

# Concord Steam

*Steam and Power Generation*

**Concord Steam**  
P.O. Box 2520  
Concord, NH 03302-2520  
Fax: 603. 224. 7816  
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February 4, 2015

Debra A. Howland  
Executive Director and Secretary  
New Hampshire Public Utilities Commission  
Walker Building  
21 South Fruit Street, Suite 10  
Concord, NH 03301

NHPUC 4FEB'16PM4:19

**Re: DG 14 - 233 Report on status of Repowering Concord Steam**

Dear Ms. Howland:

As ordered in 25-728, Concord is providing this status report.

New Plant/Repowering –

We continue to work with TD Bank Securities on financing the construction of the rebuilt plant with a combination of taxable and tax free bonds. TD Securities has been selected to be the underwriter for the bonds. We are meeting with again next week for an update on the project. The primary issue continues to be whether the State will stay with steam or not. This will delay financing until it is resolved.

We just received the Fire Marshalls report from the 12/30/15 inspection. We have already addressed and resolved most of the violations, and we will go into details at our meeting next Wed with Staff. We will work on developing the required corrective action plan.

Yours Truly,



Peter Bloomfield, PE  
President



STATE OF NEW HAMPSHIRE DEPARTMENT OF SAFETY  
John J. Barthelmes, Commissioner



**Division of Fire Safety**  
**OFFICE OF THE STATE FIRE MARSHAL**  
J. William Degnan, State Fire Marshal

Office: 110 Smokey Bear Blvd, Concord, NH  
Mailing Address: 33 Hazen Drive, Concord, NH 03305  
603-223-4289, FAX 603-223-4294

**FIRE & LIFE SAFETY INSPECTION REPORT**

**Date of Inspection:** December 30, 2015

**Inspection #:** 2150082

**Occupancy:** Concord Steam Plant  
123 Pleasant Street  
(Industrial Occupancy-High Hazard)

**Owner:** Concord Steam Corporation

**Dear Mark Saltzman,**

This report details the findings of the inspection conducted on December 30, 2015. The building was inspected for compliance with the minimum standard for existing buildings in ***NFPA 101, Life Safety Code, 2009 edition, and NFPA 1, Uniform Fire Code, 2009 edition, NFPA 70, 2011 edition***, as well as others. The building was inspected for fire and life safety concerns. Other problems with the building may need to be addressed that are outside the scope of this inspection. This report reflects the violations that were observed at the time of the inspection. Other violations may exist that were not observed at the time of the inspection.

Those in attendance from the NH State Fire Marshal's Office were Engineering and Plans Review Section Chief Ron Anstey, Investigator Adam Fanjoy, and Inspector Tom Humphrey.

This violation letter also identifies issues that were noted on past inspection letters as some of the issues mentioned and noted in the past letters had not been corrected during this most current inspection. This inspection letter will serve as the most current and as such supersedes any previous inspection letters from this office.

**NFPA 101 Ch. 6.1.12.1\* Definition — Industrial Occupancy.** An occupancy in which products are manufactured or in which processing, assembling, mixing, packaging, finishing, decorating, or repair operations are conducted.

**NFPA 101 Ch. 6.2.2.4\* High Hazard Contents.** High hazard contents shall be classified as those that are likely to burn with extreme rapidity or from which explosions are likely.



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**NFPA 101 Ch. 40.1.4.1.3\* High Hazard Industrial Occupancy.** High hazard industrial occupancies shall include the following:

- (1) Industrial occupancies that conduct industrial operations that use high hazard materials or processes or house high hazard contents
- (2) Industrial occupancies in which incidental high hazard operations in low or ordinary hazard occupancies that are protected in accordance with Section **8.7** and **40.3.2** are not required to be the basis for overall occupancy classification.

**Violations**

**NFPA 101: 7.10.1.5.1 Exit Access.** Access to exits shall be marked by approved. Readily visible signs in all cases where the exit or way to reach the exit is not apparent to occupants. *Install or repair any illuminated exit signage.*

**NFPA 101: 7.5.1.5 Exit Access.** Exit access shall be arranged so that there are no dead end corridors, unless permitted by and limited to the lengths specified in Chapters 11 through 43. *Dead end corridors not permitted in High Hazard Occupancies.*

**NFPA 1 Ch. 13.6.8.1.3.1 Fire Extinguishers** shall be conspicuously located where they are readily accessible and immediately available in the event of fire. *The fire extinguishers shall be inspected manually or by means of an electronic monitoring device / system at a minimum of 30-day intervals. Make sure that all fire extinguishers are readily accessible and located where they are easily visible and able to be identified for use. Remove the items that were obstructing and partially covering the extinguishers in the furnace room.*

**NFPA 101: 7.8.1.1. Illumination of Means of Egress.** Illumination of means of egress shall be provided for every building and structure where required in Chapters 11 through 43. For the purpose of this requirement, exit access shall include only designated stairs, aisles, corridors, ramps, escalators, and passageways leading to an exit. For the purposes of this requirement, exit discharge shall include only designated stairs, aisles, corridors, ramps, escalators, walkways, and exit passageways leading to a public way. *Illuminate all means of egress.*

**NFPA 101: 40.2.9.1 Emergency Lighting.** Emergency lighting shall be provided in accordance with Section 7.9 except as otherwise exempted by 40.2.9.2. *Add emergency lighting to provide enough light to satisfy the requirements of this Code in the event of power failure and ensure the units are in proper working order and are tested monthly and the testing is documented.*



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**NFPA 1 10.7.1.1 Fire Reporting.** The person discovering any unwanted fire, regardless of magnitude, shall immediately notify the fire department. *At the time of this inspection, an active fire was discovered. Report all fires immediately to the Concord Fire Department.*

**NFPA 70: 312.2 Damp and wet locations.** In damp or wet locations, surface –type electrical enclosures shall be placed or equipped so as to prevent moisture or water from entering or accumulating within the cabinet. *The electrical switchgear enclosures in the generator area are not listed for damp or wet locations. It was observed that the electrical switchgear was exposed to steam and moisture.*

**NFPA 70: 100.26(3) Personnel Doors.** Where electrical equipment rated at 1200A or more that contains overcurrent devices, switching devices, or control devices installed and there is a personnel door(s) intended for entrance or egress from the working space shall be equipped with panic bars, pressure plates, or other devices that normally latch but open under simple pressure. *The doors within the building in the generator room do not meet this requirement. Install or repair required doors.*

**NFPA 70: 110.22 Clear Working Space Around Electrical Switch Gear, Disconnects, and Panelboards.** *Maintain proper workspace in and around the electrical gear and electrical disconnects and remove items to maintain proper clearances.*

**NFPA 70B, Ch. 6 Planning and Development of an Electrical Preventive Maintenance Program (EPM).**

A program should be developed for a (EPM) program. The program should at a minimum consist of the following:

1. Compile a listing of all electrical equipment and systems.
2. Determine which electrical equipment and systems are most critical.
3. Develop a system for monitoring.
4. Determine the internal and/or external personnel needed to implement and maintain the EPM program.

*Conduct an Electrical Assessment. An effective electrical maintenance/testing program identifies and recognizes factors leading to deterioration. A well-administered testing program can prevent accidents, save lives, minimize costly breakdowns, and reduce unplanned outages.*

**NFPA 101:7.1.10.1\* General.** Means of egress shall be continuously maintained free and clear of all obstructions or impediments to full instant use in the case of fire or other emergency. *Clear all impediments and remove deadbolts and bars on exit doors.*



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**NFPA 101: 40.3.2.1-40.3.2.4 Protection from Hazards.** All High hazard industrial occupancies, operations, or processes shall have approved, supervised automatic extinguishing systems in accordance with section 9.7 or other protection appropriate to the particular hazard, such as explosion venting or suppression.

**NFPA 101: 40.3.2.2 Protection from Hazards.** Protection in accordance with 40.3.2.1 shall be provided for any area subject to an explosion hazard in order to minimize the danger to occupants in case of fire or other emergency before they have time to use exits to escape.

**NFPA 101: 40.3.2.3 Protection from Hazards.** Activation of the fire-extinguishing or suppression system required by 40.3.2.1 shall initiate the required building fire alarm system in accordance with 40.3.4.3.4.

**NFPA 101: 40.3.2.4 Protection from Hazards.** Hazardous areas in industrial occupancies protected by approved automatic extinguishing systems in accordance with Section 9.7 shall be exempt from the smoke-resisting enclosure requirement of 8.7.1.2. *Install an approved, supervised automatic extinguishing system.*

**NFPA 1: 13.6.7.3.2.4 Buildings having an occupancy hazard subject to Class B or Class C fires or both, shall have a standard compliment of Class A fire extinguishers for building protection, plus additional B or C fire extinguishers, or both.** *Multi-purpose fire extinguishers are required and shall not exceed a maximum travel distance of 50 feet.*

### **Requirements**

The inspections showed a wide range of fire and life safety violations, including those that pose an imminent hazard to life safety. Pursuant to NHPA 1 section 1.15 you are required to secure the services of a NH licensed fire protection engineer to perform a comprehensive review of the facility.

The inspectors observed structural damage to the building. The damage was observed but not limited to the roof structure, exterior wall opening by the wood chip conveyer system and the maintenance bay. Pursuant to NFPA 1 section 10.1.4.1 you are required to secure the services of a structural engineer to evaluate the integrity of the building.

Due to the complexity of the facilities electrical systems and the observed violations including those noted above, pursuant to NFPA 1 1.15.1 you are required to secure a NH licensed electrical engineer to perform a comprehensive evaluation of all the electrical systems.

### **NH RSA 153:24 Penalty for Violation of Regulations:**



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Whoever shall violate any rule or regulation of the State Fire marshal issued pursuant to RSA 153:5 or RSA 153:14 I, shall be guilty of a violation if a natural person, or guilty of a misdemeanor if any other person. Each offense shall constitute a separate violation. All

penalties, fees, or forfeitures collected under the provisions of this chapter shall be paid into the treasury of the state.

If you believe that compliance with a stated code or rule provision item imposes an unreasonable hardship, you may apply for a variance from, or an exception to, the stated code or rule provision item, in writing, to the State Fire Marshal, in accordance with Saf-C 6006.03. Any alternative method of achieving compliance must provide protection which is equal to or exceeds the stated code or rule provision protection.

Housekeeping issues need to be addressed immediately; other violations of a more complex nature will require a corrective action plan. Provide us with the names and contact information for the engineers by March 3, 2016.

Respectfully,

District Chief Danielle Cole  
NH State Fire Marshal's Office  
Bureau of Investigations

***APPEALS OF APPLICATION OF THE STATE FIRE CODE  
FROM A NOTICE OF VIOLATION***

**Exceptions or Variances**

RSA 153:4-a (I) allows the State Fire Marshal to grant variances or exceptions to the State Fire Code.

(<http://www.gencourt.state.nh.us/rsa/html/XII/153/153-4-a.htm> )

Saf-C 6005.01 The title "Exceptions and Variances" provides the guidance and requirements for action by the State Fire Marshal to ensure the request provides a degree of safety substantially equivalent to the code section cited. ([http://www.gencourt.state.nh.us/rules/state\\_agencies/saf-c6000.html](http://www.gencourt.state.nh.us/rules/state_agencies/saf-c6000.html) )

Saf-C 6005.03 provides the format for application to the State Fire Marshal for a variance or exception.

( [http://www.gencourt.state.nh.us/rules/state\\_agencies/saf-c6000.html](http://www.gencourt.state.nh.us/rules/state_agencies/saf-c6000.html) )



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**Appeals of decisions of the State Fire Marshal**

Any person aggrieved by the decision of the State Fire Marshal as provided above shall be entitled to a hearing with the Building Code Review Board rules pursuant RSA 155-A:11 and conducted in accordance to Bcr 200.

( [http://www.gencourt.state.nh.us/rules/state\\_agencies/bcr200.html](http://www.gencourt.state.nh.us/rules/state_agencies/bcr200.html) )

Any person aggrieved by the decision of the Building Code Review Board shall be entitled to a hearing in Superior Court pursuant to RSA 155-A:12

( <http://www.gencourt.state.nh.us/rsa/html/XII/155-A/155-A-12.htm> )

( [http://www.gencourt.state.nh.us/rules/state\\_agencies/bcr200.html](http://www.gencourt.state.nh.us/rules/state_agencies/bcr200.html) ).