



Memorandum

TO: RULES COMMITTEE

FROM: Jeffrey L. Clet

SUBJECT: High Rise Safety Regulation Review

DATE: April 15, 2004

Approved

Date

RECOMMENDATION

Accept staff's workload assessment on a High Rise Safety Regulation Review.

BACKGROUND

At the March 30, 2004 Rules Committee Meeting, staff was directed to prepare a workload assessment on the above-referenced item. This memorandum responds to that direction.

ANALYSIS

In an effort to improve community service and the effectiveness, efficiency and safety of Fire Fighting crews, the San Jose Fire Department High-Rise Committee has researched whether emergency response performance could be improved through requiring self-contained breathing apparatus (SCBA) refilling capability, backup electrical power and assurance of portable radio communication coverage in new high-rises and other unique structures. These systems and equipment have been provided in the design of the new City Hall and are described in more detail below.

Self-Contained Breathing Apparatus Refilling System

This system allows certified breathing air to be piped from the outside of a building to floors or areas of a building where firefighters can refill SCBA cylinders near the area of the emergency and eliminates the need for firefighters to leave the structure for cylinder refilling or to haul in spare filled cylinders. With this system in place the Fire Department's SCBA re-filling apparatus would be parked near the building and a high-pressure hose line run from the vehicle to an inlet for the system, which would be located at the ground floor level.

Radio Communication Equipment

Reliable emergency radio communication is critical for emergency response operations. The lack of radio communication within a structure can present dangerous conditions for both emergency response personnel and the occupants of the structure. Portable radio coverage may be accomplished by the installation of repeaters, powered antennas or other devices in a structure, so that the Fire Department can work effectively throughout the structure.

Backup Electrical System

During fires and other incidents in large structures the electrical power is often disconnected. These structures are required to have backup power that activates during emergencies for exit lighting and other specified needs but this electrical power is not required to cover all areas of a structure. This system would allow the Fire Department to energize a separate circuit using a Fire Department generator and provide power for a work area not covered by the emergency backup power system. The system is a separate electrical circuit that is energized only by the fire department and would have outlets on each floor or remote area.

Workload Assessment:

To complete staff review of the potential for adoption of enhanced fire safety requirements for new high-rise buildings and other unique structures will require close coordination among the Fire Department, Public Works, the Building Division of Planning, Building and Code Enforcement, the Office of Economic Development, and the City Attorney's Office, to:

1. Research current practices and regulations used in other jurisdictions pertaining to the proposed systems, including requirements instituted to maintain systems and those associated costs. [2 staff x 40 hours = 80 hours – approximate completion 5/4/04]
2. Determine affected stakeholders by working with the City Development Cabinet and the Chamber of Commerce. [1 staff x 4 hours = 4 hours – approximate completion 5/11/04]
3. Conduct focus groups with interested Developers and Contractors to determine their concerns and obtain their input on design options or criteria. [2 staff x 20 hours = 40 hours – approximate completion 5/18/04]
4. Analyze information to assess whether special climatic, geological, or topographical conditions require modification of the building standards contained in the California Fire Code to enhance fire safety requirements for new high-rise buildings and other unique structures and to determine what impacts those requirements would have on stakeholders if adopted. [4 staff x 10 hours = 40 hours – approximate completion 5/25/04]
5. If adoption of enhanced requirements appears to be appropriate and has broad stakeholder support, develop a draft ordinance and administrative guidelines to implement the requirements; if it is determined that adoption of enhanced requirements is not appropriate, or there is substantial stakeholder opposition, provide an updated report to the Rules Committee and/or make a presentation to Council presenting staff recommendations. [4 staff x 10 hours = 40 hours – approximate completion 6/8/04]
6. If the ordinance is drafted, provide to other county jurisdictions to coordinate efforts in standardizing regulations within the county, and with Development Community and Contractors. [2 staff x 12 hours = 24 hours – approximate completion 6/15/04]

7. Present recommendation to Council concerning either direction to City Attorney's Office to draft ordinance, or approval of ordinance. [2 staff x 10 hours = 20 hours – approximate completion 6/22/04]

It is anticipated that the complete staff review of the potential for adoption of enhanced fire safety requirements for new high rise buildings and other unique structures take at least 248 hours of staff time and require at least 8 weeks to complete.

COORDINATION

This memorandum has been coordinated with the Department of Public Works, the City Attorney's Office, and Planning, Building and Code Enforcement.

Jeffrey L. Clet
Fire Chief