

meeting at the phone number listed above. Written statements may be filed with the Board either before or after the meeting. Individuals who wish to make oral statements pertaining to the agenda item should contact Pat Halsey at the address or telephone number listed above. Requests must be received five days prior to the meeting and reasonable provision will be made to include the presentation in the agenda. The Deputy Designated Federal Officer is empowered to conduct the meeting in a fashion that will facilitate the orderly conduct of business. Individuals wishing to make public comment will be provided a maximum of five minutes to present their comments. This notice is being published less than 15 days prior to the meeting date due to programmatic issues that had to be resolved prior to the meeting date.

*Minutes:* Minutes will be available by writing or calling Pat Halsey at the address and phone number listed above. Minutes will also be available at the following Web site: <http://www.oakridge.doe.gov/em/ssab/minutes.htm>.

Issued at Washington, DC on December 23, 2008.

**Rachel Samuel,**

*Deputy Committee Management Officer.*

[FR Doc. E8-30969 Filed 12-29-08; 8:45 am]

**BILLING CODE 6450-01-P**

## DEPARTMENT OF ENERGY

### Office of Science; Fusion Energy Sciences Advisory Committee

**AGENCY:** Department of Energy.

**ACTION:** Notice of Open Meeting.

**SUMMARY:** This notice announces a meeting of the Fusion Energy Sciences Advisory Committee. The Federal Advisory Committee Act (Pub. L. 92-463, 86 Stat. 770) requires that public notice of these meetings be announced in the **Federal Register**.

**DATES:** Tuesday, January 13, 2009, 9 a.m. to 6:30 p.m. and Wednesday, January 14, 2009, 9 a.m. to noon.

**ADDRESSES:** The Gaithersburg Hilton, 620 Perry Parkway, Gaithersburg, Maryland 20877, USA.

**FOR FURTHER INFORMATION CONTACT:**

Albert L. Opdenaker, Office of Fusion Energy Sciences; U.S. Department of Energy; 1000 Independence Avenue, SW.; Washington, DC 20585-1290; Telephone: 301-903-4927.

**SUPPLEMENTARY INFORMATION:** *Purpose of the Meeting:* The purpose of the meeting will be to complete two charges: one on High Energy Density Laboratory Plasmas

and one that asked FESAC to review the Fusion Energy Sciences Strategic Plan Overview which is scheduled to be sent to Congress by March 1, 2009.

### Tentative Agenda

*Tuesday, January 13, 2009*

- Office of Science Perspectives.
- OFES Program Perspectives.
- Final Report on the High Energy Density Plasma Charge.
- Report on FESAC Review of the Strategic Plan Overview.
- Use of Technical Readiness Levels in Planning the Fusion Program.
- Use of Technical Readiness Levels at Boeing.
- Public Comments.
- Adjourn.

*Wednesday, January 14, 2009*

- Status Report on the Research Needs Workshop Activities.
- Preparation of Letters to DOE/SC.
- Adjourn.

*Public Participation:* The meeting is open to the public. If you would like to file a written statement with the Committee, you may do so either before or after the meeting. If you would like to make oral statements regarding any of the items on the agenda, you should contact Albert L. Opdenaker at 301-903-8584 (fax) or [albert.opdenaker@science.doe.gov](mailto:albert.opdenaker@science.doe.gov) (e-mail). Reasonable provision will be made to include the scheduled oral statements on the agenda. The Chairperson of the Committee will conduct the meeting to facilitate the orderly conduct of business. Public comment will follow the 10-minute rule. This notice is being published less than 15 days before the date of the meeting due to programmatic issues.

*Minutes:* The minutes of the meeting will be available on the U.S. Department of Energy's *Office of Fusion Energy Sciences* Web site (<http://www.science.doe.gov/ofes/>).

Issued at Washington, DC, on December 23, 2008.

**Rachel Samuel,**

*Deputy Committee Management Officer.*

[FR Doc. E8-30970 Filed 12-29-08; 8:45 am]

**BILLING CODE 6450-01-P**

## DEPARTMENT OF ENERGY

### Office of Energy Efficiency and Renewable Energy

[Docket No. EERE-2006-BC-0132]

### Building Energy Standards Program: Determination Regarding Energy Efficiency Improvements in the Energy Standard for Buildings, Except Low-Rise Residential Buildings, ANSI/ASHRAE/IESNA Standard 90.1-2004

**AGENCY:** Office of Energy Efficiency and Renewable Energy, Department of Energy.

**ACTION:** Notice of determination.

**SUMMARY:** The Department of Energy (DOE) today determines that the 2004 edition of the *Energy Standard for Buildings, Except Low-Rise Residential Buildings*, American National Standards Institute (ANSI)/American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Illuminating Engineering Society of North America (IESNA) Standard 90.1-2004, (Standard 90.1-2004) would achieve greater energy efficiency in buildings subject to the code, than the 1999 edition (Standard 90.1-1999 or the 1999 edition). The quantitative analysis of the energy consumption of buildings built to Standard 90.1-2004, as compared with buildings built to Standard 90.1-1999, indicates national source energy savings of approximately 13.9 percent of commercial building energy consumption. Site energy savings are estimated to be approximately 11.9 percent. As a result of this positive determination regarding Standard 90.1-2004, each State is required to certify that it has reviewed the provisions of its commercial building code regarding energy efficiency, and updated, as necessary, its code to meet or exceed Standard 90.1-2004. This Notice provides guidance to States on Certifications, and Requests for Extensions of Deadlines for Certification Statements.

**DATES:** Certifications and Requests for Extensions of Deadlines, with regard to Standard 90.1-2004, are due at DOE on or before December 30, 2010.

**ADDRESSES:** Certifications or Requests for Extensions of Deadlines should be directed to the Assistant Secretary for Energy Efficiency and Renewable Energy, Office of Building Technology Assistance, EE-42, 1000 Independence Avenue, SW., Washington, DC 20585-0121. Envelopes or packages should be labeled, "State Certification of Commercial Building Codes Regarding Energy Efficiency". The Technical

Support Document for this determination can be accessed at [http://www.energycodes.gov/implement/determinations\\_com.stm](http://www.energycodes.gov/implement/determinations_com.stm).

**FOR FURTHER INFORMATION CONTACT:** Mr. Ronald B. Majette, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Forrestal Building, Mail Station EE-2J, 1000 Independence Avenue, SW., Washington, DC 20585-0121, 202-586-7935.

**SUPPLEMENTARY INFORMATION:**

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**I. Introduction**

*A. Statutory Requirements*

Title III of the Energy Conservation and Production Act, as amended (ECPA), establishes requirements for the Building Energy Efficiency Standards Program. (42 U.S.C. 6831 *et seq.*) ECPA provides that whenever the ANSI/ASHRAE/IESNA Standard 90.1-1989 (Standard 90.1-1989 or 1989 edition), or any successor to that code, is revised, the Secretary must make a determination, not later than 12 months after such revision, whether the revised code would improve energy efficiency in commercial buildings and must publish notice of such determination in the **Federal Register**. (42 U.S.C. 6833(b)(2)(A)) The Secretary may determine that the revision of Standard 90.1-1989, or any successor thereof, improves the level of energy efficiency in commercial buildings. If so, then not later than two years after the date of the publication of such affirmative determination, each State is required to certify that it has reviewed and updated the provisions of its commercial building code regarding energy efficiency with respect to the revised or successor code. (42 U.S.C. 6833(b)(2)(B)(i)) The State must include in its certification a demonstration that the provisions of its commercial building code, regarding energy efficiency, meet or exceed the revised

standard (in this case, Standard 90.1-2004). (42 U.S.C. 6833(b)(2)(B)(i))

If the Secretary makes a determination that the revised standard will not improve energy efficiency in commercial buildings, State commercial codes shall meet or exceed the last revised standard for which the Secretary has made a positive determination. (42 U.S.C. 6833(b)(2)(B)(ii)) On July 15, 2002, the Secretary published a determination updating the reference code to Standard 90.1-1999. 67 FR 46464. DOE held a workshop and accepted comments on the methodology for making a determination and in the final determination, DOE addressed concerns raised as to the methodology relied upon in the determination.

ECPA also requires the Secretary to permit extensions of the deadlines for the State certification if a state can demonstrate that it has made a good faith effort to comply with the requirements of Section 304(c) of ECPA and that it has made significant progress in doing so. (42 U.S.C. 6833(c))

*B. Background*

1. Publication of Standard 90.1-2004

The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) and the Illuminating Engineering Society of North America (IESNA) approved the publication of the 2004 edition of *Energy Standard for Buildings Except Low-rise Residential Buildings*, in June 2004 and July 2004, respectively.

The Standard was developed under American National Standards Institute approved consensus standard procedures. Standard 90.1 is under continuous maintenance by a Standing Standard Project Committee (SSPC) for which the ASHRAE Standard Committee has established a documented program for regular publication of addenda or revisions, including procedures for timely, documented, consensus action on requests for change to any part of the standard. The American National Standards Institute (ANSI) approves addenda prior to their publication by ASHRAE and IESNA and therefore prior to their inclusion in a new version of Standard 90.1. ANSI approved the final addendum for inclusion in Standard 90.1-2004 on August 5, 2004. The 2004 edition was published in December 2004.

2. Analysis Methodology

In arriving at a determination, the Department first reviewed all significant changes between the 1999 edition and the 2004 edition of Standard 90.1,

including those changes made between the 1999 edition and the 2001 edition (ANSI/ASHRAE/IESNA Standard 90.1-2001). Standard 90.1 is complex and covers a broad spectrum of the energy related components and systems in buildings ranging from simple storage buildings to complex hospitals and laboratories. The size of buildings addressed range from those smaller than single family homes to the largest buildings in the world. The approach to development of the standard was not changed from that used for the 1999 edition, with no changes to the scope or the way components are defined. The 2004 edition was reorganized to improve usability and new climate zones were utilized in place of the climate bins used in Standard 90.1-1999. We concluded that because no significant changes were made to the structure, scope, or component definitions of Standard 90.1, the same methodology used for the analysis of Standard 90.1-1999 could be utilized for the analysis of Standard 90.1-2004. Based on this, DOE determined it was unnecessary to hold a public workshop and seek comment on the analysis methodology, as was done on for the analysis of Standard 90.1-1999.

DOE did not conduct a formal determination of energy savings on the 2001 edition. Initial review of the changes made in the 2001 edition indicated that while the changes typically improved the usability and understandability of the text, the only changes that could quantitatively be compared were estimated to result in negative energy savings. These changes, primarily to slab edge insulation requirements in cool and cold climates, were estimated to have a minor impact in terms of energy efficiency in buildings at the national level, but no simulation was made to quantify the impact. All changes made between the 1999 and 2001 editions are included in this determination for the 2004 edition.

3. DOE Response to Comments on Previous Analysis

DOE did not conduct a workshop on the analysis relied upon in this determination because DOE relied on the same methodology as in the Standard 90.1-1999 determination. DOE previously sought comment on this analysis and responded to comments received in the Standard 90.1-1999 determination. 67 FR 46464. DOE re-reviewed the comments and data submitted regarding issues raised in the comparative analysis of Standard 90.1-1989 and Standard 90.1-1999. The more significant comments are discussed below.

We have attempted to keep the comparative analysis of Standard 90.1–1999 and Standard 90.1–2004 as close as possible to the previous analysis comparing Standard 90.1–1989 and Standard 90.1–1999. As acknowledged in the previous analysis, we recognize that, given the numerous assumptions required to simulate the potential impact of the new standard, reasonable minds could differ over both the specific model employed and over the assumptions used in those models. We recognized previous cautions about the complexity of the problem and magnitude of alternative compliance approaches in the standard.

We recognize that our methodology for the purpose of a simple yes/no determination is inadequate for determining an absolute quantification of energy savings estimates associated with using Standard 90.1–2004 and make no such claim for the analysis on which this determination relies. DOE did perform a quantitative analysis that included many of the changes in Standard 90.1–2004 that can be modeled, but this quantitative analysis is not able to accurately quantify all the likely effects of the new standard.

We continue to believe that our comparison should rely on both quantitative and qualitative comparisons. While quantitative estimates of energy savings are indeed a much preferred method of comparison, it is not always possible to simulate or provide appropriate weighting to many features in Standard 90.1 and therefore we will continue to note changes that individually, or in net, result in increased energy efficiency, even where they could not be accurately quantified. States can use this information when upgrading their energy codes.

We continue to believe that the analysis of whether the standard will improve energy efficiency in commercial buildings should, to the extent possible, reflect the changes in the minimum requirements of each standard. However, in assessing the impact of those requirements, we believe that the fundamental buildings designs considered, including construction types, lighting designs, operation, and equipment design and usage characteristics should be based on a realistic estimate of current construction. We believe that we have done this in our analysis.

As in the previous determination for Standard 90.1–1999, DOE did not include analysis of potential changes in equipment market share in its analysis. Potentially, different levels of cost increases between specific component types serving the same base need within

the construction market (e.g. masonry wall construction versus frame wall construction or space heating boilers versus furnaces) could result in market shifts which could impact, in some cases negatively, overall energy consumption within commercial buildings. In general, the Department does not have the data or the tools to examine the potential elasticity between markets and does not believe it is required to do so to assess whether a revision to the standard will improve energy efficiency in commercial buildings. The Department will consider quantitative data regarding the impact of market switching on its Determination only if there is sufficient evidence to believe that the likely impact of market switches would be a reduction in energy efficiency due to the revised standard taken as a whole.

We have continued to use new construction square footage data extracted from the Energy Information Administration's National Energy Modeling System, as the basis for our analysis. For this analysis, we used data from the years 2006 to 2015.

Consistent with the previous determination analysis, DOE compared versions of Standard 90.1 "as a whole" and did not issue determinations for individual addenda. DOE interprets the language in Section 304(b)(2) of ECPA to mean that when a comprehensive revision of the ASHRAE Standard is published, which in this case is ASHRAE Standard 90.1–2004, then that revised or successor standard triggers the Secretary's obligation to issue a determination as to whether the revised standard improves energy efficiency. This determination is made by comparing the revised or successor standard to the last predecessor standard.

While it is true that the addenda process is part of the ongoing maintenance of the standard and thus continually modifies or revises the existing standard over time, it would be an unreasonable reading of the statute to categorize each addenda in this maintenance process as a "revised or successor standard" within the meaning of Section 304(b)(2) of ECPA, so as to require a determination by the Secretary. Such an interpretation of the statute would put an unreasonable burden both on the States and DOE. For the States, a determination by the Secretary requires some State action, and what is required depends upon whether the Secretary issues an affirmative or a negative determination. If the Secretary were required to issue a determination after each addenda was published, the States would be

constantly required to change their codes. This would affect the stability and certainty of State commercial building codes. DOE believes that Congress could not have intended this result.

We continue to believe that DOE's responsibility is to determine whether or not the new version of Standard 90.1 will improve energy efficiency, and not whether the measures are technologically feasible and economically justified. The statutory language in Section 304(b) of ECPA states that the Secretary is required to make a determination as to whether any successor standard to ASHRAE Standard 90.1–1989 will improve energy efficiency. (42 U.S.C. 6833(b)(2)(A)) The Secretary must publish a notice of this determination in the **Federal Register**. The language does not require that DOE perform an independent economic analysis as part of the determination process. Section 304(b) of ECPA does not include any reference to language concerning economic justification.

However, Congress did address consideration of the technological feasibility and cost effectiveness of the Voluntary Building Energy Codes be considered. Section 307 of ECPA requires DOE to participate in the ASHRAE process and to assist in determining the cost effectiveness and technical feasibility of the ASHRAE standard. (42 U.S.C. 6836) It also requires DOE to periodically review the economic basis of the voluntary building energy codes and participate in the industry process for review and modification, including seeking adoption of all technologically feasible and economically justified energy efficiency measures. (42 U.S.C. 6836(b))

Unlike Section 307 of ECPA which specifically includes language concerning economic justification, Section 304 of ECPA omits any reference to economic justification. "It is generally presumed that Congress acts intentionally and purposefully where it includes particular language in one section of a statute but omits it in another section." *Bates v. United States*, 522 U.S. 23, 29–30 (1997). Accordingly, the statutory scheme cannot be read to require an economic analysis as part of the determination process in Section 304(b) of ECPA.

The fact that the Section 304 of ECPA determination process does not require the Secretary to perform an economic analysis does not diminish the importance that the ASHRAE standards be technologically feasible and economically justified. However, it appears that Congress assumed that

these issues would be addressed by stakeholders in the development of the standard and through DOE's active participation in the ASHRAE process itself. The language of Section 307 of ECPA delineates DOE as one participant in the process, however DOE is not the ultimate decision maker regarding provisions of revisions to the ASHRAE standard.

Accordingly, for all of these reasons, DOE has determined that it is not required to perform an economic analysis as part of its determination process in Section 304 of ECPA.

We continue to use a scaling approach to building modeling, as opposed to the use of specific buildings. We believe that by using a scaling approach, we can assess the impact of building envelope changes over a broad range of building sizes. The size selection of the prototype used for scaling is near the median square footage for most building categories.

As in the Standards 90.1–1999 determination, the quantitative comparison of whole-building lighting requirements is the methodology used and we addressed space-by-space requirements and supplemental or additional lighting power allowances in our detailed textual analysis. This was an issue in the previous comparison of Standard 90.1–1989 and Standard 90.1–1999. 64 FR 46473. Standard 90.1–1999 and Standard 90.1–2004 have virtually identical additional lighting power allowance requirements, with the exception that the text of Standard 90.1–2004 includes clarification that the additional lighting power allowance for retail displays is based on the area of the specific display and not on the floor area surrounding the display. The difficulty in incorporating this into a quantitative analysis is obtaining data on the size of display areas. DOE has collected information on display areas with dedicated lighting systems from a sample of retail buildings in Richland, Kennewick, and Pasco, Washington. The results of this survey indicate that there is a wide range of additional lighting power allowance that would be considered appropriate under either the 1999 or 2004 editions, depending on the amount of display area. However, the results from this admittedly small survey indicate that the variation is correlated highly with the type of retail establishment (convenience store, department store, specialty store, etc). DOE does not know of any source of data that could be used to provide an overall weighting of the retail sector by these specific types and therefore has chosen not to include this information in the quantitative analysis.

We again considered comments to the analysis of the Standard 90.1–1999 determination that we should use DOE 2.1 as the basis of the energy simulations, and we also considered whether or not we should use the new EnergyPlus simulation software for this determination. In the interests of comparing this analysis with the analysis done previously for Standard 90.1–1999, we choose to continue to use the existing BLAST software tool. The use of EnergyPlus in this determination was rejected for three reasons. First, the previous analysis of Standard 90.1–1999 had been conducted in BLAST and DOE wished to use as similar a process as possible for this analysis. Second, DOE did not have a set of building prototypes in EnergyPlus that could have been used for this analysis. DOE did develop a set of prototypes, but these were not available until November 2008. Third, DOE believes that the use of BLAST (and the existing methodology) may facilitate public review of this analysis by interested stakeholders.

### C. Summary of the Comparative Analysis

We carried out both a broad quantitative analysis and a detailed textual analysis of the differences between the requirements and the stringencies in the 1999 and the 2004 editions.

#### 1. Quantitative Analysis

The quantitative comparison of energy codes was done using whole-building energy simulations of buildings built to each standard. We simulated seven representative building types in 11 representative U.S. climates. Note that only differences between requirements applied to new buildings were considered in this quantitative analysis. Changes in requirements in the 2004 edition that pertain to existing buildings are addressed in the detailed textual analysis. The simulations were based on a 15 zone building prototype used in previous DOE building research. Simulated Energy Use Intensities (EUI) for each zone were scaled to reflect variations in building size and shapes for each representative building type. Energy use intensities developed for each representative building type were weighted by total national square footage of each representative building type to provide an estimate of the difference between the national energy use in buildings constructed to both editions.<sup>1</sup>

<sup>1</sup> A more detailed explanation is located in the Standard 90.1–2004 Technical Support Document

Both the 2004 and 1999 editions address additions and renovations to existing buildings. Since DOE found insufficient data to permit us to accurately quantify the effects of these aspects of the standards, we chose not to address the impacts on existing buildings in this analysis.

The quantitative analysis of the energy consumption of buildings built to Standard 90.1–2004, as compared with buildings built to Standard 90.1–1999, indicates national source energy savings of approximately 13.9 percent of commercial building energy consumption. Site energy savings are estimated to be approximately 11.9 percent. These figures represent a conservative estimate of energy savings.

We also performed a detailed analysis of the differences between the textual requirements and stringencies of the two editions of Standard 90.1 in the scope of the Standard, the building envelope requirements, the building lighting and power requirements, and the building mechanical equipment requirements.

#### 2. Detailed Textual Analysis

The emphasis of our detailed requirement and stringency analysis was on looking at the specific changes that ASHRAE made in going from Standard 90.1–1999 to Standard 90.1–2004. ASHRAE publishes changes to their standards as addenda to the preceding standard and then bundles all the addenda together to form the next edition. ASHRAE processed 34 addenda to Standard 90.1–1999 to create Standard 90.1–2001. ASHRAE also processed 31 addenda to Standard 90.1–2001 to create Standard 90.1–2004. All told, 65 addenda were evaluated by DOE in preparing this Determination.

Each standard has multiple ways to demonstrate compliance. We compared the prescriptive requirements for each standard as we believe that this approach represents the most common approach to using the standard in question for most buildings.<sup>2</sup>

#### D. Determination Statement

The Department's review and evaluation found that there are significant differences between the 1999 edition and the 2004 edition. Our overall conclusion is that the 2004 edition will improve the energy efficiency of commercial buildings. However, we found a number of

available at [http://www.energycodes.gov/implementation/determinations\\_com.stm](http://www.energycodes.gov/implementation/determinations_com.stm).

<sup>2</sup> A more detailed explanation is located in the Standard 90.1–2004 Technical Support Document available at [http://www.energycodes.gov/implementation/determinations\\_com.stm](http://www.energycodes.gov/implementation/determinations_com.stm).

changes in textual requirements and stringencies that will decrease energy efficiency. Overall, we concluded the changes in textual requirements and stringencies are “positive,” in the sense that they will improve energy efficiency in commercial construction. Our quantitative analysis shows, nationally, new building efficiency should improve by almost 13.4 percent, looking at source energy, and by almost 11.1 percent, when considering site energy. While both the 1999 and 2004 edition cover existing buildings, the reduction in lighting power allowance and the relatively high frequency of lighting

retrofits in commercial buildings should improve the efficiency of existing building stock. DOE has therefore concluded that Standard 90.1–2004 receive an affirmative determination under Section 304(b) of the Energy Conservation and Production Act.

**II. Results of Quantitative Analysis**

Tables 1 and 2 show the aggregated energy use and associated energy savings by building type for the seven categories analyzed and on an aggregated national basis for the 1999 and 2004 editions, respectively. For each edition the building floor area

weight, used to calculate the building energy or cost use intensity, is presented. The electric and gas building energy use intensity is presented for each type analyzed, electric being predominate in all types. Site energy use intensities ranged from over 125 thousand Btu per square foot annually for the Food Service type to approximately 27 thousand Btu per square foot annually for the Warehouse type. Source energy use intensities have similar ranges but vary in quantitative order from site energy intensities. Building energy cost intensities are also presented.

**TABLE 1—MODELED ENERGY USE INTENSITY BY BUILDING TYPE—1999 EDITION**

Building type	Building type floor area weight	Whole building EUI data for building population (kBtu/sf-yr or \$/sf-yr)				
		Electric EUI	Gas EUI	Site EUI	Source EUI	\$UI
Assembly .....	0.061	54.68	27.39	82.08	203.23	1.62
Education .....	0.155	31.33	16.85	48.18	117.72	0.96
Food Service .....	0.035	97.40	28.32	125.72	339.25	2.68
Lodging .....	0.091	40.93	11.53	52.46	142.16	1.14
Office .....	0.189	42.66	4.89	47.55	140.25	1.11
Retail .....	0.277	46.07	3.56	49.63	149.54	1.18
Warehouse .....	0.191	18.63	8.65	27.29	68.49	0.56
National .....	.....	39.75	9.89	49.64	136.59	1.09

**TABLE 2—MODELED ENERGY USE INTENSITY BY BUILDING TYPE—2004 EDITION**

Building type	Building type floor area weight	Whole building EUI data for building population (kBtu/sf-yr or \$/sf-yr)				
		Electric EUI	Gas EUI	Site EUI	Source EUI	\$UI
Assembly .....	0.061	47.13	28.18	75.32	180.24	1.45
Education .....	0.155	27.12	16.94	44.06	104.52	0.86
Food Service .....	0.035	89.33	28.99	118.32	314.51	2.49
Lodging .....	0.091	31.82	13.33	45.15	115.37	0.93
Office .....	0.189	37.49	4.88	42.37	123.90	0.98
Retail .....	0.277	38.71	3.57	42.28	126.30	1.00
Warehouse .....	0.191	14.30	8.29	22.59	54.40	0.45
National .....	.....	33.67	10.07	43.75	117.60	0.94

Table 3 presents the estimated percent energy savings between the 1999 and 2004 editions. Overall, considering those differences that can be reasonably quantified, the 2004 edition will increase the energy efficiency of

commercial buildings. Numbers in Table 3 represent percent energy savings, thus negative numbers represent increased energy use. There is an increase in gas EUI for all building types except warehouse. This is

attributable to the decrease in lighting power density in all building types, which leads to both an increase in cooling energy and an increase in heating energy.

**TABLE 3—ESTIMATED PERCENT ENERGY SAVINGS WITH 1999 EDITION—BY BUILDING TYPE**

Building type	Building type national wt.	Percent savings in whole building energy use intensity				
		Electric EUI	Gas EUI	Site EUI	Source EUI	\$UI
Assembly .....	0.061	13.8	-2.9	8.2	11.3	11.0
Education .....	0.155	13.4	-0.5	8.5	11.2	10.9
Food Service .....	0.035	8.3	-2.4	5.9	7.3	7.1
Lodging .....	0.091	22.3	-15.6	13.9	18.8	18.4
Office .....	0.189	12.1	0.1	10.9	11.7	11.6
Retail .....	0.277	16.0	-0.3	14.8	15.5	15.4
Warehouse .....	0.191	23.2	4.2	17.2	20.6	20.2
National .....	.....	15.3	-1.8	11.9	13.9	13.7

### III. Discussion of Detailed Textual Analysis

All 65 addenda processed by ASHRAE in the creation of Standard 90.1–2004 from Standard 90.1–1999

were evaluated by DOE for their impact on energy efficiency. DOE determined whether that addenda would have a positive, neutral, or negative impact on overall building efficiency. Table 4 shows the number of positive and

negative changes for each section of Standard 90.1. Note that number of changes listed adds up to 73, indicating that some addenda covered more than one section.

TABLE 4—RESULTS OF TEXTUAL ANALYSIS BY SECTION OF STANDARD 90.1

Section of standard	Number of changes made to section	Number of positive (energy saving) changes	Number of neutral (no energy saving) changes	Number of negative (energy increasing) changes
Title, Purpose, and Scope .....	0	0	0	0
Definitions .....	2	0	2	0
Administration and Enforcement .....	3	0	3	0
Envelope .....	11	11	8	2
HVAC Equipment and Systems .....	27	7	16	5
Service Water Heating .....	3	0	3	0
Power .....	1	0	1	0
Lighting .....	14	5	9	0
Energy Cost Budget .....	5	0	5	0
Normative and Informative References .....	7	0	7	0
Overall .....	<sup>2</sup> 73	13	54	7

<sup>1</sup> The impact of the single positive envelope change greatly outweighs the impact of the two negative envelope changes.

<sup>2</sup> The overall number of changes is more than the total number of addenda due to the fact that some addenda covered more than one section of the standard.

The results of the textual analysis indicate that the majority of changes (54 of the total of 73 listed) were neutral. These include editorial changes, changes to reference standards, changes to alternative compliance paths, and other changes to the text of the standard that may improve the usability of the standard, but do not generally improve or degrade the energy efficiency of buildings. There were 13 changes that were evaluated as having a positive impact on energy efficiency and 7 changes that were evaluated as having a negative impact on energy efficiency.

The 7 negative impacts on energy efficiency are:

1. Reduction of slab on grade insulation requirements for northern U.S. and Alaska. (1999 to 2001 edition)
2. Relaxation of heated slab on grade insulation requirement in northern U.S. and Alaska. (1999 to 2001 edition)
3. Reduction of motorized damper leakage requirements for most of the continental U.S. (1999 to 2001 edition)
4. Removal of requirements for motorized dampers on small-medium system HVAC systems. (1999 to 2001 edition)
5. Removal of performance requirements for balancing to 10% of design flow rates. (1999 to 2001 edition)
6. Relaxed requirements limiting volume of air reheated or re-cooled in supply air systems. (1999 to 2001 edition)
7. Expansion of Exhaust Air Energy Recovery exceptions to additional

commercial kitchen hoods. (2001 to 2004 edition)

Note that the majority of negative impacts are associated with addenda processed in the creation of the 2001 edition. These addenda were the main reason that a formal determination was not done on Standard 90.1–2001.

The 13 positive impacts on energy efficiency include:

1. Removed explicit allowance for supply air into non-occupied isolation areas. (1999 to 2001 edition)
2. Limitations of the use of dampers in closed circuit cooling towers in place of water bypass valves and piping. (1999 to 2001 edition)
3. Additions of insulation requirements for buried ductwork. (1999 to 2001 edition)
4. Mapping of envelope requirements to new climate zones (2001 to 2004 edition), which led to increased stringency of envelope requirements.
5. Mapping of economizer requirements to new climate zones (2001 to 2004 edition), which led to greater geographic expansion of economizer requirements.
6. Addition of requirements for ventilation fan controls. (2001 to 2004 edition)
7. Lowered size range for part-load fan power limitation. (2001 to 2004 edition)
8. Addition of requirements for heat pump pool heaters. (2001 to 2004 edition)
9. Complete replacement of interior lighting power density allowances. (2001 to 2004 edition)

10. Revised exterior lighting power density allowances. (2001 to 2004 edition)

11. Addition of occupancy sensor requirements for classrooms, meeting, and lunch rooms. (2001 to 2004 edition)

12. Lower retail sales lighting power allowance. (2001 to 2004 edition)

13. New exit sign wattage requirement. (2001 to 2004 edition)

Note that the majority of positive impacts are associated with addenda processed to create the 2004 edition. Overall, the positive impacts outweigh the negative impacts in a simple numerical comparison.

### IV. Filing Certification Statements With DOE

#### A. Review and Update

On the basis of today's DOE determination, each State is required to certify to DOE that it reviewed and updated, as necessary, the provisions of its commercial building code to meet or exceed the provisions of the 2004 edition. (42 U.S.C. 6833(b)(2)(B)(i)) This action must be taken not later than two years from the date of today's notice, unless an extension is provided.

The Department recognizes that some States do not have a State commercial building code or have a code that does not apply to all commercial buildings. If local building codes regulate commercial building design and construction rather than a State code, the State must provide for review and update of those local codes to meet or

exceed the 2004 edition. States may base their certifications on reasonable actions by units of general purpose local government. Each such State must still review the information obtained from the local governments and gather any additional data and testimony for its own certification.

States should be aware that the Department considers high-rise (greater than three stories) multi-family residential buildings and hotel, motel, and other transient residential building types of any height as commercial buildings for energy code purposes. Consequently, commercial buildings, for the purposes of certification, would include high-rise (greater than three stories) multi-family residential buildings and hotel, motel, and other transient residential building types of any height.

#### B. Certification

Section 304(b) of ECPA requires each State to certify to the Secretary of Energy that it has reviewed and updated the provisions of its commercial building code regarding energy efficiency to meet or exceed the 2004 edition. The certification must include a demonstration that the provisions of its commercial building energy code regarding energy efficiency meet or exceed Standard 90.1–2004. If a State intends to certify that its commercial building code already meets or exceeds the requirements of Standard 90.1–2004, the State should provide an explanation of the basis for this certification, e.g., Standard 90.1–2004 is incorporated by reference in the State's building code regulations. The chief executive of the State (e.g., the Governor) or a designated State official, such as the Director of the State energy office, State code commission, utility commission, or equivalent State agency having primary responsibility for commercial building codes, should provide the certification to the Secretary. Such a designated State official could also provide the certifications regarding the codes of units of general purpose local government based on information provided by responsible local officials.

#### C. Request for Extensions

Section 304(c) of ECPA requires that the Secretary permit an extension of the deadline for complying with the certification requirements described above if a State can demonstrate that it has made a good faith effort to comply with such requirements and that it has made significant progress toward meeting its certification obligations. (42 U.S.C. 6833(c)) Such demonstrations could include one or more of the

following: (1) A plan for response to the requirements stated in section 304; or (2) a statement that the State has appropriated or requested funds (within State funding procedures) to implement a plan that would respond to the requirements of Section 304 of ECPA.

#### D. Submittals

When submitting any certification documents in response to this notice, the Department requests that the original documents be accompanied by one copy of the same.

#### V. Approval of the Office of the Secretary

The Secretary of Energy has approved publication of today's determination.

Issued in Washington, DC, on December 12, 2008.

**Steven G. Chalk,**

*Deputy Assistant Secretary for Renewable Energy, Office of Technology Development, Energy Efficiency and Renewable Energy.*

[FR Doc. E8–30975 Filed 12–29–08; 8:45 am]

**BILLING CODE 6450–01–P**

### DEPARTMENT OF ENERGY

#### Federal Energy Regulatory Commission

[Docket No. CP07–417–005]

#### Texas Gas Transmission, LLC; Notice of Amendment

December 19, 2008.

Take notice that on December 15, 2008, Texas Gas Transmission, LLC (Texas Gas), 3800 Frederica Street, Owensboro, Kentucky 42301, filed an amendment, pursuant to section 7(c) of the Natural Gas Act, to its existing authorization issued to Texas Gas by the Commission on May 2, 2008.<sup>1</sup> Specifically, Texas Gas is requesting authorization to construct, own and operate a second directional drill crossing of the Little Red River in White County, Arkansas, utilizing the original 36-inch pipeline design already authorized, all as more fully set forth in the application which is on file with the Commission and open for public inspection. This filing is available for review at the Commission in the Public Reference Room or may be viewed on the Commission's Web site at <http://www.ferc.gov> using the "eLibrary" link. Enter the docket number excluding the last three digits in the docket number field to access the document. For assistance, please contact FERC Online Support at

<sup>1</sup> *Texas Gas Transmission, LLC*, 123 FERC ¶ 61,118 (2008).

[FERCOnlineSupport@ferc.gov](mailto:FERCOnlineSupport@ferc.gov) or toll free at (866) 208–3676, or for TTY, contact (202) 502–8659.

Any questions regarding this Application should be directed to Kathy D. Fort, Manager of Certificates and Tariffs, Texas Gas Transmission, LLC, 3800 Frederica Street, Owensboro, Kentucky 42301 or by telephone at 270–688–6825 or fax at 270–688–5871.

Pursuant to section 157.9 of the Commission's rules, 18 CFR 157.9, within 90 days of this Notice the Commission staff will either: complete its environmental assessment (EA) and place it into the Commission's public record (eLibrary) for this proceeding, or issue a Notice of Schedule for Environmental Review. If a Notice of Schedule for Environmental Review is issued, it will indicate, among other milestones, the anticipated date for the Commission staff's issuance of the final environmental impact statement (FEIS) or EA for this proposal. The filing of the EA in the Commission's public record for this proceeding or the issuance of a Notice of Schedule for Environmental Review will serve to notify federal and state agencies of the timing for the completion of all necessary reviews, and the subsequent need to complete all federal authorizations within 90 days of the date of issuance of the Commission staff's FEIS or EA.

There are two ways to become involved in the Commission's review of this project. First, any person wishing to obtain legal status by becoming a party to the proceedings for this project should, on or before the below listed comment date, file with the Federal Energy Regulatory Commission, 888 First Street, NE., Washington, DC 20426, a motion to intervene in accordance with the requirements of the Commission's Rules of Practice and Procedure (18 CFR 385.214 or 385.211) and the Regulations under the NGA (18 CFR 157.10). A person obtaining party status will be placed on the service list maintained by the Secretary of the Commission and will receive copies of all documents filed by the applicant and by all other parties. A party must submit 14 copies of filings made with the Commission and must mail a copy to the applicant and to every other party in the proceeding. Only parties to the proceeding can ask for court review of Commission orders in the proceeding.

However, a person does not have to intervene in order to have comments considered. The second way to participate is by filing with the Secretary of the Commission, as soon as possible, an original and two copies of comments in support of or in opposition to this project. The Commission will