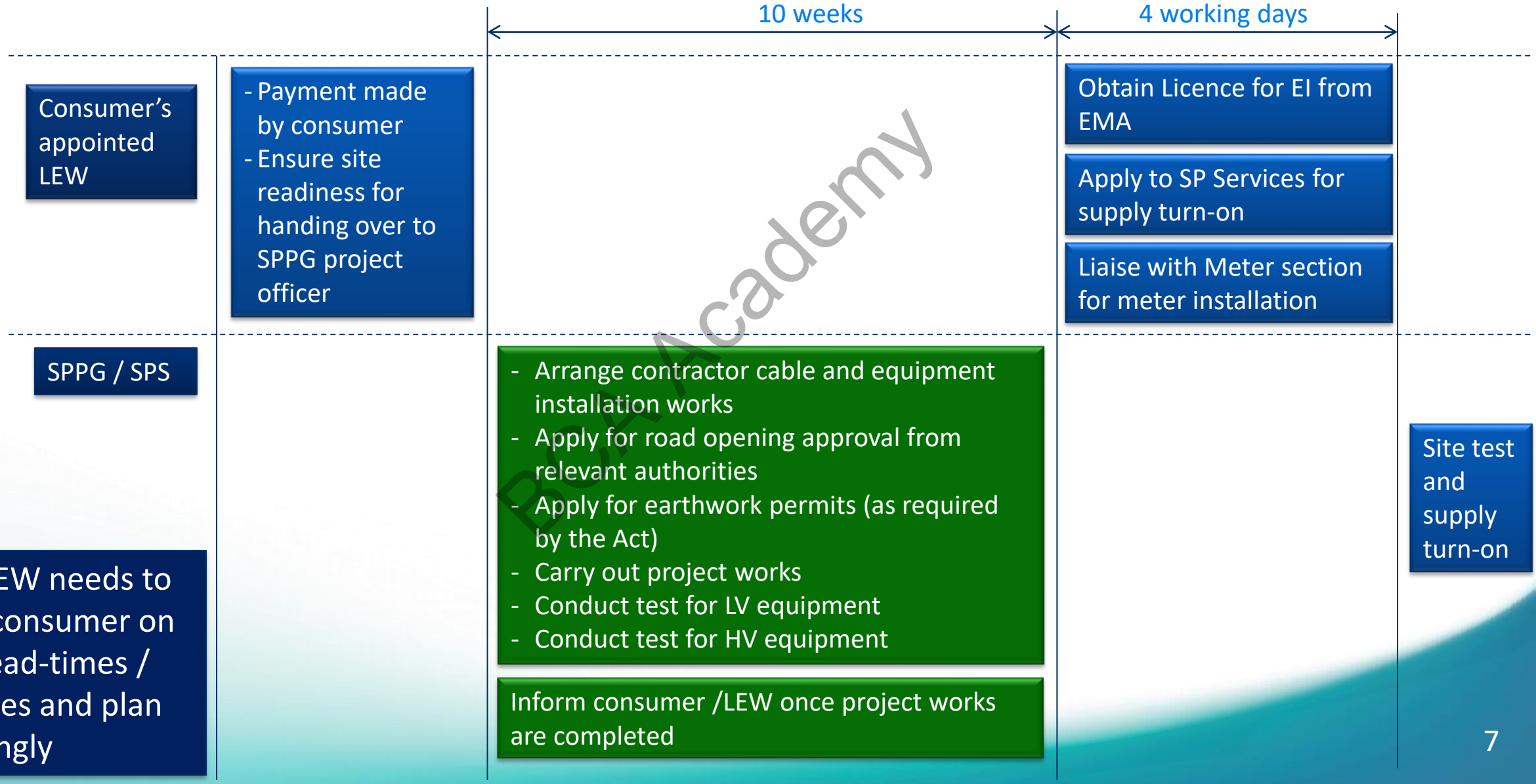
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Typical Lead Time for Service Connection Not Involving Substation



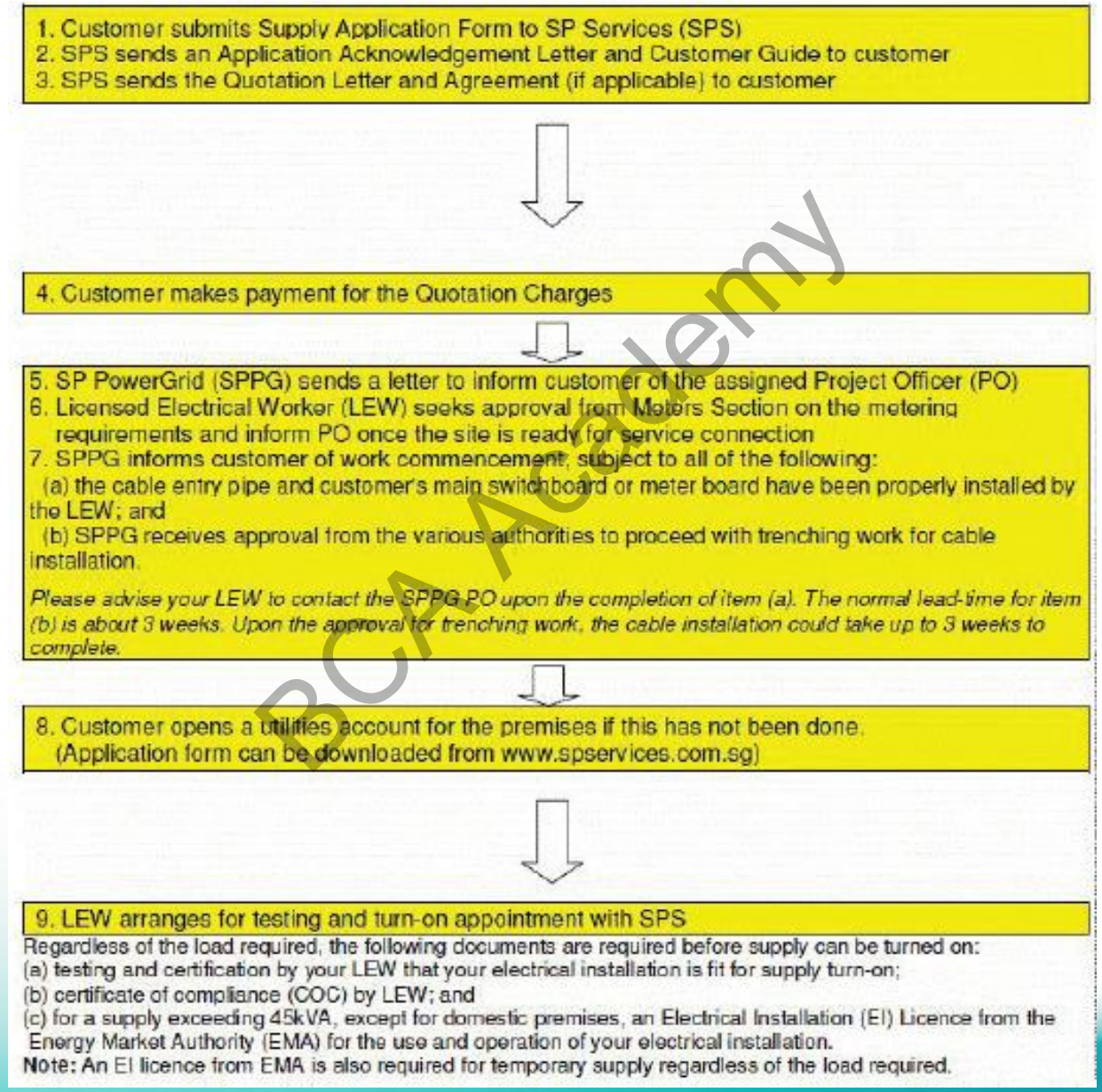
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Typical Lead Time for Service Connection Involving Substation



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Guide on Electricity Supply Connection



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COC

CERTIFICATE OF COMPLIANCE

Particulars of Electrical Installation

Name of Consumer: _____

Address of Installation: _____

_____

Electrical Installation Licence No.: _____ MSS Account No.: _____

Approved load & Supply Voltage: _____ kW _____ Volts

Generator(s) Installed: ☐ Operated in parallel with PowerGrid's network.
No. of generator: _____ Rating: _____ kVA

☐ Standby generator.
No. of generator: _____ Rating: _____ kVA

☐ Not applicable

Electrical Installation Design Certification

I certify that the design of the above-mentioned electrical installation complies with the requirements of the Electricity (Electrical Installations) Regulations 2002 and the relevant Singapore Standard Code of Practice. With the certification of compliance by the LEW responsible for the installation work as shown below, I hereby request for the energisation of the supply line to the said electrical installation on _____ (date).

_____	_____	_____
Name & Signature of LEW responsible for design of electrical installation*	Licence No.	Date

Electrical Installation Inspection Certification

I have supervised the work of the above-mentioned electrical installation and hereby certify that the electrical installation complies with the requirements of the Electricity (Electrical Installations) Regulations 2002 and the relevant Singapore Standard Code of Practice. I further certify that the technical requirements as stipulated by the person responsible for turning on the switchgear which controls the supply of electricity to the said electrical installation have been complied with.

_____	_____	_____
Name & Signature of LEW responsible for electrical installation work*	Licence No.	Date

* The same LEW may perform both design and installation work for the electrical installation.

Copy to:

Market Support Services Licensee

REF: E(EI)Reg5(2)

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COR

CERTIFICATE OF READINESS
FOR THE ENERGISATION OF SERVICE CONNECTION

Name of Customer Installation: _____

Address: _____

Customer Installation Licence No/Expiry Date: _____

Connection Voltage: _____

Approved Load: _____

Name of Connection Cable(s): _____
Owned by Connection Applicant (Yes / No)

MSS Account No: _____

Name of Retailer: _____

Certification By LEW

I, _____(name) the undersigned LEW, hereby certify that the service connection*, the equipment and works at the above installation (Licence No: _____) are now ready and fit for energisation with effect from the date and time specified below.

Date: _____

Time: _____

I certify that:

a. Protection details are as follows:

CT Ratio: _____ /1A or 5A*

Short-Time Withstand Current Ratings of Main Supply Incoming Switchgear _____ KA for1 sec or 3 sec

Main 1 Type: _____

Main 2 Type*: _____ Direct Acting Tripping Setting: _____

O/C Type: _____ Setting: _____

E/F Type: _____ Setting: _____

b. The switching equipment/transformer/service connection* and all associated apparatus related to the service connection have been tested and checked by me and they have passed the pre-commissioning checks and tests in compliance with the Market Rules, Transmission Code, Handbook on How to Apply for Electricity Connection, Connection Agreement, all other applicable standards, and the associated protection systems have all been proven effective.

c. The main protection schemes for the connection have been commissioned by load simulation method on date: _____**

d. *For multi-metered installation with the exception of HDB residential installation, the metering scheme has been designed as master/sub-metering scheme.

e. All necessary meters have been installed.

f. The safety coordination requirements of the Transmission code have been fully complied with.

g. All workmen have been withdrawn and warned that it is no longer safe to continue to work on the equipment without a 'Permit-to-work (PTW)', and that all tools, scaffolding, ladders, construction materials including any temporary local earthing connections have been removed from the equipment, and all protective screens or guards, if any, have been securely fixed and the appropriate warning signs displayed and that all keys, if any, necessary for the isolation and operation of the equipment have been handed to me.

h. All circuit earth on equipment to be energised are removed.

i. Equipment to be energized in this request (the diagram must clearly indicate the portion of the equipment to be energized. If the space is insufficient, please provide diagram as attachment) is shown below:

Name & Signature of LEW requesting for energisation of supply line	Licence No.	Date

* Delete where not applicable
** To indicate NA where protection scheme is not applicable

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SOTO

STATEMENT OF TURN–ON OF ELECTRICITY

ELECTRICITY SUPPLY TO _____
[Name of Applicant]

AT _____
[Address of Installation]

_____

ELECTRICAL INSTALLATION LICENCE NO* : _____

APPLICATION NUMBER: _____

I agree that the above-mentioned electrical installation is suitable for connection to the electrical system. I certify that the supply line to the installation has been energized on

_____ [Date] at _____ [time] .

Name & Signature of PowerGrid's Officer	NRIC No.	Date

I acknowledge that the supply line has been energized on the date and time indicated above.

Name & Signature of LEW requesting for energization of supply line	Licence No.	Date

I acknowledge that the supply line has been energized on the date and time indicated above and confirm that I will be responsible for the operation of this electrical installation hereafter.

Name & Signature of LEW responsible for the operation of the electrical installation*	Licence No.	Date

I acknowledge that the supply line has been energized on the date and time indicated above.

Name & Signature of Applicant or His Representative	NRIC / Passport No.	Date

* Not Applicable for an electrical installation that is exempted from licensing.

Original Copy - PowerGrid Ltd
Pink Copy - LEW (Requesting)
Yellow Copy - LEW (Operation)
Green Copy - Applicant
Blue Copy - MSSL
White Copy - File

REF: E(EI) REG R5(4)

Note: This form can be downloaded from http://elise.ema.gov.sg.

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Fast Track (FT) Projects

76kVA ~ 140 kVA For New Industrial Development

To promote investment and entrepreneurship, industrial development applying Low Voltage supply may be considered for fast track connection scheme.

Eligible applicant should meet the following criteria:

a. New Load application of 76 to 140 kVA; and
b. Point of supply connection not exceeding 150m away from existing network source.

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Fast Track (FT) Projects

76kVA ~ 140 kVA For New Industrial Development

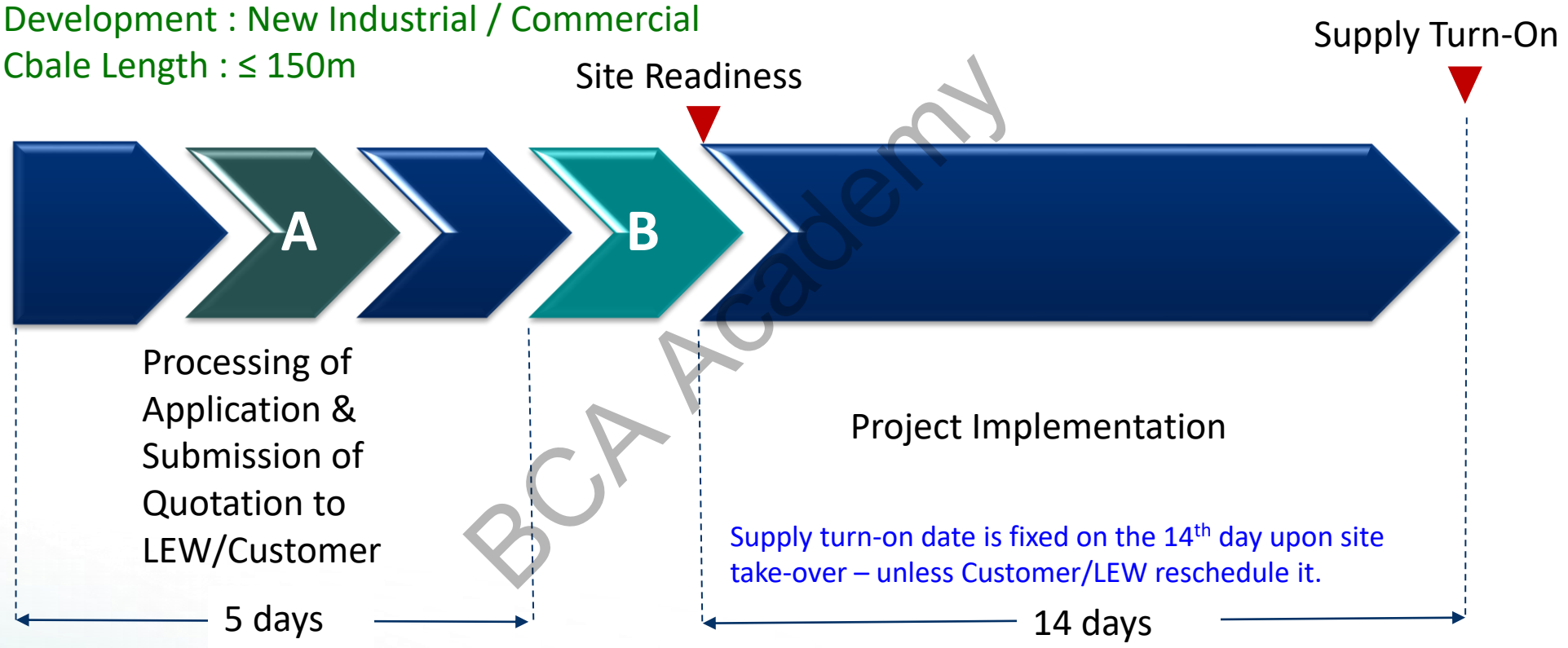
Applications under such fast track connection scheme will receive their supply in (5+14) 19 days* from date of submission of application to SPSL.

* Excluding time taken by Customer/LEW

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Procedure for Fast Track Projects

Applied Load : 76kVA ~ 140kVA
Development : New Industrial / Commercial
Cbale Length : ≤ 150m



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The above project timeline excludes time taken by LEW/customer for: (A) making queries & seeking clarifications and (B) making payment and preparing site readiness.

Note: Close collaboration is key for achieving the expedited project timeline

Lead Time Required for FT Projects

No.	Procedures	Time to complete
1	The customer has to engage and appoint a LEW to submit an application to SPSL to connect to the grid system, along with 2 copies of the site plan. The LEW could submit the Certificate of Compliance to SPSL in this procedure. A quotation for the connection will be offered for the customer to follow up if the submitted site plan by the LEW is in order. LEW will arrange to make payment and open an account.	5 days
2	SPPG will carry out the project implementation after the payment is made and customer site is readied to receive connection. An arrangement will be made with the LEW within the 14 days on the supply turn-on.	14 days

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This guide can be found at the following url:
https://www.spgroup.com.sg/wcm/connect/spgrp/7589101e-d2b2-4b89-bafa23f74b753cae/%5BInfo%5D+Roles+%26+Responsibilities+for+Fast+Track+Application+Process.pdf?MOD=AJPERES&CVID=

Salient Points to Note

Reschedule of Supply Turn-On Date

- Inform SPPG's Project Officer at least 3 working days in advance

Pre-Supply Energisation

- Obtain Licence for Electrical Installation (EI) from EMA
- Open Account with Market Support Services Licensee (MSSL)
- Submit Certificate of Compliance (COC) and Certificate of Readiness (COR) to SPPG

Post-Supply Energisation

- Phasing out supply (where required)
- Acknowledge on the SOTO

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