Northwest Power and Conservation Council

February 8, 2005

DECISION MEMORANDUM

TO: Council Members

FROM: John Shurts
Charlie Grist

SUBJECT: Model Conservation Standard for new commercial buildings

PROPOSED ACTION: Adopt into the power plan the model conservation standard for new commercial buildings that the Council released in December for public review and comment. The proposed standard is as follows:

> The model conservation standard for new commercial buildings is as follows: New commercial buildings and existing commercial buildings that undergo major remodels or renovations are to be constructed to capture savings equivalent to those achievable through constructing buildings to the better of 1) the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. (ASHRAE) Standard 90.1-2001 (I-P Version) — Energy Standard for Buildings Except Low-Rise Residential Buildings (IESNA cosponsored; ANSI approved; Continuous Maintenance Standard), I-P Edition and addenda a through am or subsequent revision to ASHRAE Standard 90.1, or 2) the most efficient provisions of existing commercial building energy standards promulgated by the states of Idaho, Montana, Oregon and Washington, so long as those provisions reflect geographic and climatic differences within the region and other appropriate considerations, and are designed to produce power savings that are cost-effective for the region and economically feasible for customers, taking into account financial assistance made available from Bonneville.

SIGNIFICANCE: This is the last substantive piece of the Fifth Power Plan, completing the Model Conservation Standards.

BUDGETARY/ECONOMIC IMPACTS: None by itself. If state and local code-setting jurisdictions decide to revise their building code standards consistent with this proposed mcs, there would be both costs and energy savings involved. The staff recommends this standard in part on the ground that it is cost-effective. The conservation appendices to the power plan have information on costs and savings; the power division staff can provide additional information if needed.

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BACKGROUND:

- The Power Act requires that the power plan have model conservation standards for, among other things, new and existing structures. See Sections 4e(3)(A), 4f(1)(A). The plan has to have a new commercial building mcs in some form, and it always has.

- The Power Act also requires that model conservation standards "reflect geographic and climatic differences within the region and other appropriate considerations, and shall be designed to produce all power savings that are cost-effective for the region and economically feasible for consumers . . . ." The Council is to adopt the model conservation standards into the plan "after consultation, in such manner as the Council deems appropriate, with the Administrator, States, and political subdivisions, customers of the Administrator, and the public." Section 4f(1).

- The draft power plan included a particular proposed model conservation standard for new commercial buildings, based on a reference standard from the American Society of Heating, Refrigerator and Air-Conditioning Engineers (known as ASHRAE). The draft also recognized that the proposed commercial building mcs did not appear to capture all the cost-effective savings possible.

- During the time of public comment on the draft mcs, the power division staff (Tom Eckman and Charlie Grist) received information -- from a report assessing the status of the mcs that the staff had asked for earlier but which came in after the draft was out, from an oral comment at a consultation, and from their own reflections on what information we have -- that indicated the proposed commercial building mcs in the draft power plan did not satisfy the Act's requirements to achieve all cost-effective power savings. In addition, commercial building energy standards in the region already exceeded the proposed ASHRAE-based standard. At least in these jurisdictions, exceeding the ASHRAE standards was considered feasible and cost-effective by the state or local officials who adopted these standards. The proposed commercial building standard in the draft power plan was not a "model"; the more likely model(s) were already at work in the region.

- For this reason, the power division staff recommended that the Council revise the new commercial building mcs in the final power plan. The approach the staff recommended would use the best standards in the region as the model that all jurisdictions in the region should aspire to, but would also recognize that economic and climactic differences may require some modification of these standards in certain jurisdictions -- and the Council would pledge itself to help code-setting jurisdictions find the right elements and standard for that locale. These concepts are reflected in the standard ultimately released for public review and recommended for adoption here.

- The Council was concerned that this more stringent standard had not been the subject of public review, comment and consultation as required by Section 4f(1) of the Power Act. So, the Council held up a decision on this one model conservation standard -- the only part of the power plan not finalized -- and sought comment from specific entities and the

public through the end of January, the method the Council deemed appropriate for consultation on this proposed mcs.

- The Council received six comments on the proposed new commercial building mcs. Attached at the end of this memorandum is a summary of those comments. The comments run from: support of the proposed mcs; concern that the standard is not sufficiently strict; concern about the ambiguity and indefinite nature of the standard; concern that standards in general are not sufficiently flexible to allow for innovative design; and a statement from the Idaho Governor reserving judgment as to whether any models standards will be acceptable to the State of Idaho.

- The time has come for a Council decision on a commercial building mcs for the power plan. The Council may (1) adopt the standard now proposed, which is the recommendation of the staff; (2) revert back to and adopt the standard proposed in the draft power plan -- although this would require a decision that this lesser standard is as good as the Council can achieve in terms of the combination of cost-effectiveness and economic feasibility; or (3) adopt a modified version of the proposed commercial building mcs, such as to make it more stringent or to make it more definite. If the Council were to settle on a standard that is substantially modified, this would require further public review. The Council does not have the option of not adopting a commercial building mcs, of having no commercial building mcs in the power plan.

- Model conservation standards are *not* self-implementing. State and local jurisdictions would have to make voluntary, affirmative decisions to adopt them, or any other building standards relating to energy conservation. The Power Act gives no enforceable legal meaning to the mcs vis-à-vis state and local jurisdictions. These standards are truly "model" in that sense.

- The power plan has legal meaning or legal weight only with regard to Bonneville, and it is through the Bonneville link that the Act does include the one potential implementation/enforcement mechanism for the mcs -- the possibility of a Bonneville surcharge on customers in jurisdictions that have not implemented standards that achieve energy savings comparable to the mcs. BUT, the surcharge is not self-implementing, nor is it committed wholly to Bonneville decision. Section 4f(2) allows for the possibility of an mcs-related surcharge only upon a majority vote of the Council to recommend that Bonneville adopt such a surcharge. The Fifth Power Plan does not have a provision for a surcharge. Voting to adopt the proposed commercial building mcs (or any other commercial building mcs) does not constitute approval of a recommendation for a surcharge to accompany that mcs.

ANALYSIS: The staff recommends the adoption of the new commercial building model conservation standard set forth at the beginning of the memorandum. The staff did not receive comments or other information indicating that the more strict standard now proposed is not justified on the standards in the Act. Certain commenters urged the Council to adopt a more strict standard, but the staff believes the current standard -- calling for a goal of matching the "best of the best" in the region, while being sensitive to local variation -- is what is viable under the standards of the Act on the basis of the information the Council has at this time. The staff also understands the commenters' concerns about the indefinite nature of the standard. It will

take some further time and effort to determine what is the best standard for any particular jurisdiction, out of the best regional standards with any appropriate local variation. The staff believes this will be workable in practice, and it may turn out that one particular standard can be devised as a suitable model for all jurisdictions in the region.

ALTERNATIVES: Described above. The Council might revert back to the standard originally proposed in the draft power plan. Or, it might consider a modified version of the currently proposed standard, especially to make it more strict (as requested in certain comments), or more definite in some fashion (to respond to concerns about its ambiguity and indefinite nature).

ATTACHMENTS: Attached is a summary of the comments the Council received on the proposed commercial building mcs.

Summary of Comments Received on MCS Recommendation for Commercial New Buildings

Source	Comment	Received
Dirk Kempthorne, Governor of Idaho	Proposed MCS for residential takes conservation to a higher plain than the State Legislature and building industry have supported to date. While Idaho is prepared to participate in review of regional building standards, it reserves judgment on whether any models standards will be acceptable to the state of Idaho.	February 3, 2005
Jeff Johnson, New Buildings Institute	Proposed standard for new buildings is not stringent enough. Cost-effective savings can be achieved at efficiency levels beyond NSI/ASHRAE/IESNA Standard 90.1-2001 or the more stringent local codes. Recommends a methodology for assessing code provisions that accounts for tradeoffs between gas and electric impacts at the source. New buildings programs should focus on "delivered performance" by incorporating efficiency measures, design strategies and controls, and improving the installation, operation and maintenance of energy systems and efficiency measures.	January 31, 2005
Elizabeth Klumpp, Washington CTED	Encourage Council to adopt MCS for new buildings that reach beyond what has been proposed. Include recent Washington code (adopted November 2004 and effective July 2005) as one that qualifies as "existing code". Include City of Seattle in the list of existing codes. Highlights several specific code provisions which should be improved across the region including; ventilation distribution systems, variable air volume zone fans, small fan motors in series-powered fan boxes, building commissioning, and potentially windows.	January 31, 2005
Dennis Zimmer, Electrical Engineer	Mostly poses questions about the MCS, the purpose of Council adoption of MCS, how terms of the Act are defined. Thinks codes can be a barrier to energy efficiency, because they lag cutting-edge practice. Recommends allowing building designers "documented flexibility" to employ newest and best technologies.	January 4, 2005
Tom Foley,	Agrees with concept. Identifies ambiguous language.	December 23, 2004
Tom Bender, Sustainable Architecture and Economics	Agrees with "best-of-existing" approach. Does not like the idea of having to look at more than one standard. Urges having the economic feasibility based on higher, rather than current economic feasibility costs.	December 22, 2004