

# STANDARD OPERATING PROCEDURE FOR POWER FAILURE

## STANDARD OPERATING PROCEDURE FOR

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Version: 3.1

Department: Operations

Approved By: Sarah Nordstrom, COO

### 1. PURPOSE AND SCOPE

1. This Standard Operating Procedure ("SOP") establishes protocols and

2. This SOP applies to all Company facilities, field operations, and customers.

## **2. DEFINITIONS**

1. "Critical Power Event" means any unplanned interruption of primary power.
2. "Emergency Power Systems" means backup power sources including generators and UPS systems.
3. "Safe State Protocol" means the predetermined sequence of actions to be taken in the event of a power outage.

## **3. RESPONSIBILITIES**

1. Facility Manager

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Monitor facility power systems

- - 2 -

Initiate emergency protocols

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Coordinate with emergency response team

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Document all power-related incidents

## 2. Operations Control Center

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Monitor AMR fleet status

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Execute remote shutdown procedures

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Coordinate with customer facility personnel

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Maintain communication protocols

### 3. Technical Support Team

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Provide remote diagnostic support

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Monitor BlueCore(TM) system performance

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Execute recovery procedures

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Document technical responses

## **4. POWER FAILURE RESPONSE PROCEDURES**

### 1. Initial Response

- a) Automated systems shall immediately detect power loss and initiate Protocol
- b) AMRs shall execute immediate stop procedures if in motion
- c) BlueCore(TM) systems shall switch to backup power mode
- d) Operations Control Center shall be automatically notified

## 2. Communication Protocol

- a) Automated alerts to designated personnel via:

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SMS messaging

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Email notifications

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Emergency response system

- b) Customer notification within 5 minutes of event confirmation

- c) Hourly status updates until resolution

### 3. AMR Safety Procedures

- a) Engage mechanical braking systems
- b) Maintain minimum power to thermal management systems
- c) Preserve navigation data and operational logs
- d) Execute controlled shutdown if backup power falls below 20%

## 5. RECOVERY PROCEDURES

### 1. System Verification

- a) Confirm facility power restoration
- b) Verify environmental conditions
- c) Check AMR diagnostic systems

d) Test communication networks

## 2. Restart Protocol

a) Sequential power-up of AMR systems

b) BlueCore(TM) system integrity verification

c) Navigation system recalibration

d) Operational readiness confirmation

## 3. Documentation Requirements

a) Incident report completion

b) System performance logs

c) Customer impact assessment

d) Corrective action documentation

## **6. PREVENTIVE MEASURES**

### **1. Regular Testing**

- a) Monthly backup power system tests
- b) Quarterly full-system failover drills
- c) Bi-annual emergency response training
- d) Annual SOP review and updates

### **2. Maintenance Requirements**

- a) Weekly UPS system inspections
- b) Monthly generator maintenance
- c) Quarterly battery system assessment
- d) Semi-annual power distribution audit



## **7. COMPLIANCE AND REPORTING**

1. All power failure events must be reported to:

- a) Company Safety Officer
- b) Quality Assurance Department
- c) Customer Success Team
- d) Relevant regulatory authorities

2. Documentation Retention

- a) Incident reports maintained for 5 years
- b) System logs preserved for 3 years
- c) Training records kept for 2 years
- d) Maintenance records retained for 3 years

## **8. AMENDMENTS AND REVIEWS**

1. This SOP shall be reviewed annually by the Operations Department

2. Amendments require approval from:

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Chief Operations Officer

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Chief Technology Officer

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Chief Robotics Officer

## **9. LEGAL DISCLAIMER**

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## 10. APPROVAL AND EXECUTION

APPROVED AND ADOPTED this 15th day of January, 2024.

POLAR DYNAMICS ROBOTICS, INC.

**By:** \_

Sarah Nordstrom

Chief Operations Officer

**By:** \_

Dr. James Barrett

Chief Robotics Officer

