PowerVolt Group

Disaster Recovery and Business Continuity Plan

Emergency notification contacts

Name	Home	Mobile phone
Brij Sharma	630-653-3770	630-597-5664
Ajay Sharma	425-442-9000	425-442-9000
Steve Ensign	563-872-3900	563-581-8043
Tom Daharsh	262-349-0576	262-349-0576

Revisions control page

Date	Summary of changes made	Changes made by (Name)
3/31/2013	New Document	Ajay Sharma
3/1/2015	Added Tom Daharsh	Ajay Sharma

Purpose

The purpose of this disaster recovery and business continuity plan is to prepare PowerVolt Group in the event of extended service outages caused by factors beyond our control (e.g., natural disasters, man-made events), and to restore services to the widest extent possible in a minimum time frame. All PowerVolt Group sites (Addison, Illinois; Clarence, Iowa; Bellevue, Iowa) are expected to implement preventive measures whenever possible to minimize operational disruptions and to recover as rapidly as possible when an incident occurs.

The plan identifies vulnerabilities and recommends necessary measures to prevent extended voice communications service outages. It is a plan that encompasses all system sites and operations facilities.

Scope

The scope of this plan is limited to PowerVolt Group manufacturing sites in the United States. This is not a daily problem resolution procedures document.

Plan objectives

- Serves as a guide for the recovery teams.
- References and points to the location of critical data.
- Provides procedures and resources needed to assist in recovery.
- Identifies vendors and customers that must be notified in the event of a disaster.
- Assists in avoiding confusion experienced during a crisis by documenting, testing and reviewing recovery procedures.
- Identifies alternate sources for supplies, resources and locations.
- Documents storage, safeguarding and retrieval procedures for vital records.

Assumptions

- Key people (team leaders or alternates – as per contact matrix) will be available following a disaster.
- A national disaster such as nuclear war is beyond the scope of this plan.
- This document and all vital records are backed up daily in a secure off-site location and not only survive the disaster but are accessible immediately following the disaster.
- Each support organization will have its own plan consisting of unique recovery procedures, critical resource information and procedures.

Disaster definition

Any loss of utility service (power, water), connectivity (system sites), or catastrophic event (weather, natural disaster, vandalism) that causes an interruption in the service provided by the PowerVolt Group operations. The plan identifies vulnerabilities and recommends measures to prevent extended service outages.

Recovery teams

- Emergency management team (EMT)
- Disaster recovery team (DRT)
- IT technical services (IT)

See Appendix A for details on the roles and responsibilities of each team.

Team member responsibilities

- Each team member will designate an alternate
- All of the members should keep an updated calling list of their work team members' work, home, and cell phone numbers both at home and at work.
- All team members should keep this plan for reference at home in case the disaster happens after normal work hours. All team members should familiarize themselves with the contents of this plan.

Instructions for using the disaster recovery and business continuity plan

Invoking the plan

This plan becomes effective when a disaster occurs. Normal problem management procedures will initiate the plan, and remain in effect until operations are resumed at the original location or a replacement location and control is returned to the appropriate functional management.

Disaster declaration

The senior management team, with input from the EMT, DRT and IT, is responsible for declaring a disaster and activating the various recovery teams as outlined in this plan.

In a major disaster situation affecting multiple business units, the decision to declare a disaster will be determined by senior management. The EMT and DRT will respond based on the directives specified by senior management.

Notification

Regardless of the disaster circumstances, or the identity of the person(s) first made aware of the disaster, the EMT and DRT must be activated immediately in the following cases:

- Two or more systems and/or sites are down concurrently for three or more hours.
- Two or more capital equipment malfunctions that result in work stoppage.
- Any problem at any system or network facility that would cause either of the above conditions to be present or there is certain indication that either of the conditions are about to occur

External communications

Corporate personnel are the principal contacts for external communications with suppliers, partners, extended facilities and customers.

Emergency management procedures

The following procedures are to be followed by system operations personnel and other designated company personnel in the event of an emergency. Where uncertainty exists, the more reactive action should be followed to provide maximum protection and personnel safety.

In the event of any situation where access to a building housing a system is denied, personnel should report to alternate locations. Primary and secondary locations are listed below.

Alternate locations

Workplace: Addison, Illinois

- Attempt to contact your immediate supervisor or management via telephone. Home and cell phone numbers are included in this document

Workplace: Bellevue, IA

- Attempt to contact your immediate supervisor or management via telephone. Home and cell phone numbers are included in this document

Workplace: Clarence, IA

- Attempt to contact your immediate supervisor or management via telephone. Home and cell phone numbers are included in this document

In the event of a natural disaster

In the event of a major catastrophe affecting any facility, immediately notify the **Brij Sharma, President, and Tom Daharsh, VP Operations.**

Procedure

STEP	ACTION
1	Notify EMT and DRT of pending event, if time permits.
2	If the impending natural disaster can be tracked, begin preparation of site within 48 hours as follows: • Facilities department on standby for detailed recovery/business continuity instructions. • Engage external IT services and notify of event. • Confirm alternate sites can continue with manufacturing to ensure continuity of supply (after material routing and scheduling instructions are received).
3	24 hours prior to event: • Create an image of the system and files • Back up critical system elements • Create backups of e-mail, file servers, etc. • Notify senior management

In the event of a fire

If fire or smoke is present in the facility, evaluate the situation, determine the severity, categorize the fire as major or minor and take the appropriate action as defined in this section. Call 9-1-1 as soon as possible if the situation warrants it.

- Personnel are to attempt to extinguish minor fires (e.g., single hardware component or paper fires) using hand-held fire extinguishers located throughout the facility. Any other fire or smoke situation will be handled by qualified building personnel until the local fire department arrives.
- In the event of a major fire, call 9-1-1 and immediately evacuate the area.
- In the event of any emergency situation, system security, site security and personal safety are the major concerns. If possible, the operations supervisor should remain present at the facility until the fire department has arrived.
- In the event of a major catastrophe affecting the facility, immediately notify senior management.

Procedure

STEP	ACTION
1	Dial 9-1-1 to contact the fire department.
2	Immediately notify all other personnel in the facility of the situation and evacuate the area.
3	Alert the EMT and DRT. *Note:* During non-staffed hours, security personnel will notify the Senior Executive responsible for the location directly.
4	Contact appropriate vendor personnel to aid in the decision regarding the protection of equipment if time and circumstance permit.
5	All personnel evacuating the facilities will meet at their assigned outside location (assembly point) and follow instructions given by the designed authority. **Under no circumstances may any personnel leave without the consent of supervision.**

In the event of a network services provider outage

In the event of a network service provider outage to any location, the guidelines and procedures in this section are to be followed.

Procedure

STEP	ACTION
1	Notify senior management of outage. Determine cause of outage and timeframe for its recovery.
2	If outage will be greater than one hour, route all calls via alternate services. If it is a major outage and all carriers are down and downtime will be greater than 12 hours, deploy satellite phones, if available.

In the event of a flood or water damage

In the event of a flood or broken water pipe within any computing facilities, the guidelines and procedures in this section are to be followed.

Procedure

STEP	ACTION
1	Assess the situation and determine if outside assistance is needed; if this is the case, dial 9-1-1 immediately.
2	Immediately notify all other personnel in the facility of the situation and be prepared to cease voice operations accordingly.
3	Immediately notify all other personnel in the facility of the situation and be prepared to cease operations accordingly.
4	Water detected below the raised floor may have different causes: • If water is slowly dripping from an air conditioning unit and not endangering equipment, contact repair personnel immediately. • If water is of a major quantity and flooding beneath the floor (water main break), immediately implement power-down procedures. While power-down procedures are in progress, evacuate the area and follow management's instructions.

Notification of incident affecting the site

On-duty personnel responsibilities

If in-hours:

Upon observation or notification of a potentially serious situation during working hours at a system/facility, ensure that personnel on site have enacted standard emergency and evacuation procedures if appropriate and notify the EMT and DRT.

If outside hours:

IT personnel should contact the EMT and DRT.

Provide status to EMT and DRT

Contact EMT and/or DRT and provide the following information when any of the following conditions exist: (See Appendix B for contact list.)

- Two or more facilities are down concurrently for three or more hours.
- Any problem at any system or location that would cause the above condition to be present or there is certain indication that the above condition is about to occur.

The EMT will provide the following information:

- Location of disaster
- Type of disaster (e.g., fire, hurricane, flood)
- Summarize the damage (e.g., minimal, heavy, total destruction)
- Meeting location that is a safe distance from the disaster scene
- An estimated timeframe of when a damage assessment group can enter the facility (if possible)
- The EMT will contact the respective market team leader and report that a disaster involving voice communications has taken place.
- The EMT and/or DRT will contact the respective team leader and report that a disaster has taken place.

Decide course of action

Based on the information obtained, the EMT and/or DRT need to decide how to respond to the event: mobilize IT, repair/rebuild existing site (s) with location staff, or relocate to a new facility.

Inform team members of decision

If a disaster is not declared, the location response team will continue to address and manage the situation through its resolution and provide periodic status updates to the EMT/DRT.

If a disaster is declared, the EMT and/or DRT will notify IT Tech Services immediately for deployment.

Declare a disaster if the situation is not likely to be resolved within predefined time frames. The person who is authorized to declare a disaster must also have at least one backup person who is also authorized to declare a disaster in the event the primary person is unavailable.

Disaster declared: Mobilize incident response/Technical services teams/Report to command center

Once a disaster is declared, the DRT is mobilized. This team will initiate and coordinate the appropriate recovery actions.

Conduct detailed damage assessment (This may also be performed prior to declaring a disaster.)

1. Under the direction of local authorities and/or EMT/DRT, assess the damage to the affected location and/or assets. Include vendors/providers of installed equipment to ensure that their expert opinion regarding the condition of the equipment is determined ASAP.

   A. Participate in a briefing on assessment requirements, reviewing:
      (1) Assessment procedures
      (2) Gather requirements
      (3) Safety and security issues

   NOTE: Access to the facility following a fire or potential chemical contamination will likely be denied for 24 hours or longer.

   B. Document assessment results.
      Building access permitting:
      - Conduct an on-site inspection of affected areas to assess damage to essential hardcopy records (files, manuals, contracts, documentation, etc.) and electronic data.
      - Obtain information regarding damage to the facility (s) (e.g., environmental conditions, physical structure integrity, furniture, and fixtures) from the DRT.

2. Develop a restoration priority list, identifying facilities, vital records and equipment needed for resumption activities that could be operationally restored and retrieved quickly.
3. Recommendations for required resources.

Contact DRT: Decide whether to continue to business recovery phase

The EMT and DRT gather information regarding the event; contacts senior management and provides them with detailed information on status.

Based on the information obtained, senior management decides whether to continue to the business recovery phase of this plan. If the situation does not warrant this action, continue to address the situation at the affected site(s).

Business recovery phase (48 hours - full recovery)

This section documents the steps necessary to activate business recovery plans to support full restoration of systems or facility functionality at an alternate/recovery site that would be used for an extended period of time. Coordinate resources to reconstruct business operations at the temporary/permanent system location, and to deactivate recovery teams upon return to normal business operations.

System and facility operation requirements

The system and facility configurations for each location are important to re-establish normal operations.

Notify EMT and corporate business units of recovery startup

Using the call list in Appendix B, notify the appropriate company personnel. Inform them of any changes to processes or procedures, contact information, hours of operation, etc.

Operations recovered

Assuming all relevant operations have been recovered to an alternate site, and employees are in place to support operations, the company can declare that it is functioning in a normal manner at the recovery location.

Appendixes

Appendix A: PowerVolt Group recovery teams

Emergency management team (EMT)

Note: See Appendix B for contact list.

Charter:

Responsible for overall coordination of the disaster recovery effort; evaluation and determining disaster declaration; and communications with senior management.

Support activities:

The EMT:

- Evaluate which recovery actions should be invoked and activate the recovery teams
- Evaluate damage assessment findings
- Set restoration priority based on the damage assessment reports
- Provide senior management with ongoing status information
- Act as a communication channel to corporate teams and major customers
- Work with vendors and IRT to develop a rebuild/repair schedule

Disaster recovery team

Note: See Appendix B for contact list

Charter:

Responsible for overall coordination of the disaster recovery effort; establishment of the emergency command area; and communications with senior management and the EMT.

Support activities:

- Coordinate with EMT and senior management
- Determine recovery needs
- Establish command center and assembly areas
- Notify all company department heads and advise them to activate their plan(s) if applicable, based upon the disaster situation
- If no disaster is declared, take appropriate action to return to normal operations using regular staff
- Determine if vendors or other teams are needed to assist with detailed damage assessment
- Prepare post-disaster debriefing report
- Coordinate the development of site-specific recovery plans and ensure they are updated semi-annually

IT technical services (IT)

Charter

IT will facilitate technology restoration activities.

Support activities

- Upon notification of disaster declaration, review and provide support as follows:
    1. Facilitate technology recovery and restoration activities, providing guidance on replacement equipment and systems, as required
    2. Coordinate removal of salvageable equipment at disaster site that may be used for alternate site operations

Appendix B: Recovery team contact lists

Emergency management team (EMT)

Name	Contact Details
Brij Sharma	 PowerVolt Group Contact Matrix_July
Ajay Sharma	
Tom Daharsh	
Steve Ensign	

Disaster recovery team (DRT)

Name	Contact Details
Sam Kumar	 PowerVolt Group Contact Matrix_July
Claudia Bisinger	
Larry Sullivan	
Kathy Niebuhr	
Dianne Koriander	
Andy Kalia	

IT technical services

Name	Contact Details
Sam Kumar	 PowerVolt Group Contact Matrix_July
Ashish Tejpal	
Andy Kalia	

Appendix C: Contact list

Name	Address	Home	Mobile/Cell Phone
 PowerVolt Group Contact Matrix_July			