



The Florida Senate

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Committee on Regulated Industries

REVIEW OF ELEVATOR SAFETY AND REGULATION

Issue Description

A recent report by the Office of Program Policy Analysis & Government Accountability (OPPAGA) studied the implementation of elevator safety provisions by the Bureau of Elevator Safety (bureau) within the Division of Hotels and Restaurants of the Department of Business and Professional Regulation. The report included a study of the implementation of s. 399.061, F.S., which permits elevator owners to hire private elevator inspectors. The report found that some private elevator inspectors are not responding to written requests from the bureau for clarification of their inspection methods. The purpose of these requests is to reconcile the results of the private inspections that did not find elevator safety violations with the re-inspections by the bureau that did find safety violations. The OPPAGA report recommended that private inspectors and elevator companies should be required by law to respond to the bureau's requests for clarification. The OPPAGA report also studied the bureau's analysis and reporting of elevator accidents, and its posting of information regarding the safety of elevators. This Senate interim report studies the extent to which the bureau has adopted the OPPAGA recommendations and analyzes the need for legislative action to implement the recommendations.

During the 2006 Regular Session, s. 553.509(2), F.S., (s. 12, ch. 2006-71, L.O.F.) was enacted to require residential multi-family dwellings that are at least 75 feet in height and have a public elevator to be capable of operating at least one elevator on alternate generated power. The elevator must be able to operate for an unspecified number of hours each day for a period of five days after a disaster or emergency resulting in an electrical power outage. Based upon information from constituent complaints received by Senator Dennis L. Jones, Chair of the Senate Regulated Industries Committee, concerns have been expressed regarding the cost of these requirements, and about adding this financial burden to the increasing costs for insurance, taxes, and maintenance. They were also concerned with the short period between the effective date of the requirement (July 1, 2006) and the deadlines for implementation, December 31, 2006 and December 31, 2007. This report addresses the extent of compliance with these requirements, identifies any problems that citizens and governmental agencies have had in implementing these requirements, and recommends legislation to resolve the issues and concerns.

Background

Elevator Regulation

Chapter 399, F.S., which may be cited as the "Elevator Safety Act," establishes minimum standards for elevator safety. The bureau is the agency charged with enforcing the provisions of ch. 399, F.S.¹ The term "elevator" includes a wide variety of mechanical devices, including escalators, dumbwaiters, moving walks, inclined stairway lifts, and inclined or vertical wheelchair lifts.² According to the division, there were approximately 73,280 elevators in Florida as of August 2008 for which it has inspection responsibilities. This number includes approximately 25,000 elevators in the five contracted jurisdictions for which it has secondary oversight responsibility.³

¹ See s. 399.10, F.S.

² Section 399.01(6), F.S.

³ The following five local governments are under contract with the department to provide elevator inspection services: the cities of Miami and Miami Beach, Broward and Miami-Dade counties, and Reedy Creek Improvement District.

The owner of the elevator is responsible for the safe operation, proper maintenance, inspection, and correction of code deficiencies of the elevator.⁴ Elevators must have a certificate of operation before they can be operated. Certificates of operation are valid for two years and expire at the end of the period unless revoked earlier. The certificates can only be renewed for vertical conveyances that have had a current satisfactory inspection.⁵ Section 399.061, F.S., requires the annual inspection of elevators by a certified elevator inspector.⁶ The certified elevator inspector may be a private elevator inspector, a state-employed elevator inspector,⁷ or an inspector for a municipality or county under contract with the department.⁸ The privatization of elevator inspections has helped to increase the number of licensed inspectors and has helped the bureau increase the number of inspections conducted each year, as mandated by the annual inspection requirement.⁹

Alternate Power Generators for Elevators

Section 553.509(2)(a), F.S., requires that any person, firm, or corporation that owns, manages, or operates a residential multi-family dwelling, including a condominium, which is at least 75 feet high (high-rise residential buildings) and contains a public elevator, have at least one elevator capable of operating on alternate generated power. In the event of a general power outage, this elevator must ensure that residents have building access for an unspecified number of hours each day over a five-day period following a natural or manmade disaster, emergency, or other civil disturbance. The alternate generated power source must be capable of powering any connected fire alarm system in the building.

The alternate generated power requirements do not apply to high-rise buildings that were in existence on October 1, 1997, or which were either under construction or under contract for construction on October 1, 1997.¹⁰ Newly constructed residential multi-family dwellings meeting the criteria of this section must meet the engineering, installation, and verification requirements of s. 553.509(2), F.S., before occupancy.¹¹

Section 553.509(2)(b), F.S., provides that, at a minimum, the elevator must be appropriately pre-wired and prepared to accept alternate generated power. The power source must be capable of powering the elevator, a connected building fire alarm system, and emergency lighting in the internal lobbies, hallways, and other internal public portions of the building. The requirement that the alternate power source must be capable of powering a connected fire alarm system does not require that the fire alarm system must be actually connected to the alternate power source. The dwellings must either have a generator and fuel source on the property or proof of a current guaranteed service contract providing such equipment and fuel source within 24 hours of a request. Proof of a current service contract for such equipment and fuel must be posted in the elevator machine room or other place conspicuous to the elevator inspector.

Section 553.509(2)(b), F.S., also requires that the local building inspection agency verify the engineering plans for alternate generated power capability by December 31, 2006. The local building inspectors must verify the installation and operational capability of the alternate generated power source and report to the county emergency management director by December 31, 2007. Section 553.509(2)(f), F.S., requires that certified elevator inspectors confirm that all installed generators are in working order, the elevators have current inspection records posted, and a generator key located near the generator. If there is no installed generator, the inspector is required to confirm that the appropriate pre-wiring and switching capabilities are present and that the guaranteed contingent service contract is posted.

⁴ Section 399.02(5)(b), F.S.

⁵ Section 399.07(1), F.S.

⁶ In 2001, the Legislature amended s. 399.061, F.S., to increase the frequency of elevator inspections from once every two years to annual inspections. *See* s. 10, ch. 2001-186, L.O.F.

⁷ *See* s. 399.061, F.S. In 2000, the Legislature amended s. 399.061, F.S., (s. 4, ch. 2000-356, L.O.F.) to provide for the use of private elevator inspectors.

⁸ Section 399.13, F.S.

⁹ *Privatization Has Helped Improve Elevator Safety: Additional State Oversight is Needed*, Report No. 08-18, Office of Program Policy Analysis & Governmental Accountability, Florida Legislature, April 2008.

¹⁰ Section 553.507, F.S., exempts such buildings, structures, and facilities from the provisions of ss. 553.501-553.513, F.S., the "Florida Americans with Disabilities Implementation Act."

¹¹ Section 553.509(2)(c), F.S.

The owner, manager, or operator of the high-rise residential building must keep written records of any contracts for alternative power generation equipment and fuel source.¹² Quarterly inspection records of lifesafety equipment and alternate power generation equipment must also be posted in the elevator machine room or other place conspicuous to the elevator inspector.¹³ Section 553.509(2), F.S., also requires that elevator owners maintain a written emergency operations plan. It additionally requires that multi-story affordable residential dwellings for persons age 62 and older that are financed or insured by the United States Department of Housing and Urban Development must make every effort to obtain grant funding from the Federal Government or the Florida Housing Finance Corporation to comply with the requirements of s. 553.509(2), F.S.

Findings and/or Conclusions

OPPAGA Report

As noted above, OPPAGA examined the state's regulation of elevators and how the privatization of inspections has affected the regulation. The report stated that the bureau's inspectors re-inspect about 4 percent of all elevators inspected by private inspectors. According to the report, the state inspectors found non-life-threatening violations in 52 percent of the elevators that the private inspections had given a passing, violation free inspection. To address the discrepancy between the violations found by bureau and private inspectors, the bureau posted two technical advisories on its website to clarify the inspection standards.¹⁴ The bureau also required that private inspectors provide a written explanation as to why their inspection results differed from the bureau's inspections. According to the OPPAGA report, 40 percent of private inspectors ignored or refused to respond to the bureau's request for clarification. The bureau's lack of statutory authority to require a response has been cited by some private inspectors to justify their lack of response.

The OPPAGA report recommended that the bureau should annually review the results of its elevator re-inspections and quarterly publish technical advisories, post on its website an elevator's compliance history in order to provide citizens information about the safety of elevators, annually analyze elevator incident data and report to the Legislature those accidents that result in medical intervention or death, and that the Legislature consider amending s. 399.049, F.S., to require private inspectors or registered elevator companies¹⁵ to respond to the bureau's requests for information.

Bureau's Response to the OPPAGA Recommendations

In response to the report, the bureau has begun to perform annual reviews of its elevator re-inspections and to publish technical advisories. To date, the bureau has published three advisories.¹⁶ The bureau advises that it interprets the OPPAGA recommendation as four publications annually and that it attempts to publish one per quarter. The bureau also advises that it publishes an industry bulletin or a technical advisory as the need to provide specific information arises, and that publications have occurred as frequently as twice per quarter.

Posting Elevator Inspection Information on the Bureau's Website

The bureau has followed the OPPAGA recommendation that it post information on its website about elevators and their previous compliance history. According to OPPAGA, the recommendation was intended to provide citizens with information about the safety of the elevators they frequent and to encourage elevator owners to have their non-compliant elevators inspected. The bureau's website contains a link to a document titled "List of Elevator License Renewals and Delinquent Status,"¹⁷ which the bureau states is updated weekly. According to OPPAGA, this document is not consistent with its recommendation of providing the public with information about the safety of elevators because it fails to provide an inspection history and to specify a reason for a failed

¹² Section 553.509(2)(b), F.S.

¹³ Section 553.509(2)(d), F.S.

¹⁴ Technical Advisory 2007-01 and 2007-02 found at:

<http://www.myflorida.com/dbpr/hr/information/ElevTechAdvisory.html> (Last visited September 4, 2008).

¹⁵ See s. 399.01(13), F.S. Registered elevator companies are entities that are registered with and authorized by the division to employ persons to construct, install, inspect, maintain, or repair any vertical conveyance.

¹⁶ *Supra* at n. 14.

¹⁷ See <http://www.myflorida.com/dbpr/hr/elevators/elevator-renewals.html> (Last visited September 4, 2008).

inspection. A review of this document also revealed that it is extremely long (over 400 pages), and that it may be difficult for persons to search the document for information about specific elevators.

Reporting Data on Elevator Accidents/Incidents

Consistent with the OPPAGA report, the bureau has been compiling monthly reports of elevator accidents, including data regarding the number of accidents that have resulted in medical attention or death. According to the bureau, it has been collecting this data since July 1, 2007. The reports specify the number of accidents that resulted from rider behavior, for example, riders exceeding the load capacity of the elevator car. The bureau stresses that the accuracy of its monthly accident report is dependent on the accuracy and completeness of the data reported to it by elevator owners and operators. According to the bureau, there have been 858 reported accidents since July 1, 2007, with 101 accidents requiring medical attention. No reported fatal accidents have occurred in or upon an elevator. The bureau does not plan to post its monthly accident analysis on the Internet. The bureau is not required by law to report to the Legislature those accidents that result in medical intervention or death.

Private Inspectors' Failure to Respond to Bureau Requests

The final recommendation of the OPPAGA report requires legislation to implement. Current law does not require private inspectors or registered elevator companies to respond to bureau requests for information. As noted in the report, responses to the bureau's requests could help the bureau reconcile the results from its inspections with the results from inspections conducted by private inspectors. According to the bureau, it continues to find violations in approximately 52 percent of the re-inspected elevators. The violations that were found during the bureau's re-inspection were not found by the private inspectors. By reconciling the results of these inspections, the bureau could determine the reasons for the differing inspection results. For example, it is not clear whether the private inspectors are interpreting the elevator safety code¹⁸ in a different manner than that done by the state inspectors, or whether the private inspectors are failing to note evident violations.

Based on a review of the report and discussions with the OPPAGA staff and the bureau, there is an additional issue regarding who should be held responsible for the private inspector's failure to respond. The report noted that the bureau had developed proposed statutory language that would authorize a penalty against the elevator's certificate of operation, i.e., the owner of the elevator, for the private inspector's failure to respond.

The advantage of holding the elevator owner responsible is that he or she is ultimately legally responsible for the inspection of the elevator and its safe operation.¹⁹ The elevator certificateholder could require the inspector that he or she hires to conduct the inspection to fully cooperate with the bureau and respond to the bureau's requests. However, holding the certificateholder responsible for the private inspector's non-response may be inequitable because the certificateholder may be unaware of the bureau's practice of conducting re-inspections and requesting information from the private inspector to reconcile inspection results. The certificateholder may also be unable to control the private inspectors actions after the inspection and the contractual relationship has concluded. According to the bureau, most inspection services are handled on a one-on-one basis between the owner and the inspector without a long-term written contract.

The report further noted that, because a certificate of operation cannot be issued if there is a violation, failure to respond could result in an elevator not being authorized to operate. However, s. 399.07(6), F.S., which provides the grounds for suspending or refusing to issue or renew a certificate of operation, does not authorize the bureau to suspend or refuse to renew an elevator's certificate of operation on the basis that a private inspector failed to respond to the bureau's inquiry.

In addition, the disciplinary provisions for elevator inspectors in s. 399.07(6), F.S., do not authorize the bureau to revoke or impose a monetary penalty on an elevator inspector or a certificateholder who fails to respond to its requests for clarification. Section 399.105(1), F.S., authorizes an administrative fine of not more than \$1,000 against any person who fails to respond to reasonable requests by the department to determine whether the

¹⁸ See s. 399.02(1), F.S. The elevator safety code is contain the latest edition of the following codes of the American Society of Mechanical Engineers (ASME): ASME A17.1, ASME A17.3, and ASME A18.1.

¹⁹ Section 399.02(5)(b), F.S.

provisions of a service maintenance contract and its implementation ensure safe elevator operation. However, this penalty authorization is limited to the provision of service maintenance contracts. The term “service maintenance contract” includes the performance of “applicable code-required safety tests,”²⁰ but, according to the bureau, safety tests are different from routine inspections.

According to the bureau, the re-inspection of elevators is not directly influenced by the certification process, i.e., the bureau does not conduct a re-inspection before renewing an elevator’s certification. The bureau also can not automatically proceed to suspend the certification after a failed re-inspection because it must permit the elevator owner to have 30 days to correct any violations found during a re-inspection.²¹ The bureau could only sanction the elevator owner with a fine of up to \$1,000 for failing the re-inspection.²²

Enforcement of Alternate Power Generation Requirements

The bureau is not authorized by ch. 399, F.S., or ch. 553, F.S., or by any other provision to enforce the requirements of s. 553.509(2), F.S. The alternate power generation requirements in s. 553.509, F.S., do not provide a mechanism for enforcement by any other state or local agency.

Enforcement by the Florida Building Commission

Elevator safety regulations, including requirements related to providing emergency power, are provided by the Florida Building Commission (commission) in the Florida Building Code (code). Pursuant to ch. 553, F.S., the commission is authorized to adopt and maintain the code as a single, unified state building code for the design, construction, erection, alteration, modification, repair, or demolition of public or private buildings or structures.²³ The commission must amend and update the code every three years. According to commission staff, the first triennial update of the code became effective in October 2005, and the second update is due this year with an effective date of October 1, 2008.

The commission does not have the authority to enforce the ongoing maintenance of building code requirements adopted under ch. 553, F.S. The commission’s authority is limited to construction activities, e.g., the construction, erection, alteration, modification, repair, or demolition of a structure.²⁴ The commission can establish the building code requirements for the issuance of a building permit but it does not have ongoing authority over the structure after the construction, erection, alteration, modification, repair, or demolition of a structure is complete. The commission and local building code officials also do not have the authority to inspect buildings for which a building permit has not been issued or at which construction activities are not occurring. Therefore, if a high-rise residential building is not in compliance with the requirements of s. 553.509(2), F.S., the commission and local building code officials do not have jurisdiction unless:

- A permit application has been submitted for the building’s construction, erection, alteration, modification, repair, or demolition; or
- The building is under construction, erection, alteration, modification, repair, or demolition.

²⁰ Section 399.01(10), F.S., defines a “service maintenance contract” to mean:
a contract that provides for routine examination, lubrication, cleaning, adjustment, replacement of parts, and performance of applicable code-required safety tests such as on a traction elevator and annual relief pressure test on a hydraulic elevator and any other service, repair, and maintenance sufficient to ensure the safe operation of the elevator.
A service maintenance contract shall be made available upon request of the department for purposes of oversight and monitoring.

²¹ Section 399.105(4), F.S.

²² Section 399.105(3), F.S.

²³ The commission is administered and staffed by the Department of Community Affairs (DCA), and commission activities are funded through an “under roof floor space assessment” of one-half cent per square foot. The local government responsible for collecting a permit fee collects the surcharge and remits it to the DCA quarterly.

²⁴ See ss. 553.76 and 553.79, F.S.

Enforcement by Emergency Management Agencies

Section 553.509(2), F.S., requires that compliance with installation and operational capability requirements must be verified by local building inspectors and reported to the county emergency management agency by December 31, 2007. According to a representative for the Florida Division of Emergency Management, emergency management officials are not clear about the purpose served by this requirement. State emergency management officials interpret this requirement as not specifying any enforcement responsibilities or authority for emergency management officials on either the state or county level. The provision also does not specify how the county emergency management officials are supposed to use the building inspectors' reports of installation and operational capability. It is not clear whether such a report would provide any emergency management benefit or purpose. It also appears that county emergency management agencies are only receiving the reports from the local building officials and storing the reports. No database has been created from these reports. The reports are maintained in each county. It is also not clear whether an accounting of these reports would indicate the extent of compliance, unless a record of the number of high-rise residential buildings affected by this requirement is also available.

Self-Enforcement by Condominium Associations

In addition to the absence of enforcement authority by state or local agencies, it is not clear whether there are any legal consequences to a condominium association's failure to comply with the requirements of s. 553.509(2), F.S. Condominium association officers and directors have a fiduciary relationship to the condominium unit owners,²⁵ but it is not clear whether their fiduciary responsibility would require that they comply with the alternate generated power requirement. Generally, an officer or director of a condominium association has violated his or her fiduciary duty if they violate a criminal provision; directly or indirectly personally benefit from a transaction; act recklessly; or perform an act or omission "committed in bad faith or with malicious purpose or in a manner exhibiting wanton and willful disregard of human rights, safety, or property."²⁶

The provisions of s. 553.509(2), F.S., may also conflict with s. 718.1265(1)(f), F.S.,²⁷ which permits the boards of condominium associations to exercise emergency powers during a declared state of emergency, including the right to order that elevators be shut down or the electricity shut down or turned off.

Enforcement by Certified Elevator Inspectors

Certified Elevator Inspectors are required under s. 553.509(2)(f), F.S., to confirm that all installed generators required by ch. 553, F.S., are in working order, have current inspection records posted in the elevator machine room or other place conspicuous to the elevator inspector, and have the required generator key in the lockbox posted at or near the installed generator. If there is no generator installed in the building, the inspector must confirm that appropriate pre-wiring and switching capabilities are in place and that a statement affirming that a guaranteed contract for contingent services for alternate power is current for the operating period. However, this provision appears to only require elevator inspectors to "confirm" whether the elevator have met the requirements of s. 553.509(2), F.S., i.e., it appears to only create a reporting requirement for the elevator inspector. It does not appear to create a violation by the elevator owner for failing to meet those requirements.

Who Should Enforce the Alternate Generated Power Requirements?

Representatives for the commission and the bureau generally agree that the limited jurisdiction of the commission and local building code officials does not engender the ongoing enforcement of the alternate generated power requirement beyond the area of construction activities. Both acknowledge that the bureau's required performance of annual elevator inspections facilitates periodic verification of compliance with the alternate generated power requirements. However, it is not clear how the bureau would enforce the provision. For example, the bureau

²⁵ See s. 718.111(1), F.S.

²⁶ Condominium association officers and directors are required by s. 718.111(1), F.S., to discharge their duties in accordance with ss. 617.0830 and 617.0834, F.S. Section 617.0834, F.S., relates to immunity from civil liability for officers and director of a corporation not for profit. Section 617.0830, F.S., relates to the general standards for the directors and or a not-for-profit corporation.

²⁷ Section 718.1265, F.S., was enacted during the 2008 regular session by s. 15, ch. 2008-28, L.O.F.

expressed its reluctance to suspend an elevator's certificate because of the perceived expense of complying with the requirements and because the requirements do not appear to have any immediate impact on elevator safety.

The Cost of Regulation by the Bureau

The bureau detailed the administrative regulatory cost that would be associated with the bureau's enforcement of the elevator alternate power requirement. Although the installation requirements and operational capabilities must be verified by the local building inspectors, the bureau represents that it would need to conduct, either directly or through private inspectors, its own inspection of the alternate power requirement in order to ascertain compliance during the annual inspection. The bureau also stated that the alternate power inspection would be time-consuming. It would require taking the elevator system out of normal service; parking the elevator at the landing where the alternate power switch is located; isolating and shutting down the elevator's standard power source; transferring the elevator and all associated power circuits to the alternate power source; checking all switches, power circuits, and overrides for automatic sequence operation; and testing elevator operation through several stops to ensure proper emergency systems operation. According to the bureau, a complete alternate power inspection would add an estimated one to two hours for each elevator inspection. The elevator inspection may require, depending on the wiring, to shut off all power to the occupants of the building for the duration of the alternate power test.

The bureau also anticipates costs associated with issuing orders to correct non-compliance, and costs associated with administrative actions related to issuing a fine to an elevator owner for failing to comply with a requirement. The bureau noted that such enforcement actions may be complicated if the elevator owner cannot afford to comply with the alternate power requirements.

The bureau estimates a total annual cost of approximately \$537,600. This includes approximately \$137,600 to complete an estimated 4,300 monitoring inspections at one hour each, with an FTE cost of \$32/hr (including salary, fringe, and overhead, but not including automobile and fuel, communication, etc.). If inspections are conducted by private inspectors, the elevator owners would need to incur additional unknown costs. In addition to the costs associated with conducting the alternate power inspections, the bureau anticipates an additional \$400,000 in costs for administrative support. The division's estimate includes six new full-time employee positions.

Effect of Building Code Requirements

The Florida Building Code requires that high-rise buildings²⁸ be provided with Class 1, Type 60 standby power.²⁹ The code requires high-rise emergency power to be provided for elevator car lighting and emergency voice/alarm communications systems. Standby power is required for power and lighting of the fire command center, electrically powered fire pumps, ventilation and automatic fire detection equipment for smoke proof enclosures, and elevators.

According to the staff of the commission and the bureau, these agencies interpret the building code requirement as requiring that at least one elevator in the high-rise building must have stand-by emergency power. This requirement is not just limited to emergency power for emergency first-responders or for emergency power that is sufficient to lower the elevator to the ground floor and maintain its lighting during a power outage. Consequently, the building code requirement is comparable to the requirement in s. 553.509(2), F.S., except that it:

- Does not limit the emergency power requirement to five days after a declared state of emergency, and
- Is limited to construction for which a building permit is required, e.g., new construction or renovation.

²⁸ The code defines a high-rise building as a building having occupied floors located more than 75 feet above the lowest level of fire department vehicle access. *See* s. 403.1, Florida Building Code.

²⁹ *See* s. 1006.2.4, Florida Building Code. According to officials from the Building Commission, Class 1, Type 60 standby power is capable of providing electrical capacity, reliability and quality to loads for one hour within 60 seconds following a power loss or failure of the normal power supply.

The requirement in s. 553.509(2), F.S., is broader because it includes all high-rise residential multifamily buildings that were constructed after October 1, 1997,³⁰ and is not limited to ongoing construction for which a building permit is required.

Compliance Survey

Senate professional staff prepared a survey to attempt to assess the extent of compliance with s. 553.509(2), F.S.³¹ The survey was sent to the Community Association Leadership Lobby (CALL),³² which is an advocacy group that represents Florida condominiums, homeowners' associations, mobile home communities, and cooperatives; the Community Associations Institute, an association that represents community association managers; and the Institute of Real Estate Management, which represents real estate management professionals. During the 2006 Regular Session, CALL expressed its concerns with the short period between the provision's effective date and the deadlines for implementation. It also expressed its concerns with the costs of implementing the requirement. It has also supported the previous efforts to extend the deadlines. The Community Association Leadership Lobby has advised that it would support the repeal of s. 553.509(2), F.S.

Professional staff did not receive any responses to the survey. According to a representative for these organizations, there were several likely reasons why no one responded to the survey:

- The survey was sent during the summer months when many persons who could respond to the survey are out-of-town for the summer;
- The community association managers are too busy to respond to a voluntary survey; and
- There may be a reluctance to disclose a building owner's non-compliance with a legal requirement.

No state agency or state-wide association maintains a record of the number of high-rise residential buildings that are affected by the requirements of s. 553.509(2), F.S., or the extent of compliance. Without enough survey responses to accurately gauge the extent of compliance, the following questions regarding the implementation of the s. 553.509(2), F.S., remain unclear:

- The number of high-rise residential buildings that are affected by the requirements of s. 553.509(2), F.S.;
- The extent of compliance;
- The cost of compliance; and
- Any difficulties or concerns experienced during or after the implementation of the requirement.

According to a representative for condominium associations, it is possible that the absence of responses to the survey may also indicate a lack of compliance. For example, the attorneys for CALL did not distribute the survey because they would have advised the association's members to not answer the survey on the basis that they could not respond without admitting non-compliance. They expressed the concern that the information may expose the condominium to discipline by state agencies. Although efforts were made to provide for anonymous responses, the association's attorneys also expressed the concern that the responses would be official records of the association and that the non-compliance could be made known to the association's members and raise concerns relating to whether the board has acted in accordance with its fiduciary responsibilities by failing to implement the requirement of s. 553.509(2), F.S.³³

³⁰ *Supra* at n. 10.

³¹ A copy of the survey is included in Appendix A.

³² As noted on their website, "the Community Association Leadership Lobby is the leading organization working to enhance the quality of life and protect property values for Florida's community association residents. CALL advocates on behalf of more than 4,000 member communities, including condominiums, homeowners' associations, mobile home communities and cooperatives throughout the state.... CALL was created by Florida-based international law firm Becker & Poliakoff, P.A." See <http://www.callbp.com/about.php> (last visited September 4, 2008).

³³ *Supra* at n. 26.

Extent of compliance

The extent of compliance with the requirements of s. 553.509(2), F.S., is unclear. The bureau has changed its inspection reports to gather data to determine the extent of compliance with s. 553.509(2), F.S. Although the bureau's compilation and computation of the information is not complete, it has provided a limited and preliminary estimate of its findings. According to the bureau, it estimates that 1,783 of the approximately 4,569 condominium locations over seven floors in height "potentially" have a generator installed. The bureau bases this estimate on buildings constructed after 1985, which is when the Florida Building Code required all newly constructed high-rise buildings to have standby power. The bureau has no other data currently available.

The lack of reliable data regarding the extent of compliance with s. 553.509(2), F.S., appears to be directly related to the absence of a clearly defined agency that is responsible for the enforcement of the provision. Although the bureau does not currently capture the data regarding the number of condominiums that need or have complied with the alternate power requirement, the bureau estimates that as many as 10 percent of elevators may be affected by this requirement, which equals approximately 4,300 elevators. However, this estimate may be too high because, according to a representative for condominium associations, most condominiums are not high-rise buildings.

Although the requirement references condominiums, the requirements in s. 553.509(2), F.S., could also apply to other high-rise buildings such as high-rise, non-condominium apartments, and nontransient public lodging establishments which serve as multifamily dwellings. The extent to which these non-condominium high-rise residential buildings are affected by this requirement is also not clear.

Costs of Compliance by Elevator Owners

In the absence of responses from affected elevator owners to the survey, the cost to elevator owners of complying with the alternate power requirement is also unclear. However, it appears that the cost of compliance varies depending on the building's and elevator's existing wiring and configuration and the power needs of the elevator. Based on an interview with an electrical contractor, it is estimated that the cost to engineer and install the appropriate generator wiring, coupling, and transfer switch would be approximately \$4,000 to \$6,000 per location.

Options to power an elevator with a portable generator include purchasing the generator or entering into a guaranteed services contract in which a second party provides the generator, maintenance, and servicing for a fee. The cost of purchasing a generator is dependent on each individual application. Generally, standby generators cost \$300 to \$500 per kilo-watt. Therefore, a 20 KW standby generator would cost between \$6,000 and \$10,000. A 100 KW generator would cost between \$30,000 and \$50,000. These costs do not include the costs of installation and maintenance. The cost of a guaranteed services contract would be subject to the same variables as discussed above and is unknown. However, it is likely to be considerably less than the cost of a purchased generator.

Public Safety Considerations

According to emergency management officials, the alternate power requirements of s. 553.509(2), F.S., may threaten public safety because emergency power for elevators may encourage persons to stay in high-rise buildings and areas that are not safe and do not have the necessary infrastructure for safe habitation. For example:

- Although a building's elevator may have an alternate power source, the rest of the building may be without the electricity to power fire alarms and telephones.
- It is generally dangerous to permit high-rise residential buildings to remain occupied for extended periods of time while without electricity because its occupants may engage in high-risk activities that may cause fires, e.g., using portable canned heating fuels (sternos) to heat foods or using other combustible materials as a source of heating during cold temperatures or for lighting.
- If the generator used to power the elevator runs out of fuel, persons may be unable to leave the building or become trapped in an elevator.
- If not stored properly, the fuel for the alternate power generators may cause a fire.

- If not properly vented, the alternate power generator may vent carbon monoxide into occupied areas. If these areas are equipped with carbon monoxide detectors, the detectors may not be operational in a building without electricity.

Options and/or Recommendations

Senate professional staff recommends that s. 399.049, F.S., should be amended to provide that an elevator inspector's certification or an elevator company's registration may be suspended, revoked or fined for failing to respond to a written request from the Bureau of Elevator Safety (bureau) for information relating to the results of elevator inspections. This would authorize the bureau to compel private inspectors and elevator companies to respond to the bureau's requests. The information provided by the private inspectors and elevator companies could assist the bureau to improve the reliability of elevator inspections.

Senate professional staff recommends that the bureau should be required to annually analyze elevator incident data and report its findings to the Legislature. It should also be required to make its report available on the Internet in its entirety. This information could help the Legislature and the public to assess the effectiveness of current elevator safety regulation.

Senate professional staff also recommends that the Legislature consider the repeal of s. 553.509(2), F.S. The repeal is based upon the following findings and conclusions:

- The requirement may pose a threat to public safety, i.e., the availability of emergency power for elevators during the five days after a declared state of emergency may encourage persons to stay in high-rise buildings and areas that are not safe and do not have the necessary infrastructure for safe habitation;
- The requirement does not have a clearly defined state or local agency that is responsible for its on-going enforcement;
- Enforcement of the requirement by a state agency would carry a fiscal burden without a clearly defined benefit that may out-weigh the public safety concerns;
- The requirement does not appear to have any clearly defined impact on elevator safety;
- It is not clear what penalty, if any, should be imposed on building owners who cannot comply with the requirement because they cannot afford the expense; and
- To the extent that an alternate emergency power for elevators provides a public benefit, the Florida Building Code currently requires emergency power for elevators in new high-rise residential construction.

In the alternative, the Legislature could continue to require emergency generated power pursuant to s. 553.509(2), F.S., but, to ensure uniform compliance, the follow-up inspections would need to be funded and an agency designated with the responsibility of conducting inspections. The bureau and certified elevator inspectors would be the logical choice because they are already inspecting elevators.



THE FLORIDA SENATE
COMMITTEE ON REGULATED INDUSTRIES

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Tallahassee, Florida 32399-1100
(850) 487-5957

Senator Dennis L. Jones, D.C., *Chair*

Senator Steven A. Geller, *Vice Chair*

Professional Staff: Patrick "Booter" Imhof, *Staff Director*

Senate's Website: www.flsenate.gov

July 28, 2008

To whom it may concern:

The professional staff of the Senate Committee on Regulated Industries is conducting a study regarding the implementation of s. 553.509(2), F.S., which requires residential multi-family dwellings that are at least 75 feet in height and have a public elevator must be capable of operating at least one elevator on alternate generated power.

This law, which was enacted in 2006, requires that the elevator must be able to operate for an unspecified number of hours each day for a period of five days after a disaster or emergency resulting in an electrical power outage. Section 553.509(2)(b), F.S., requires that the person, firm, or corporation that owns, manages, or operates a building affected by this requirement must have provided verification of engineering plans for alternate generated power capability to the local building inspection agency by December 31, 2006. The local building inspectors were required to verify the installation and operational capability of the alternate generated power source and report to the county emergency management director by December 31, 2007.

The attached survey is intended to assess the extent of compliance by condominium associations with the requirements of s. 553.509(2), F.S. The survey is also intended to identify any problems or concerns that condominium associations may have experienced in complying with these requirements which may need to be addressed through further review or Legislative action.

The attached survey is directed to the owners, managers, or operators of residential multi-family buildings that are at least 75 feet in height (high-rise building) and must comply with the alternative generated power requirements for elevators under s. 553.509(2), F.S.

If you have any questions, please contact me at the telephone number listed in the letterhead or via e-mail at oxamendi.miguel@flsenate.gov. Please return the completed questionnaire to me by August 15, 2008. Thank you for your assistance and time in this matter.

Sincerely,

Miguel Oxamendi
Senior Attorney,
Regulated Industries Committee

Questionnaire on Review of Elevator Safety and Regulation

The Florida Senate Committee on Regulated Industries July 2008

Name of person completing the questionnaire:

Title of person completing the questionnaire:

Office of person completing the questionnaire:

Telephone number of person completing the questionnaire:

E-mail address of person completing the questionnaire:

Questions

1. Does the high-rise building (defined as being at least 75 feet in height) have one or more public elevators? Yes or No.

2. If the high-rise building has more than one elevator, how many elevators does it have?

3. Was the high-rise building in existence on October 1, 1997, or either under construction or under contract for construction on October 1, 1997? Yes or No.

4. Does the high-rise building have an alternative generated power source as required in s. 553.509(2), F.S.? Yes or No.

5. Has at least one public elevator in the high-rise building been prewired and prepared to accept an alternate power source for use in case of a power outage as required by s. 553.509(2), F.S.? Yes or No.

6. Is the high-rise building's alternate power supply sufficient to provide emergency lighting to the interior lobbies, hallways, and other portions of the building used by the public. Yes or No.

7. Does the high-rise building have an available generator and fuel source on the property? Yes or No.

8. Does the high-rise building have a current guaranteed service contract for such equipment and fuel source to operate the elevator on an on-call basis within 24 hours after a request? Yes or No.

9. If you answered "yes" to question 8, please explain the cost of the service contract:

10. Is proof of a current service contract for such equipment and fuel posted in the elevator machine room or other place conspicuous to the elevator inspector? Yes or No.

11. Have the engineering plans for the building that provide for the capability to generate power by alternate means been provided to the local building inspection agency for verification?
Yes or No.

12. If you answered “yes” to question 11, were the engineering plans provided to the local building inspection agency for verification before December 31, 2006? Yes or No.

13. If you answered “yes” to question 11, what was the cost of producing the engineering plans?

14. If you answered “no” to question 11, please explain why:

15. Has the local building inspection agency verified the high-rise building’s compliance with the installation and operational capability requirements for the alternative power? Yes or No.

16. If you answered “yes” to question 15, were installation and operational capability requirements for the alternative power verified by December 31, 2007? Yes or No.

17. If you answered “yes” to question 15, were installation and operational capability requirements for the alternative power reported to the local emergency management agency by December 31, 2007? Yes or No.

18. Was the high-rise building constructed after July 1, 2006? Yes or No.

19. Section 553.509(2)(d), requires that each person, firm, or corporation that is required to maintain an alternate power source must also maintain a written emergency operations plan that details the sequence of operations before, during, and after a natural or manmade disaster or other emergency situation. The plan must include, at a minimum, a lifesafety plan for evacuation, maintenance of the electrical and lighting supply, and provisions for the health, safety, and welfare of the residents. Is such a written emergency plan maintained for the high-rise building?
Yes or No.

20. Does the owner, manager, or operator of the residential multifamily dwelling keep written records of any contracts for alternative power generation equipment? Yes or No.

21. Section 553.509(2)(d), F.S., requires that quarterly inspection records of lifesafety equipment and alternate power generation equipment be posted in the elevator machine room or other place conspicuous to the elevator

inspector. Are such quarterly inspection records posted in the elevator machine room or other place conspicuous to the elevator inspector? Yes or No.

22. Section 553.509(2)(d), F.S., also requires that the owner or operator keep a generator key in a lockbox posted at or near any installed generator unit. Has the owner or operator complied with this requirement? Yes or No.

23. If you answered “no” to any of questions 19, 20, 21, or 22 please explain:

24. Section 553.509(2)(e), F.S., requires that multi-story affordable residential dwellings for persons age 62 and older that are financed or insured by the United States Department of Housing and Urban Development must make every effort to obtain grant funding from the Federal Government or the Florida Housing Finance Corporation to comply with the requirements of s. 553.509(2), F.S. It provides that, if an owner of such a residential dwelling cannot comply with these requirements of this subsection, the owner must develop a plan with the local emergency management agency to ensure that residents are evacuated to a place of safety in the event of a power outage resulting from a natural or manmade disaster or other emergency situation that disrupts the normal supply of electricity for an extended period of time. A place of safety may include, but is not limited to, relocation to an alternative site within the building or evacuation to a local shelter. If this provision is applicable, have you made an effort to obtain funding from the Federal Government or the Florida Housing Finance Corporation to comply with s. 553.509(2), F.S.? Yes, No, or Not applicable.

25. If you answered “yes” to question 24, did you obtain sufficient funding to comply with the requirements: Yes or No.

26. If you answered “no” to question 24, please explain:

27. Please provide any additional information or response that you think would be helpful in the analysis of the implementation s. 553.509(2), F.S., including any recommendations you may have that would improve its implementation or opinions you may have regarding provision.

Thank you for taking the time to complete this Questionnaire. Replies to the Questionnaire by August 15, 2008, would be appreciated. Replies may be sent via e-mail to oxamendi.miguel@flsenate.gov, fax (850) 410-5120, or regular mail to Miguel Oxamendi, Florida Senate, 330 Knott Building, 404 South Monroe Street, Tallahassee, Florida 32399-1100.

Any information that you provide in this survey is only intended for use by Legislative staff for the purposes of this study.

If you have any questions, please don't hesitate to contact Mr. Oxamendi via e-mail or at (850) 487-5957.