2021 WSEC-C - Editorial Comments & Questions EPAC Proposals being considered for Council Meeting on 9/15/2023 Version: 2023-09-13 By: Eric Vander Mey (ericv@rushingco.com), 206-321-1677

See below for editorial comments for the proposed code language for code change proposals to be reviewed at the Council Committee Meeting on 9/15/2023.

Comments are based on the Com_energy_draft_code_text_091223 file that was posted for the Council Meeting:

As currently proposed if Proposals 036B/037 and 037 were to move forward to change the prescriptive requirements of the WSEC-C for service hot water heating systems it does not appear that this was analyzed for the energy efficiency or carbon emissions reductions for process service hot water heating systems.

Per C401.2.2 it is clear that all energy using equipment for manufacturer, industrial, or commercial processes have to comply with Section C404.2. So the service hot water heating system serving any process loads in these facilities need to be 50% electric heat pump per the current version of 2021 WSEC-C.

Comment A: Since these process service hot water systems are not subject to C406 per C401.2.2 the additional C406 credits options proposed will not work for service hot water systems that select fossil fuels as the energy source.

Will this be addressed by the Council to maintain the stringency of the 2021 WSEC-C or will an exception be added to clarify process loads?

Comment B: Electric heat is often also used as an energy source for these process service hot water production. The proposals as written do not allow use of electric resistance heat in C404.2.1 but now allow fossil fuels.

Will this be addressed by the Council? Current 2021 WSEC-C Language for Reference

SECTION C401 GENERAL

C401.1 Scope. The provisions in this chapter are applicable to commercial *buildings* and their *building sites*.

C401.2 Application. Commercial buildings shall comply with one of the following:

- 1. Prescriptive Compliance. The prescriptive compliance option requires compliance with Sections C402 through C406, and Sections C408, C409, C410, C411, and C412.
- 2. Total Building Performance. The total building performance option requires compliance with Section C407.
- 3. When adopted by the local jurisdiction, the requirements of Appendix F, Outcome-Based Energy Budget, Sections C408, C409, C410, C411, C412 and any specific section in Table C407.2 as determined by the local jurisdiction. The Proposed Total UA of the proposed building shall be no more than 20 percent higher than the Allowed Total UA as defined in Section C402.1.5.

C401.2.1 Application to existing buildings. Additions, alterations, repairs, and changes of space conditioning, occupancy, or use to existing buildings shall comply with Chapter 5.

C401.2.2 Application to process equipment. Energy using equipment used by a manufacturing, industrial, or commercial process other than for conditioning spaces or maintaining comfort and amenities for the occupants shall comply with Section C403.3.2, Tables C403.3.2(1) through (16) inclusive, Sections C403.3.4.1 through C403.3.4.3, C403.7.7, C403.9.2.1, C403.10.3, C403.11.2, C403.11.3, C404.2, Table C404.2, and Sections C405.8, C410, and C412.

PROCESS APPLICATION. A manufacturing, industrial, or commercial procedure or activity where the primary purpose is other than conditioning spaces and maintaining comfort and amenities for the occupants of a building.