Threat Assessment and Planned Response 3 – Utility Failure

Threat Assessment:

The East Elm campus of Eastern Nazarene College consists of seventeen buildings, housing administrative offices, educational buildings, and dormitories. These buildings were built between the early and late 1900's. The Old Colony campus consists of three buildings, all rehabilitated in the 1990's. These buildings house classrooms, offices, and a daycare.

Electric power is provided to both campuses by National Grid. Telephone service to both campuses is provided by Verizon. Water is provided by the Massachusetts Water Resource Authority through the city of Quincy. Gas is provided by National Grid. Cable is provided by Privatel (and Comcast in some areas?).

In the event of a natural/manmade disaster/emergency situation, one or all of these utilities may be compromised resulting in a campus EOC (emergency operations center) being activated.

The threat assessment of utility failure involves numerous divisions of Eastern Nazarene College including, but not limited to:

Facilities Management

Safety and Security

Student Development/Residential Life

Grounds

Education

Administration

These departments must work cooperatively to resolve the situation in a timely manner to minimize the business interruption of the ENC community as a whole.

The event of a utility failure may include any of the following problems: No heat, no gas for the kitchen, no electricity/lights for living areas, and campus communication failure.

Electrical

Threat Assessment: Electrical utility failure most often occurs during major storms and is generally a result of problems unrelated to events on campus. Since Eastern Nazarene utilizes oil as the main fuel for heat in the central plant, loss of electricity or mechanical failure of the oil pumps are a concern that would have severe impacts to hot water and heating systems in most of the buildings on campus.

Depending on the severity of the power failure, an electrical utility failure can have a significant impact on valuable research projects, unsaved work on computers and may result in the suspension of classes and campus closure.

Sump pumps will not work during power outages, which increase risks of flooding in basement areas.

In addition, depending on the severity of the emergency, sustained building lighting or emergency lighting may not provide lasting or sufficient illumination in corridors and stairwells for safe exiting in emergency conditions.

Security officers and individual departments should have flashlights and portable radios available for these emergencies.

A source of gasoline will need to be available on campus as gas pumps will not be working during a major outage.

Planned response: In the event of an electrical utility failure, there are no backup generators currently available on the campus. If the power failure is expected to last beyond a short timeframe, the ERT will need to consider renting portable generators to maintain normal operations to be placed in strategic locations such as the data center and food services. If the electrical failure will influence class scheduling, the college ERT may be activated to manage the emergency.

In extended instances of power loss, staff will be ordered off of campus to prevent them from being in an unsafe environment. E2Campus may be used from other Nazarene college campuses to send out notifications regarding power outages.

Administration will investigate possibilities of memorandum with the new middle school on St. Ann/Hancock Street in case evacuation space is needed.

We have checked with Sherrie Burt in Shrader, and she reports that there are no heat/cold requirements in the labs in **Shrader Hall**. Outages would not affect Shrader hall labs, but Jon Twining would need to be notified immediately to care for the animals in the animal lab in the basement.

Security officers will post at dormitory entrances to monitor who is entering the living spaces, as card readers will not be working without power.

SDO will provide students with flashlights to use to travel in hallways to restrooms, etc. They will also provide students with extra blankets, as the heaters will be offline.

Academic buildings will be emptied and secured during outages. Security will seal entrances to prevent unauthorized access by staff members with keys.

During outages during the winter, building bathrooms will have faucets running to prevent freezing pipes on both campuses. Potential freezing locations will continue to be checked before, during and after major outages.

Water

Threat Assessment: If the utility failure is water, the effect on the campus could become very significant in a short period of time. A water failure could present a health problem that would require activation of the (ERT) Emergency Response Team and coordination with County Public Health.

Planned response: In the event of a water failure, the first step in the campus response will be assessment of the extent of water failure and period of time the campus will be without potable water. If it is determined that the campus will be without potable water for 12 hours or more, the college ERT may activate. An immediate action plan will include notifications to the campus community, campus housing and surrounding communities to minimize health hazards until water utilities are restored.

Plumbing Failure

Threat Assessment: A plumbing failure could result through accident, vandalism or age of water lines at any point where these pipes travel from entry point of the building and within the walls to the plumbing fixture.

Planned response: In the event of a plumbing failure or flooding, faculty, staff and students should cease using electrical equipment in the flooded areas. Notify the Facilities Department if failure occurs during normal working hours and the Security Office if after hours.

Facilities will address flooding issues. In significant situations, evacuation of flooded areas may be necessary. Please see Threat Assessment and Planned Response 2 for more on flooding.

Gas

Threat Assessment: Disruption of natural gas utilities could have significant impacts on campus functions where this utility option is utilized. Currently, natural gas is used in the food services areas, the science labs and the three main boilers.

Planned response: In the event of a serious gas leak, cease all operations: Evacuate the building. DO NOT SWITCH ON LIGHTS OR ANY ELECTRICAL EQUIPMENT. REMEMBER: electrical arcing can trigger an explosion! Notify Campus Security IMMEDIATELY.

In an unplanned disruption that creates an immediate threat to life, structure or other property, the Campus Security Office and the Quincy Fire Department will be dispatched to manage the threat and the ERT will be activated to manage the process of restoring gas utilities to their normal state.

Elevator Entrapment Procedures

Threat Assessment: During a power failure, elevators will be out of service.

Planned Response: If a person finds themselves trapped in an elevator during a power failure, they can use the emergency phone to notify Campus Security. Campus Security will then notify the Facilities Department and they will attempt to release the doors. As a last resort, the Quincy Fire Department will be called to help in the opening of the elevator doors. If the elevator does not have an emergency phone, the person can activate the emergency alarm (located on the panel) which will signal for help.

During incidences of power failure, the Security Supervisor on duty will coordinate patrols of all affected buildings and will determine if anyone has been trapped in an elevator and has been unable to contact security.

National Grid

Gas emergencies:

1-800-233-5325

Power outages:

1-800-465-1212

City of Quincy Water

(617) 376-1912

Verizon

800-974-6006

ThyssenKrupp

(877) 230-0303