

Cooling Contingency

Be Prepared for Catastrophic Failure



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Being prepared for the unexpected is good management practice in any industry. Success or failure can be critical to the health of a business. Reliability is crucial.

Advance planning in case of building system failure is critical. Failure of the heating, ventilation and air conditioning system (HVAC) could be catastrophic. But a well-crafted Cooling Contingency Plan can reduce such risks, improve component redundancy, and prepare the facility for rapid deployment of temporary equipment to sustain critical operations.

The benefits of such a plan include minimizing operational emergencies, enhancing reliability, and reducing the economic, legal, or other long-term implications that could result from a major HVAC system failure.

WHAT IS A COOLING CONTINGENCY PLAN?

A cooling contingency plan defines your response to a HVAC system emergency before it happens, including preparing facilities to enable operational continuity and steps for recovery.

It also includes reducing risk, adding or improving component redundancy, and preparing facilities for rapid deployment of temporary equipment suitable to sustain critical operations.

DESIGNING THE COOLING CONTINGENCY PLAN

Start by addressing the possible consequences of a major HVAC outage: How dependent are critical and on-going operations, equipment and advanced technology, facilities, information systems, and other resources on comfort cooling or process-chilled water? What effect would there be on such operations if the cooling system failed or needed to be shut down for unplanned service?

What would be the cost of not

having cooling for an hour, a day, a week? Qualify and quantify the impact and related costs.

Determine who understands the consequences of failure and comprehends the interplay and dependence between the facility's critical operations and the system. Who has in-depth expertise in and experience with the details of the facility's HVAC systems – and the available alternatives? The answers will create the outline of the plan and identify the players who need to be involved.

KEY PLAN COMPONENTS

Realizing the need for a plan is the first critical step. The second is assembly of a multi-disciplinary team. A successful team includes members who bring all of the knowledge and experience needed – using both on-staff personnel and outside experts.

The team must make sure all emergency situations are considered, and commercial issues are documented, and the necessary equipment and resources are ready to be activated as needed. This can be as simple as having back-up power generators on-site or as detailed as having contracts for contingency services and appropriately specified rental equipment already signed.

Key components of the plan include provisions to:

- Document current HVAC equipment in use.
- Identify potential sources of failure, probability; and document the cooling required to maintain critical areas.
- Match specific equipment and required connection components needed. Determine required response time frame and budget.
- Determine the appropriate location for temporary equipment and logistics required to run it, including electrical and water connection points.
- Assign roles and responsibilities for each team member.
- Determine how to adapt the existing system and prepare the facility to use a temporary solution.
- File, review, train and update response plan and system specifics regularly.
- Conduct periodic cooling contingency drills.

The successful implementation of a Cooling Contingency Plan that can be put into action immediately and seamlessly upon demand is quite simply “mission critical.” A well thought-out Cooling Contingency Plan is a sound investment in your business and your customers.

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