

1/23/80

Introduced by: R.R. "Bob" Greive
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Proposed No. 80-111

MOTION NO. 4715

1
2 A MOTION concerning implementation of
3 the King County Energy Code, specifying
4 work items to be accomplished prior to
5 the effective date of the code, the
6 process for code evaluation and revision,
7 any specific items for investigation
8 in anticipation of eventual update.

9 WHEREAS, the King County Council adopted energy conservation
10 policies in December of 1976 (Motion 2787), and added these
11 policies to the Comprehensive Plan of King County in April 1978
12 (Ordinance 3649) which called for the development of an Energy
13 Conservation Code for new construction, working with other
14 jurisdictions on conservation standards and promoting the use
15 of renewable energy resources, and

16 WHEREAS, the King County Council in November of 1978 passed
17 Motion 3804 calling upon the King County Executive and the
18 King County Building Code Advisory and Appeals Board to review
19 and present the Seattle-King County Energy Code to the Council
20 for adoption and implementation,

21 WHEREAS, the King County Building Code and Advisory and
22 Appeals Board forwarded its recommendations on code modifications
23 to the Council and the Executive in June 1979, and

24 WHEREAS, an ordinance for Energy Code adoption was submitted
25 to the Council by the Executive in September of 1979, and

26 WHEREAS, it is the intent of the Council that the adopted
27 Energy Code (Ordinance 79-1215) not be a static document, but
28 that work should continue in order to ease its implementation and
29 periodically update the standards with the best information availa-
30 ble for cost effective energy conservation in the region.

31 NOW THEREFORE, BE IT MOVED by the Council of King County:

32 1. The King County Executive shall submit a work plan to
33 the Council by March 1, 1980 for presenting a set of workshops
for the building design and construction industry on code
requirements.

1 2. The Building and Land Development Division shall be
2 adequately staffed at the time the code goes into effect so that
3 permit processing time and backlog are not adversely affected,
4 but achieve a thirty day or less processing time.

5 3. The Energy Code shall be reviewed by the County and
6 outside industry experts and groups after it have been effective
7 for one year. A report shall be presented to the County Council
8 no later than December 31, 1981 evaluating the Energy Code's
9 implementation and making recommendations for needed revisions
10 as set forth in the Energy Code Ordinance (79-1215). In antici-
11 pation of this review, the County Executive shall monitor the
12 effects of the Code on permit processing, and shall present a
13 recommended work plan to the Council by March 1, 1980 for develop-
14 ing, along with an analysis of their energy savings potential
15 and economic effects, the following:

- 16 a. Reduced infiltration standards for new construction,
- 17 b. Building energy performance standards with energy budgets
18 that meet or exceed Energy Code requirements, or those
19 mandated at the federal or state level,
- 20 c. Energy conservation retrofit standards for existing
21 structures,
- 22 d. More stringent cost-effective standards consistent with
23 rising energy prices and appropriate end uses by
24 energy source,
- 25 e. Simplified standards and incentives for optimum solar
26 design,
- 27 f. Energy Efficient Design Guide for public use, particu-
28 larly for residential construction,
- 29 g. Legal protection for solar access, and
- 30 h. Lighting power budget determination by the unit power
31 density procedure as set forth by the Illuminating Engi-
32 neering Society (IES) of North America.

1 4. The Building and Land Development Division, with the
2 assistance of the King County Building Code Advisory and Appeals
3 Board, shall review the 1979 Uniform Mechanical Code and other
4 appropriate uniform codes, such as standards developed by the
5 Sheet Metal and Air Conditioning Contractors National Association
6 (SMACNA), the American Society of Heating, Refrigerating and
7 Air-Conditioning Engineers (ASHRAE), the American National
8 Standards Institute (ANSI), the American Society of Mechanical
9 Engineers (ASME), the American Society for testing and materials
10 (ASTM) and others for recommendations to the King County Council
11 by June 2, 1980 for revisions to the County's structure related
12 codes.

13 5. The Design and Construction Practices Manual shall
14 include the general requirements set forth in the Energy Code
15 Ordinance (79-1215) as well as specific discussions for the
16 following:

- 17 a. A clear distinction between "clerestory" and "skylight"
18 so that designers can use them easily according to their
19 thermal and light-giving properties.
- 20 b. A definition of "fenestration" and an acceptable
21 method for determining shading coefficients of
22 exterior shading devices.
- 23 c. A clarification of the thermal properties and behavior
24 of underground walls to give designers freedom in using
25 them with credit given for their characteristics.
- 26 d. Clarifications of the meanings and design impacts from
27 the use of the terms "cold storage cooler," "heated slab,"
28 "unheated slab," and "refrigeration."
- 29 e. Definitions for "direct gain system" and "indirect gain
30 system" with a clarification of how the two systems
31 work, associated thermal mass materials for storage
32 (water, masonry, etc.), their characteristics, and
33

1 design credits accounting for their differences in
2 contributing to "average temperature" and "temperature
3 fluctuation" (swing) on a given day.

4 f. The factors which contribute to the human comfort zone,
5 including temperature, humidity, heat flow, etc. and
6 the role played by humidifiers and dehumidifiers.

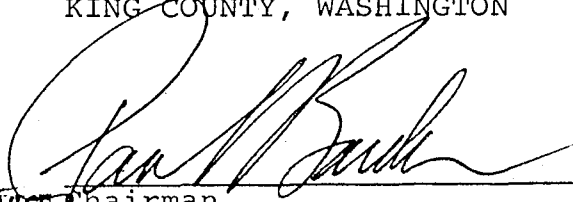
7 g. The flexibility of solar orientation and associated in-
8 sulation and solar fraction quantities to provide
9 design trade-offs in siting for solar gain.

10 h. The distinctions between "simulate" and "simulation"
11 (Subsection 5305.03 (b)) as used in the Energy Code and
12 the words "model" and "modeling."

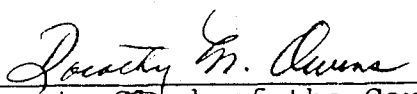
13 i. Life cycle dollar savings calculation procedures with
14 specific reference to the energy cost benefits in
15 British Thermal Units (BTUs) and dollars in using
16 optimum mixes of conservation and solar passive invest-
17 ments in new construction.

18 PASSED this 4th day of February, 1980.

19 KING COUNTY COUNCIL
20 KING COUNTY, WASHINGTON

21 
22
23 VICE Chairman

24 ATTEST:

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26 
27 Deputy Clerk of the Council