

Setting the Standard for Building Safety[™]

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Subject: Comments Supplemental Notice of Proposed Rulemaking RIN 1901-AA99 (70 Fed Reg 3812 et. sec., January 26, 2005)

To whom it may concern:

The International Code Council (ICC) submits the following comments regarding the proposed rulemaking by the U.S. Department of Energy (70 Fed. Reg. 3812 et. sec.) to establish worker safety and health regulations to govern contractor activities at DOE workplaces. The ICC is a 50,000-member association dedicated to building safety whose mission is to provide the highest quality codes, standards, products, and services for all concerned with the safety and performance of the built environment. These comments elaborate on and supplement oral comments provided by our David Conover during the public hearing on March 29, 2005 (see Attachment A) and recommend that DOE adopt by reference the ICC International Codes (I-Codes) to address the subject of the rulemaking. Of particular importance, a DOE reference to the I-Codes would adopt virtually all of the standards listed in Tables 1 to 5 of the proposed rule. Most importantly the I-Codes provide needed criteria to administer the codes and bring together all the standards referenced in Tables 1 to 5 and more into a cohesive and coordinated set of building regulatory provisions.

The I-Codes developed under the auspices of the ICC serve as a baseline for the design, construction, operation and maintenance of the majority of both public and private sector buildings in the U.S. As such the I-Codes are readily recognized and understood by building owners, product manufacturers, designers, contractors, code officials and all others involved in building design, construction, approval, and operation. The majority of U.S. state and local government agencies that adopt codes adopt and implement building safety and fire prevention codes developed by the ICC. In addition most federal agencies have building construction policies that require the use of the I-Codes or those policies refer to the state or local code proximate to the federal facility. This helps fulfill the direction of the National Technology Transfer and Advancement Act requiring federal agencies to participate in the development of and to adopt codes and standards developed in the private sector.

In brief, the I-Codes are the basis for the vast majority of U.S. construction regulations. In using those codes as a basis for its rules DOE would further consistency and uniformity, enhance the safety of workers within DOE facilities and ensure consistency within DOE facilities on issues related to safety.

Of particular importance and relevance is the establishment of the ICC by the three U.S. model building code organizations (Building Officials and Code Administrators International, International Conference of Building Officials, and Southern Building Code Congress) in 1994. Prior to that date model codes were developed separately by each of these organizations and state and local government adopted one of the three model codes, and standards referenced therein, on a regional basis. In an effort to unify the U.S. the ICC set out to develop one family of model codes to take the place of these three different sets of model codes. In 2000 the first complete family of the ICC International Codes was published and in 2003 the three model code organizations consolidated their operations as the ICC. This has resulted in one coordinated family of model codes and one supporting organization for those codes - the national uniformity that industry, building owners, regulators and others have called for. It also addresses a past concern of federal agencies about the lack of a singular national model code that forced agencies to either choose one of the three model codes over the others or run the risk of non-uniformity throughout agency facilities. Federal, state and local governments adopting building regulations have adopted the I-Codes as they undertook to update their regulations that had historically adopted one of the three regional model codes. This has resulted in significant progress toward uniformity in building regulations throughout the U.S. with only one state (California) with statewide authority to adopt building codes still enforcing one of the legacy codes instead of the I-Codes; although that state has made the decision to adopt the I-Codes to replace the currently adopted legacy code.

It is important to point out that this consolidation and focus of the U.S. model code system occurred recently and after current DOE criteria, such as DOE orders 420.1 and 440.1A, applying to DOE facilities became effective. The events described above that have occurred are particularly relevant to the issues addressed in the proposed rule and provide DOE a minimum baseline and foundation upon which to build that is consistent with federal, state and local regulations.

Purpose

The purpose of these comments is to ensure DOE has requirements for DOE owned and leased facilities that:

- > Are consistent with federal law
- > Are consistent within DOE and amongst DOE facilities
- > Can be uniformly and easily implemented
- > Provide DOE confidence with respect to compliance and conformity assessment
- > Are consistent with requirements for buildings that are adopted by other federal agencies as well as state and local government
- Are readily understood by designers, manufacturers, contractors and others involved with building design, construction and operation

- Promote simplicity, uniformity and consistency in design, construction and conformity assessment
- > Build upon a common denominator set of codes, and standards referenced in those codes, that are used throughout the U.S.

General

To fully understand and address ICC's comments it is important to have an understanding of the current situation regarding federal, state and local building regulations. With the publication of the ICC International Codes, a complete and coordinated set of documents to address all aspects of building safety, federal, state and local government have a singular solution to addressing building safety and performance issues. With few exceptions federal, state and local government have adopted and are using these codes. Federal agencies are doing so in response to the National Technology Transfer and Advancement Act (P.L. 104-113) and the need to update their building-related policies and requirements. State and local agencies are doing so in response to the scheduled updating of their building-related regulations. In most all cases federal, state and local regulations were based on one of the three model codes noted above, although federal agencies tended toward "home grown" provisions to address issues considered unique to each agency. Pursuant to the consolidation of the three model code groups as the ICC and development of the I-Codes, those update activities have focused on adopting the ICC International Codes in place of the previously adopted regional model code and unique "home grown" federal provisions.

Consider the following excerpt from the National Park Service building requirements.

06 - INTERNATIONAL CODE COUNCIL AND OTHER CODE STANDARDS

1. <u>Technical Codes and Standards</u>. The Forest Service recognizes <u>International Family</u> of <u>Building and Related Codes (IBC)</u>. In addition there are codes that are not represented by the IBC that are used as model building codes and standards. While it is impractical to cite all of the required codes, specific major codes and standards are identified herein for technical uniformity. The latest code edition shall apply to all new designs for which construction has not begun.

2. <u>Facilities Leased or Authorized Under Special-Use Authorizations</u>. Locally adopted national model building codes or State codes apply. In the absence of any local regulations, apply the following design and operating standards and follow seismic safety requirements of these codes as follows:

a. International Family of Building and Related Codes published by the International Code Council.

b. Americans with Disabilities Act Access Guidelines. Title 28, Code of Federal Regulations part 36 (28 CFR part 36).

c. National Fire Protection Association (NFPA) 101, Life Safety Code. Published by the NFPA.

d. Occupational Safety and Health Standards for General Industry. Title 29 Code of Federal Regulations part 1910 (29 CFR part 1910).

e. Uniform Federal Accessibility Standards (UFAS). Published by the General Services Administration, 1984.

3. <u>*Facilities Owned and Operated by the Forest Service.*</u> *The following design and operating codes and standards apply:*

a. International Family of Building and Related Codes. Published by the International Code Council.

b. Americans with Disabilities Act Access Guidelines. Title 28, Code of Federal Regulations, part 36 (28 CFR part 36). Although the UFAS is a statutory requirement, the Americans with Disabilities Act Accessibility Guidelines (ADAAG) are the latest and most complete guidelines available at this time. The more stringent requirement shall apply when conflicting direction occurs.

c. Forest Service Health and Safety Code Handbook set out in FSH 6709.11.

d. National Electrical Safety Code published by the Institute of Electrical and Electronics Engineers, Inc.

e. National Fire Codes published by the National Fire Protection Association.

f. Occupational Safety and Health Standards for Construction set out in Title 29, Code of Federal Regulations, Part 26 (29 CFR part 26).

g. Occupational Safety and Health Standards for General Industry set out in Title 29, CFR part 1910 (29 CFR part 1910).

h. Uniform Federal Accessibility Standards published by the General Services Administration, 1988.

i. Handbook on Fundamentals, Design, and Evaluation Criteria for Energy Conservation in New Buildings, Standard 90. Published by the American Society of Heating, Refrigerating, and Air-Conditioning Engineers.

j. Built Environment Image Guide published by the USDA Forest Service, 2001, document number FS-710.

4. <u>Conflicts</u>. Generally, the latest edition of each applicable standard applies. When overlap occurs in cited standards and codes, the more protective standard applies. Conflicts in code requirements should be resolved by the Regional Director responsible for engineering.

Forward requests for clarification or for alternative standards to 29 CFR part 1910 or 29 CFR part 1926 through the chain of command and in writing to the Occupational Safety and Health Staff, Business Operations, Washington Office. The Secretary of the Department of Labor is responsible for resolving conflicts as provided in 29 CFR part 1960, subpart C.

As the DOE rules apply to DOE owned as well as leased property, the imposition of the proposed rules to private sector property that is leased to DOE would create a dilemma for private sector interests wishing to contract to serve DOE. The dilemma created is satisfaction of DOE rules that conflict with state and local codes that the property must also satisfy. With respect to DOE owned property DOE currently has requirements in place that govern the construction of DOE facilities. Those requirements refer to the codes applied by state and local government in the area surrounding the DOE facility. With the exception of California, which continues to implement the Uniform Building Code of ICBO (a legacy code to the ICC Codes) and is in the process of adopting the I-Codes, the I-Codes are adopted by all other state and local governments in which DOE facilities are located. Requiring DOE owned property to comply with one set of requirements for design, construction and renovation and a different set of requirements for worker safety during or after construction will pose problems for DOE, its contractors and workers. In the interest of consistency and uniformity across the federal sector, within DOE and between the federal and private sectors the ICC recommends that DOE adopt as a baseline the codes adopted by other federal, state and local agencies. This creates a uniform basis for federal, state and local building regulations upon which DOE can build as opposed to establishing a situation where DOE rules create a conflict with other rules the public and private sectors must also satisfy.

The ICC International Codes are the baseline codes and include by reference a large number and wide range of standards developed by many organizations, including as previously noted virtually all of the NFPA, ASME, etc. standards referenced in the proposed rule. One can look at these codes as the vehicles by which individual standards are assembled in such a way that a complete and coordinated set of provisions exists to govern the design, construction, operation, maintenance and renovation of buildings and their systems. This is analogous to purchasing a complete automobile as opposed to a large container of parts without assembly instructions.

For the reasons stated above, the ICC comments focus on the basic premise that DOE should adopt by reference a coordinated set of codes as a foundation for DOE rules on facility design, construction, renovation, and worker safety. The I-Codes are that coordinated set of provisions. They have been widely adopted throughout the U.S. and apply to other federal facilities such as those of the General Services Administration, Department of State and Department of Defense, as well as state and local facilities and private sector facilities throughout the U.S. To impose codes and standards for DOE facilities that are not based on the same foundation as other federal, state and local requirements fosters non-uniformity and will likely increase the costs of construction and facility operation. It can also foster a decrease in worker safety wherein what is "standard" elsewhere is not applied in DOE facilities. For example, private sector interests subject to state and local codes but wishing to do business with federal agencies will likely pass along the expense in time and construction cost associated with multiple and conflicting rules to DOE, if they can even comply with multiple sets of conflicting regulations. With this overarching concept of building upon an existing foundation of consistent federal, state and local rules the following specific comments are offered for DOE consideration.

Specific Comments

851.201 (b) - The ICC notes that the proposed regulations reference a number of standards from the National Fire Protection Association. As noted above such a list of standards does not provide a coordinated and cohesive set of criteria upon which to establish building safety and performance nor address worker safety. Due to the adoption rate and use of the I-Codes throughout the U.S. at the federal, state and local level and internationally by U.S. agencies such as the Department of State governing U.S. embassy buildings, the ICC requests that DOE modify the proposed rule to adopt by reference the 2003 Edition of the following ICC Codes.

- > International Building Code
- International Fire Code
- International Mechanical Code
- International Plumbing
- International Fuel Gas Code
- > International Existing Buildings Code
- > International Building Performance Code

These documents reinforce many of the NFPA standards presently referenced in the subject section of the propose rule, tie them together and adopt them by reference in one or more of these ICC codes. Through such reference these standards are integrated and can work together as an integral part of the ICC codes to address the design, construction, operation, etc. of a building and its systems. As buildings are a combined and integrated set of assemblies, systems, materials, and products they need to be addressed by a cohesive and integrated set of criteria, something accomplished more effectively through adoption of the I-Codes as opposed to adopting a list of reference standards.

Of particular note the adoption of certain NFPA standards such as NFPA 5000 will create a significant problem for DOE. NFPA 5000, a code for new building construction, was recently developed by NFPA and after two years of availability only two jurisdictions in the U.S. have adopted NFPA 5000 as their building code (Palastine TX and Pittsfield ME). As the proposed rules apply to worker safety one might argue that a building code covering new building design or renovations to existing buildings is not really applicable to the issue of worker safety. In agreeing with that premise then there is no reason to reference NFPA 5000 nor the ICC International Building Code (IBC).

The ICC feels, however, that a building code will ensure that the effective design and construction of a building will help ensure that the building will contain certain attributes that in a post occupancy situation will address the safety of the workers in that building. For that reason the ICC supports the adoption of a building code within the proposed rule. For the reasons stated above, however, that building code should be consistent with the building code adopted by virtually all federal, state and local agencies in the U.S. adopting building codes. Consider just within DOE the current application of the IBC to certain construction at the Pacific Northwest

National Laboratory (PNNL). Should the proposed rule become final then in applying NFPA 5000 at PNNL, the construction built under the IBC would have to be modified to comply with NFPA 5000 in the interest or worker safety. The ICC can think of no reason why such retrofitting of newly constructed buildings would be advantageous. In reality such undue modification of buildings, in creating additional and unneeded construction work, would increase the probability of worker injury.

The adoption of the I-Codes will also ensure that a conflict is not created between the DOE rules and state and local regulations. This is especially relevant to private sector businesses that desire to serve both federal and non-federal customers (e.g. DOE leased property). To require the use NFPA 5000 in state and local jurisdictions where the ICC Codes are adopted will create problems for designers, contractors, and facility owners as they will be faced with satisfying multiple and possibly conflicting criteria. This would be especially true should a facility owner construct a facility for non-DOE use and then later decide to lease the facility to DOE.

A review of information posted on the DOE web site indicates that DOE recognizes state and local building codes. For instance DOE orders 420.1 and 440.1A refer to state and local building codes. Without the additional reference to the I-Codes noted above the rule will be inconsistent in that, while intending to allow for compliance with state and local codes, it will effectively mandate documents that are not consistent with the majority of state and local codes. Considering the events that have occurred in the past few years to solidify the U.S. code development and adoption situation, allowing compliance with state and local codes and then imposing specific DOE rules that are based on documents such as NFPA 5000 that is adopted by any state or locality in which DOE has facilities establishes a potential for conflict.

As the vast majority of federal, state and local agencies that adopt building codes adopt documents listed in 851.101 (b) through their adoption of the I-Codes, there should be no need to refer to the listed NFPA standards. As previously stated, adoption of the ICC codes by reference ensures that the applicable NFPA standards are adopted and are coordinated in such a way that, along with the provisions in the I-Codes, they can be readily applied as a cohesive package of building regulations.

As many other federal, state and local agencies have done, DOE should adopt the I-Codes by reference and then develop amendments to those codes to address special and unique needs associated with DOE facilities. In addition, DOE could continue to participate in the development of the I-Codes as it has done this year to make those codes more sensitive to DOE's needs. Such reliance on the I-Codes and participation in the process to ensure those codes address DOE needs assists the industry, who has to comply with those codes in non-DOE facilities, and ensure consistency with other federal, state and local requirements.

The International Fire Code (IFC) directly or through reference to appropriate standards adequately addresses the fire safety aspects of building spaces and would ensure protection for DOE facilities and workers. More importantly in addition to referencing NFPA standards on this issue, the IFC also goes further in protecting facilities, especially from a fire fighter safety perspective (e.g. fire department access doors, apparatus access, etc.). In being able to address a fire more effectively one would also assume that the items within the facility would have a

higher probability of being saved should a fire occur.

During the public hearing on March 29, 2005 the testimony of the other speakers (2) focused on implementation. One speaker advocated an approach wherein contractors doing business for DOE and meeting certain protection program criteria be recognized in the final rule and exempt from the inspection requirements in the final rule. The other speaker advocated the elimination of all exceptions and that DOE take the steps necessary to implement and enforce the DOEadopted rules. The ICC is not taking a position one way or the other on this matter as DOE would have a much better understanding of the level of effort involved through direct DOE or third party enforcement activities. Certainly accredited third parties can and do provide a valuable service to building owners and regulatory officials in their conduct of conformity assessment activities on behalf of the recognized authority. Where the recognized authority does not have such accredited third parties to rely on they must conduct enforcement activities themselves. Where the third party is also the entity being regulated there can be concern for objectivity. The ICC suggests that DOE review international standards dealing with such third party activities and accreditation programs that have been established to address the acceptance of such third parties. The International Accreditation Service (IAS) is actively involved in such activities and could provide guidance to DOE on this issue. Should DOE decide to rely on third party entities for conformity assessment activities in lieu of conducting those activities themselves, a reference to relevant international standards and IAS accreditation of specific third parties could provide DOE and others the confidence they need to accept third party non-DOE enforcement. Information on the IAS is included as Attachment B.

Closing Comments

The ICC believes that the best way to address worker safety and the needs of federal agencies to adequately protect federal facilities is to adopt the same requirements already widely adopted, applied and enforced by federal, state and local government. Subsequently DOE can amend those requirements where DOE feels enhancements are needed to address any unique needs associated with DOE facilities. This ensures that all those involved with such facilities, whether DOE staff or private sector contractors and their staff, are able to technically and administratively work from the same baseline. In the case of private sector facilities the owner must already comply with state and/or local building and fire codes. Consistency between the baseline DOE requirements and such state and local codes will benefit all contractors who work not only for DOE facilities but other federal, state and local agencies or for the private sector.

Rather than providing a listing of separate standards that, while addressing specific issues, are not tied together as a collective body of regulations the ICC suggests adoption of the ICC International Codes. These codes reference many of the standards proposed to be referenced by DOE, are used as a basis for the vast majority of federal, state and local building regulations, and provide a solid and coordinated set of provisions that are fully supported to assist those having to design, construct, operate, maintain, inspect and use DOE facilities. As agencies such as the Department of State, General Services Administration and Department of Defense have adopted these documents adoption by DOE would further consistency and uniformity throughout the federal sector. As the I-Codes are adopted by virtually all state and local government agencies that regulate buildings, private sector businesses will be able to work from the same baseline

should they choose to compete for DOE business.

The ICC appreciates the opportunity to provide comments and hopes DOE will consider the opportunity it has to further solidify the uniformity and consistency of U.S. building regulation. Should additional information be needed please do not hesitate to contact us.

Sincerely,

Son C. Yakes

Sara C. Yerkes Senior Vice President of Government Relations