Business Continuity Manual

Business Continuity Plan: A5

Fixed Ground Power

		Signature	Revision	Effective Date
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A. System Description

1.0 Introduction

1.1 Fixed Ground Power are installed on all the frontal and remote stands of passenger apron and cargo stands in cargo apron to facilitate aircraft to use ground power after docking.

1.2 Most frontal parking stands at T1 and T1M are equipped with two nos. of FGP power plug outlet with rating 90kVA FGP power plug each at inner airbridge and outer airbridge.

1.3 Among the frontal stands at T1 and T1M, those designed for A380 parking are supplied with additional 90kVA plug(s) which is either bridge-mount type or pit type to cater for A380 operation. The typical A380 airbridges are equipped with two no. of FGP power plug outlet each with rating 90kVA.

1.4 All parking stands of the T1S are equipped with one no. of FGP power plug outlet with rating 90kVA each.

1.5 Most remote parking stands are equipped with two nos. of FGP power plug outlet with rating 90kVA each for the main centerline. For left or right auxiliary centerline, one no. of 90kVA FGP power plug is equipped.

1.6 Most cargo parking stands are equipped with two no. of FGP power plug outlet with rating 90kVA each. Serving the aircraft via pit system.

B Physical System Risk

Risk	Description	Mitigation
Loss of power supply to FGP Plantroom 1 / Plantroom 2	Loss of power supply from upstream LV Switchroom ‘C3’ or ‘C7’ supplying FGP Plantroom 1 or Plantroom 2 respectively.	• Carry out manual switching to restore the backup supply from LV Switchroom ‘C2’ or ‘C6’ with a de-rated total system capacity.
Failure of 380V/960V step up transformer at FGP Plantroom 1 / Plantroom 2	Failure of the duty 380V/960V step up transformer at FGP Plantroom 1 or Plantroom 2	• Carry out manual switching to restore the FGP circuits to be supplied by backup transformer.
Loss of 50 Hz power supply to the switch board inside Y1 or Y2 substation.	Loss of Fixed Ground Power to cargo stands.	• Informed Line Maintenance to mobilize Ground Power Unit to serve the aircraft as necessary.

Fire	Damage to FGP equipment inside FGP plant room or substation. .	• FGP plant room and substations are protected by smoke detector.

C Contingency Planning for Fixed Ground Power Mal-functions

1.0 Criteria for activating contingency plan

1.1 Upon detecting any irregularity on the Fixed Ground Power (FGP) units inside FGP plant room 1 & 2 or substations Y1 & Y2.

2.0 Services and manpower involved

2.1 Handling of FGP equipment shall be provided by trained line maintenance operator.

3.0 Contingency Procedures

3.1 When irregularities are detected in any one or both FGP plant rooms

i. When irregularities are discovered at any one or more of the centralized frequency converter inside the FGP plant room(s), the fault shall be immediately reported to FRTMO. FRTMO should immediate inform FRT. FRT shall inform maintenance contractor to attend the fault and take corrective action on the faulty FGP unit.

ii. When irregularities are discovered at the main FGP switchboards or 380V/960V step up transformers inside the FGP plantroom(s), the fault should immediately report to IAC-ACC and FRTMO. FRT shall immediately inform maintenance contractor to attend the fault and take corrective action on the fault FGP unit. FRT shall report the affected parking stands under the irregularities found to IAC-ACC.

3.2 When irregularities are detected in any one or both of Y1 & Y2 substation.

i. When irregularities are discovered at the 50 Hz switch board insideY1 or Y2 substation, the fault shall be immediately reported to FRTMO. FRTMO should immediate inform FRT. FRT shall inform maintenance contractor to attend the fault and take corrective action on the faulty FGP unit. FRT shall report the affected parking stands under the irregularities found to IAC-ACC.

ii The Line Maintenance Operator is responsible to ensure that the FGP unit is withdrawn from use if malfunction has occurred

4.0 Interface with other operational organizations during contingency

4.1 Line Maintenance

4.2 TSI

D Contingency Procedures during the passage of Tropical Cyclones

1.0 Contingency Procedures

1.1 When typhoon signal no. 1 or above is hoisted, maintenance contractor shall be alerted by TSI Typhoon Duty Superintendent or FRT Senior Operation Officer for performing the typhoon precautionary work for all the Fixed Ground Power equipment as when instructed.

1.2 Under the instruction from IAC-ACC, FRT Senior Operation Officer shall notify TSI Typhoon Duty Superintendent and maintenance contractor to perform typhoon precautionary work including tying up and securing the remote crocodile units to anchor points by appropriate equipment and any other precautionary work of FGP deemed necessary by the Employer.

1.3 TSI Typhoon Duty Superintendent shall coordinate with maintenance contractor to provide sufficient manpower as stipulated in the maintenance contract, with all necessary tools and equipment to perform the typhoon precautionary work in a safe and efficient manner.

1.4 After the lowering of typhoon signal no. 3 or under any circumstances considered necessary by IAC-ACC, FRT Senior Operation Officer or TSI Typhoon Duty Superintendent shall instruct the maintenance contractor to untie and reinstate the crocodile units back to the original conditions.

1.5 After lowering of the typhoon signal and completion of the reinstating of all FGP equipment to their normal working condition, TSI Typhoon Duty Superintendent or FRT Senior Operation Officer may official dismiss maintenance contractor’s typhoon precautionary team.

E. Interface with Other Operational Organizations during Contingency

1. Ramp Handling Franchisees;
2. Airlines;
3. Line Maintenance Franchisees;
4. AA TSI

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