

*Appeal for processing
PCF 1617*

- Canadian Home Builders' Association Comments on Respondent Remarks
- Second Appeal Hearing Session, September 22, 2021



Thank you Mr. Chair and good day everyone.

For the record, my name is Kathleen Maynard, and I am the Senior Director of Building Innovation at the Canadian Home Builders' Association. I represent CHBA as a key stakeholder member of the Canadian Commission on Building and Fire Codes. I will be speaking in response to the remarks that were made by the chairs of the Standing Committee on Energy Efficiency and the Standing Committee on Housing and Small Buildings at the September 1, 2021 appeal hearing session in relation to CHBA's appeal on the proposed change PCF 1617 – Tiered Energy Performance Compliance. We appreciate the opportunity to do so, and thank the Appeal Committee for allowing us the time today.

Also on the line from CHBA is Frank Lohmann, our Director of Building Science, who will also speak to some of the information we heard today, and Jack Mantyla and Liz Wynder, who are available to answer questions.

Outline

- Respondent general remarks
 - The 60-day appeal period
 - Outcomes out of scope
 - Policies, procedures and precedents
- Respondent remarks on the aspects of the appeal
 - Cross-committee coordination
 - Airtightness testing
 - Impact analysis
- Clarification and conclusion



Reference document 67: Respondent submission notes as presented September 1, 2021, A. Pride.

Reference document 68: SC-HSB Brief presented September 1, 2021, M. Brown.

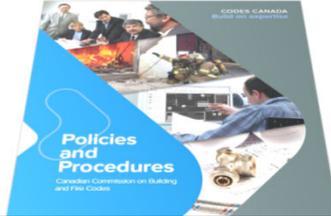
I will be commenting on the remarks made by the respondent chairs as documented in their submission notes—first on the general preamble remarks, and then on the respondents' remarks on the three aspects of the process appeal—cross-committee coordination, airtightness testing, and impact analysis.



General remarks

Respondent general remarks

- The 60-day appeal period
- Outcomes out of scope
- Policies, procedures and precedents



Reference document 67: Respondent submission notes as presented September 1, 2021, A. Pride.

In the next few slides I'll provide CHBA's comments on general remarks made by Mr. Pride in the preamble of his submission, which included the following assertions:

- That CHBA changed its appeal, and that the appeal is outside of the 60-day time limit
- That the outcomes CHBA is seeking are out of scope for the appeal
- That SC-EE and SC-HSB follow all policies and procedures, and followed precedence when the policies and procedures did not suffice



The 60-day appeal period

Respondent remarks

- Based on the Appeal Hearing Notice, the CHBA subsequently modified their appeal, and directed it to the procedural actions taken in the development of PCF 1617 by the Standing Committee on Energy Efficiency (SC-EE) and the Cross Committee Coordination with the Standing Committee on Housing and Small Buildings (SC-HSB).
- We note that the appeal is based on procedural actions taken more than 60 days prior to the date of the first appeal notice.

CHBA comments

- The Deputy Chair asked CHBA if we would be comfortable with the appeal being considered as on an action of the Standing Committee on Energy Efficiency—we agreed to this in the interest of saving time

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Reference document 67: Respondent submission notes as presented September 1, 2021, A. Pride.

Reference document 24: Email from NRC noting the 30-day extension and changing the appeal to SC's actions

Reference document 28: Email from NRC noting the date of the attempted resolution

We would like to clarify as to how this appeal came to be on the actions of the standing committees.

CHBA submitted this appeal in March on the action of the Executive Committee in approving the forwarding of PCF 1617 to post-public review by the provinces and territories without having resolved significant outstanding code development process issues.

Once we submitted the appeal, we worked with the Acting Deputy Chair to try and resolve the process concerns. At the outset, the Acting Deputy Chair requested an extension of the 30-day time limit to resolve the appeal without a hearing. CHBA accepted this open-ended extension of the 30-day resolution period in good faith, hoping that, for example, the SC-HSB would continue its work on cross-committee coordination in the meantime. (Ultimately, the extension lasted 120 days, during which the standing committees did not complete the outstanding work.)

As the CCBFC Chair noted in his introductory remarks at the first session of the appeal hearing, CHBA was asked (on June 30, 2021) if we would be comfortable with our appeal being considered as on the actions of the Standing Committee on Energy Efficiency, in which case the appeal would still be heard outside of the 60-day period, and the Executive Committee would be able to serve as the Appeal Committee. CHBA accommodated this request in the interest of saving the time it would have taken otherwise to strike a separate, independent appeal committee. In our view, this was a reasonable request as we worked toward resolution.



Outcomes out of scope

Respondent remarks

- *Further, the outcomes sought by the CHBA are or may result in technical changes which are out of scope for an appeal.*

CHBA comments

- The appeal is about the process. The outcome we are seeking is that the standing committees finish their job with respect to PCF 1617 before the PCF is put before CCBFC for approval.
- This appeal is not on the results of completing this work. Completing the process may revise changes or produce new changes, or not, as appropriate.

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Reference document 67: Respondent submission notes as presented September 1, 2021, A. Pride.

The respondent stated that the outcomes sought by CHBA might result in technical changes, which are out of scope for an appeal.

The appeal we have submitted is about code development processes and applying due diligence. The outcome we are seeking is that the standing committees finish their job with respect to PCF 1617 before the PCF is put before CCBFC for approval. This involves:

- a. Completing cross-committee coordination to resolve potential issues
- b. Removing the policy-setting airtightness testing penalty, in accordance with previous direction, and
- c. Conducting impact analysis on the revised PCF

This appeal was not submitted on the potential results of completing this work.

The appeal committee will decide whether or not this work should be completed.

In completing the process, the standing committees may well discover that technical revisions (or new changes) might be required, or not. We would expect that any revised or new changes would be brought forward for review in accordance with the process.



Policies, procedures and precedents

Respondent remarks

- *To be clear, the SC-EE and SC-HSB follow all Policies and Procedures (P&P).*
- *Further where there are gaps or ambiguity in the P&Ps, the Standing Committees followed precedence used to develop Canadian codes.*

CHBA comments

- Following policies and procedures is not the same as applying the principles and completing the intended process
- The standing committees have not followed the precedent established by the Standing Committee on Housing and Small Buildings in creating energy-efficiency provisions for Part 9

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Reference document 67: Respondent submission notes as presented September 1, 2021, A. Pride.

Reference document 49: CCBFC Policies and Procedures 2016

Reference document 72: 2021-09-01 Remarks by Bruce Clemmensen to the Appeal Committee

Mr. Pride stated that the standing committees follow all policies and procedures, and where there are gaps and ambiguity, they followed precedence.

It appears that, in this case, the idea of following policies and procedures may not mean the same thing as truly applying the principles and fully completing the intended process.

With regard to applying the principles

The introduction to the CCBFC Policies and Procedures states that the national model construction code documents development system is based on several principles. While it appears that **some** of the principles have been applied with regard to PCF 1617, the respondent did not provide evidence to show that **all** of the principles have been applied. I would like to refer the Appeal Committee to CHBA’s September 1 submission. Our presentation and the statements made by our supporting speakers provide evidence that several of the principles stated in the Policies and Procedures have not been fully applied, particularly the stated principles that:

- Those affected by the *Codes* should have the opportunity to participate in the development system and have their views on *Code* provisions and changes to those provisions considered,
- That the development system should be based on broad consensus and should be transparent, with development activities readily visible to all interested parties, and
- In considering *requested changes* to the *Codes*, the following should be considered (see Appendix F):
 - The ability to comply with such changes in light of current technology practicalities;
 - the benefit, cost and impact implications of such changes; and
 - the implications with respect to resources needed for enforcement of such

changes.

CHBA recognizes that the Standing Committee members have made an enormous contribution to code development in very challenging circumstances during the 2020 code cycle. We also recognize that the standing committees have followed the policies and procedures in many respects. Our concern is that there are some principles that appear to have been compromised, as evidenced by the documentation we submitted and the remarks of the speakers supporting our appeal. And we are very concerned that the process has not been **completed**, particularly with regard to cross-committee coordination, which all of the documentation shows, and which the respondents confirmed in their remarks.

With regard to completing the process,

as Mr. Clemmensen stated in his remarks at the September 1, 2021 appeal hearing session, the Commission relies on its standing committees to fully complete cross-committee coordination. If it is not done, the code documents may cause unintended negative consequences. The provincial/territorial partners count on the national process to publish codes that work without conflicts or inconsistencies.

And on precedence,

As the Chair of SC-EE will recall as a former member of SC-EEB and the Joint Task Group on Energy Efficiency for Housing, HSB did not establish targets for which potential issues remained unresolved. That's why they stopped in 2012 where they did in relation to the targets. In the 2015 edition of Part 9 of the National Building Code, airtightness testing is truly optional, and choosing to use prescriptive airtightness requirements is not penalized if a test is not conducted. When creating energy-efficiency provisions for Part 9, HSB performed full validation. Impact analysis was performed and updated to include all revisions. And Part 9 provisions outside of 9.36. were reviewed with the provisions in 9.36. This is the precedent for the development of energy-efficiency provisions for Part 9.



The aspects of the appeal

Respondent remarks on aspects of the appeal

- **Cross-committee coordination**—that proper cross-committee coordination processes had not taken place before an SC recommended approval of a PCF to the CCBFC
- **Airtightness testing**—that the intent of the direction and instructions issued by the EC to SC-EE, and the policy advice received from PTPACC on airtightness testing was not fully adhered to
- **Impact analysis**—that impact analysis was not fairly assessed and properly published on the PCF

Reference document 1: CHBA Letter of Appeal, March 19, 2021, including attachments to the letter

To recap:

The process appeal we submitted had three aspects—cross-committee coordination, airtightness testing, and impact analysis. Our March 19, 2021 letter of appeal provides details. I'll speak to the respondents' remarks on each of these aspects in the next few slides.



Cross-committee coordination

Respondent remarks

- *Proper and precedented cross-committee coordination processes had taken place before the standing committee recommended approval of PCF 1617 to the CCBFC.*

CHBA comments

- No evidence has been provided to show that cross-committee coordination was completed prior to recommending approval of PCF 1617.
- In fact, the respondents confirmed that the cross-committee coordination process has not been completed.

Reference document 67: Respondent submission notes as presented September 1, 2021, A. Pride.

In his remarks the Chair of SC-EE stated *that proper and precedented cross-committee coordination processes had taken place before the standing committee recommended approval of PCF 1617 to the CCBFC.*

However, the respondent has not provided any evidence to show that cross-committee coordination was completed prior to recommending approval of PCF 1617.

In fact, the respondents have confirmed that the cross-committee coordination process has **not** been completed.

During our presentation to the Appeal Committee on September 1, 2021, CHBA provided evidence of the crucial importance of completing cross-committee coordination on PCF 1617.



Cross-committee coordination

Respondent remarks

- *No concern about conflict with other sections of the National Building Code (NBC) was raised by SC-EE. However, some areas of future consideration were documented in a May 2019 memo to SC-HSB. This was presented by SC-EE chair and Codes Canada Technical Advisor in 2020-24 meeting of SC-HSB held on December 16, 2020. It was reemphasized that SC-EE was not raising concerns about the current PCFs (including 1617).*

CHBA comments

- The May 2019 memo from SC-EE to HSB raises several concerns about the implications of the PCFs for 9.36. for other sections of Part 9:
 - overheating, the installation of additional air barriers between dwelling units, attachment of exterior insulation and cladding, risk of fire spread, negative pressure and soil gas ingress, equipment performance and durability, and ventilation to ensure the adequate supply of fresh air and adequate removal of exhaust air
- The SC-EE Working Group on Unintended Consequences report raises 25 concerns

Reference document 67: Respondent submission notes as presented September 1, 2021, A. Pride.

Reference document 1: CHBA Letter of Appeal, March 19, 2021, including attachments

Reference document 70: 2021-09-01 Remarks by Bob Deeks to the Appeal Committee

Reference document 60: 11 May 2020 Report of the SC-EE Working Group on Unintended Consequences

In his remarks the Chair of SC-EE stated that

- *No concern about conflict with other sections of the National Building Code (NBC) was raised by SC-EE.*
- *However, some areas of future consideration were documented in a May 2019 memo to SC-HSB.*
- *This was presented by SC-EE chair and Codes Canada Technical Advisor in 2020-24 meeting of SC-HSB held on December 16, 2020.*
- *It was reemphasized that SC-EE was not raising concerns about the current PCFs (including 1617).*

This is contradictory to what SC-EE stated in their May 2019 memo to HSB, which was attached to the CHBA letter of appeal.

The memo raises concerns in relation to overheating, the installation of additional air barriers between dwelling units, attachment of exterior insulation and cladding, risk of fire spread, negative pressure and soil gas ingress, equipment performance and durability, and ventilation to ensure the adequate supply of fresh air and adequate removal of exhaust air—all concerns related to potential conflict between the PCFs for 9.36., including PCF 1617, and other provisions in Part 9 outside of 9.36.

The memo also states that “several non-energy related issues were identified [...] for consideration and possible action.” The memo does not say “future” consideration.

The respondent remark also contradicts the evidence Mr. Deeks provided during the first appeal session—on behalf of himself as a member of the SC-EE Working Group on Unintended Consequences and also on behalf the Chair of the SC-EE Working Group on

Unintended Consequences, Mr. Oding—which proves otherwise. The report of the SC-EE Working Group on Unintended Consequences identified 10 issues with possible implications for provisions in Part 9 outside of 9.36. that were critical to resolve prior to publication. The SC-EE Working Group report identifies 10 additional issues as important to resolve prior to provincial/territorial adoption, and 5 more issues were identified that could be resolved later in the process.

As Mr. Deeks noted, none of the issues identified by the SC-EE Working Group on Unintended Consequences as critical to resolve prior to publication has been resolved, and the respondent has provided no evidence that the completion of cross-committee coordination on these issues is not critical prior to publication.



Cross-committee coordination

Respondent remarks

- The Chair of SC-EE said that *SC-HSB created a working group (WG) to analyze SC-EE PCFs as they relate to the NBC. They found no evidence that the PCFs conflicted with the technical provisions of the other sections of the NBC under their mandate.*
- The Chair of SC-HSB stated that *during its meeting on 9 June 2021, the SC-HSB concluded that, based on their review thus far, there aren't any known specific conflicts with other requirements in Part 9 (NBC). However, the SC-HSB wasn't able to reach consensus on whether or not there may be technical conflicts that should prevent the publication of the energy efficiency changes because they have not had sufficient time to thoroughly evaluate all the implications*

Reference document 67: Respondent submission notes as presented September 1, 2021, A. Pride.

Reference document 68: SC-HSB Brief presented September 1, 2021, M. Brown.

Reference document 22: June 20, 2021 Memo from SC-HSB to SC-EE, including the report of the HSB Working Group on Cross-Committee Coordination

The Chair of SC-EE said that SC-HSB found no evidence that the energy efficiency PCFs conflicted with the technical provisions of the other sections of the NBC under their mandate.

Ms. Brown stated that during its meeting on June 9, 2021, the SC-HSB concluded that, based on their review thus far, there aren't any known specific conflicts with other requirements in Part 9 (NBC). However, the SC-HSB wasn't able to reach consensus on whether or not there may be technical conflicts that should prevent the publication of the energy efficiency changes because they have not had sufficient time to thoroughly evaluate all the implications.

Obviously, the absence of evidence does not mean there are no issues.

As we discussed in our presentation in September 1, 2021, some of the potential issues identified that relate directly to PCF 1617 were identified in the last code cycle by the SC-HSB, some have since been identified by builders, energy advisors the glass industry, warranty providers and others, as well as code officials currently applying the requirements of 9.36., and some by builders and energy advisors who are currently building net zero ready homes.

The Working Group stated in their report that they did not have time to complete their work. They did not have time to develop recommendations on the items described in the spreadsheet they developed, or to identify which PCFs related to all of the items. Further, the Working Group members were able to provide input on the draft report, but did not have the opportunity to conduct a final review on the changes made to the draft report by staff and the Working Group Chair after the WG members provided comments on the draft.

The June 20, 2021 memo from SC-HSB to SC-EE and the report attached to this memo from the HSB Working Group on Cross-Committee Coordination provides evidence both that the cross-committee coordination process is not complete, and that the cross-committee coordination process is critical in this case, due to identified conflicting requirements and the seriousness of identified potential unintended consequences.



Cross-committee coordination

Respondent remarks

- *It appears that HSB is being asked to evaluate the PCF 1617 with the same level of scrutiny, and supporting backup information, as was carried out by EE, which is beyond our understanding of expected cross-committee coordination efforts.*

CHBA comments

- The report of the SC-HSB WG on Cross-Committee coordination shows that the implications of PCFs 1617 and 1611 for other Part 9 provisions outside of 9.36. need to be fully assessed. (SC-HSB's mandate)
- Once this work is complete, further changes may be required to
 - Part 9 provisions outside of 9.36. (SC-HSB's mandate), and/or
 - Provisions in 9.36. (SC-EE's mandate)

Reference document 68: SC-HSB Brief presented September 1, 2021, M. Brown.

Reference document 22: June 20, 2021 Memo from SC-HSB to SC-EE, including the report of the HSB Working Group on Cross-Committee Coordination

Ms. Brown stated that “it appears that HSB is being asked to evaluate the PCF 1617 with the same level of scrutiny, and supporting backup information, as was carried out by EE, which is beyond our understanding of expected cross-committee coordination efforts.”

The report of the SC-HSB WG on Cross-Committee coordination shows that the implications of PCFs 1617 and 1611 for other Part 9 provisions outside of 9.36. need to be fully assessed. It is CHBA's understanding that this is now HSB's mandate.

Once this work is complete, potential changes may be required to Part 9 provisions outside of 9.36. to accommodate the proposed changes to 9.36—or not. It is CHBA's understanding that this is now HSB's mandate.

The work may also identify changes that may be required to 9.36. to accommodate provisions in Part 9 provisions outside of 9.36. We understand that this is SC-EE's mandate.

We would appreciate confirmation of this understanding, as there seems to have been considerable confusion surrounding this since SC-EE was created.

On to airtightness testing.



Airtightness testing

Respondent remarks

- *The intent of the direction and instructions issued by the Executive Committee to SC-EE was fully adhered to as communicated to the EC throughout the development of PCF 1617.*
- *The letter issued by PTPACC was a year after public review.*
- *After public review commenced, the EC directed that no compliance path will have mandatory testing.*
- *SC-EE did not create new policies.*

CHBA comment

- **Prior** to public review, the Chair of SC-EE was repeatedly advised that the Executive Committee and PTPACC had not changed their position that airtightness testing should not be mandatory in the codes
- The penalty for not conducting an airtightness test, introduced after public review, sets a policy, for which the code is not the right instrument

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Reference document 67: Respondent submission notes as presented September 1, 2021, A. Pride.

Reference document 1: CHBA Letter of Appeal, March 19, 2021, including attachments to the letter

Reference document 35: SCEE Minutes, 15 May 2019, noting that test results are not used

Reference document 18: EC Memo advising SC-EE on adverse reaction and that airtightness levels should be consistent

On airtightness testing, the respondent maintains that the intent of the direction and instructions issued by the Executive Committee to SC-EE was fully adhered to—and that critical directions came after public review.

CHBA staff witnessed several instances where the Executive Committee guidance appeared to be misunderstood by the Chair of SC-EE and some Codes Canada staff. However, the documentation CHBA submitted accompanying our September 1, 2021 presentation to the Appeal Committee shows clear guidance from the Executive Committee.

Multiple memos and staff announcements at SC-EE meetings—before PCF 1617 was submitted to public review—repeat and remind SC-EE of the direction and advice of the Executive Committee, and the provinces and territories, that the codes should not include mandatory airtightness testing. PCF 1617 went to public review with mandatory airtightness anyway.

The Executive Committee and several Codes Canada staff communicated on this issue to the SC-EE Chair six months before public review and followed up with an Executive Committee memo three months before public review.

All of this came before the CHBA letter pointed out the apparent continued lack of understanding, which was followed by another Executive Committee discussion and the subsequent third memo on the subject.

The December 8, 2020 memo from the Executive Committee to SC-EE advises SC-EE that there would likely be adverse public reaction to the changes made to PCF 1617 after public review. The Chair of SC-EE acknowledged that there was likely to be adverse public

reaction.

With such significant technical revision, and in light of likely adverse public reaction, according to procedure, the PCF should have gone back out to public review.

Mr. Pride noted in his remarks that SC-EE has not received correspondence from PTPACC. As Mr. Pride should know, PTPACC communicates through the Executive Committee. In each of its memos the Executive Committee referred to the advice received from the provinces and territories. PTPACC no doubt felt it necessary to reiterate its position yet again in the March 30, 2021 letter to which the respondent refers.

The respondent stated that SC-EE did not create new policies.

Again, our presentation at the September 1, 2021 hearing session, and the documentation cited and submitted by CHBA, provides the evidence to show that the revision of PCF 1617 after public review introduces a penalty if an airtightness test is not conducted. In doing so, SC-EE set a policy.

According to SC-EE documents cited [35] in our presentation from September 1, 2021, SC-EE's policy goal in requiring a test—even when the result is not used—was to “get the industry ready”. This is an education and training goal—a policy goal for which the national building code is not the appropriate instrument. This is the purview of the provinces and territories.



Impact analysis

Respondent remarks

- *The impact analysis was reviewed extensively and objectively by SC-EE, before and after public review.*
- *There is no requirement in the P&Ps asking for a revised impact analysis after the post PR changes are incorporated.*
- *The small subset of homes in remote areas, as noted by the appellant, may see higher costs for airtightness testing, however, that testing is now optional.*

CHBA comments

- The respondent confirms that impact analysis was not updated after the revisions were made following public review
- The intent is clearly stated in the P&P principle:
 - In considering requested changes to the Codes, the following should be considered (see Appendix F):
 - the ability to comply with such changes in light of current technology practicalities
 - the benefit, cost and impact implications of such changes; and
 - the implications with respect to resources needed for enforcement of such changes
- Significant implications for airtightness testing are not captured in the impact analysis

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Reference document 1: CHBA Letter of Appeal, March 19, 2021, including attachments

The respondent stated that the impact analysis was reviewed extensively and objectively by SC-EE, before and after public review, and that there is no requirement in the P&Ps asking for a revised impact analysis after the post-public-review changes.

However, I would refer the Appeal Committee back to this principle in the P&Ps, that clearly states the intent:

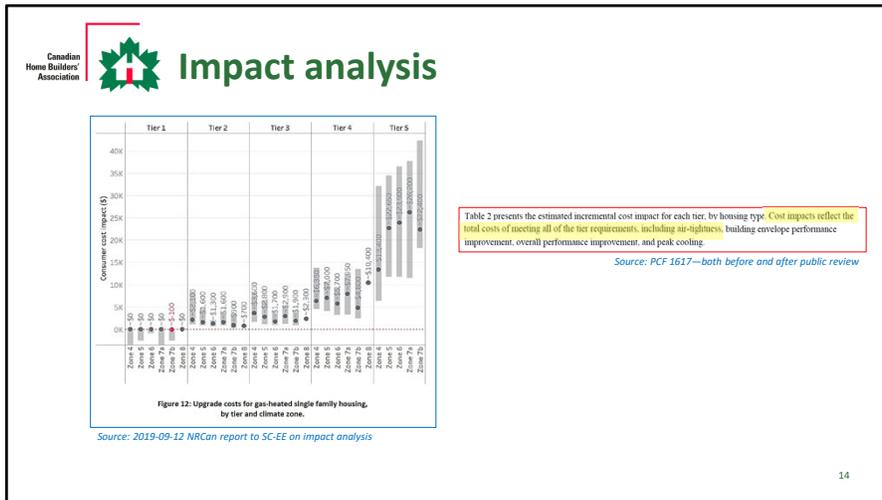
- In considering *requested changes* to the *Codes*, the following should be considered (see Appendix F):
 - The ability to comply with such changes in light of current technology practicalities;
 - the benefit, cost and impact implications of such changes; and
 - the implications with respect to resources needed for enforcement of such changes.

It is the role of standing committee chairs to champion the principles of the P&Ps in the public interest. Energy-efficiency improvements are in the public interest, but so is their cost effectiveness.

The respondent also stated that homes in remote areas may see higher costs as a result of the revisions made to PCF 1617 after public review.

We don't know for sure since, as the respondent confirmed, the impact analysis was not updated after the revisions were made following public review. Even if this is a small number of homes—why should people in rural or remote locations have to pay more for their homes because of a requirement in the code?

In addition, the PCF was revised significantly after public review, which included the introduction of the penalty for not conducting an airtightness test, as we discussed before. This penalty applies to all homes built using prescriptive airtightness requirements in the performance path—not just homes in remote areas. Tom—to your earlier question, how this works technically is explained in our December 2020 memo to Mr. Crawford, which we submitted with our September 1, 2021 presentation.



Reference document 33: 2019-09-12 NRCAN report to SC-EE on impact analysis
Reference document 1: CHBA Letter of Appeal, March 19, 2021, including attachments

The graph on this slide, which we presented at the first session of the appeal hearing, is from page 30 of the impact analysis report from Natural Resources Canada. It shows that the costs for tier 5 go up to more than \$40,000. We can only hope that the costs are not much higher, especially for those higher tiers, which offer diminishing and limited associated benefit. And since the impact analysis was not updated after the PCF was revised, the statement on the right cannot be true both before and after public review without changing the values.

[The respondent also stated that airtightness testing is now optional.](#)

However, the penalty introduced for not conducting a test means that even greater costs will be incurred to comply with the proposed change if a test can't be conducted. In addition, no prescriptive requirements have been included in the proposed changes for the proposed tiers 3, 4 and 5. If a province or territory chooses to adopt one of the higher tiers, there will be no option but to follow the performance path, and no credit to be gained without an airtightness test. We are not here to discuss the technical details, so I will refer you to CHBA's December 24, 2020 memo to Mr. Crawford and our February 12, 2021 letter to PTPACC, which were attached to our letter of appeal, for the full explanation.



New content from the September 22, 2021 session

Respondent remarks

1. *We heard at great length how often SCEE informed the EC on airtightness*
2. *"PCF 1617 does not relate specifically to other Sections of Part 9 and, therefore, this clause [17.4.6.] does NOT apply"*
3. *"Time on the agenda was made to discuss and address every item and action related to each" other synonyms used include "dealt with", or "looked at"*
4. *The Deputy Chair tasked a Codes Canada employee to work with our Task Group to ensure our code development followed our ToR and the direction of the CCBFC - no direction received to alter or cease development of PCFs.*
5. *Changes in Sections 9.1. to 9.35. as a result of PCF 1617 need a CCR*
6. *Because we can build it today – the proposed change works without further changes*
7. *Risk is managed by "figuring it out as we build these houses"*

CHBA comments

1. The EC responded clearly and consistently to SCEE's updates – no change in position
2. Anything in Part 9 affects everything in Part 9 – house-as-a-system applies everywhere. No Part/Section (code change) applies in isolation (NBC Preface)
3. The term "address" here is used as in "speak to" and not as in "resolve"
4. Frequent staff discussion (CDS team) of guidance being ignored
5. If a change is required as a result of proposed changes in 9.36. to the house-as-a-system
6. CHBA issues came from netzero builders. Issues may need changes to rest of Part 9
7. This is precisely our concern. This risk management approach will spend the money of homeowners.

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This slide has just been created today from the new information presented by the respondent team and in response to questions.

Apologies for the small font, we wanted all these items on one slide.

We will not respond to the many technical remarks that have been made today – and are a bit dismayed that such a large portion of today's discussion focussed on the technical details.

Here were a few comments that were particularly disturbing in the presentations made and we will comment on them here.

I will jump from the top – the respondents remarks made – and then to the bottom – our comments on what was said.

1. With regard to airtightness testing, we heard at great length how often SCEE informed the EC

To that we would point out, that CHBA participated in these meetings, and consistently, the EC directed SCEE to not make airtightness mandatory—in any path— and the spirit of those discussions were clear - long before the public review.

2. The slides noted that "PCF 1617 does not relate specifically to other Sections of Part 9 and, therefore, this clause [17.4.6.] does NOT apply"

To this we would point out that anything in Part 9 affects everything in Part 9 – the concept of the house-as-a-system applies everywhere. No Part/Section (code change) applies in isolation. This concept is even described in the NBC Preface.

3. The slides used the term "address" in this presentation when he says that sufficient time was spent

To this we would like to point out that the respondent uses the word "address" here to mean "speak to" and not as in "resolve". This is our main point – the issues have not been resolved, even though they may have been discussed.

4. The slides said that: The Deputy Chair tasked a Codes Canada employee to work with our Task Group to ensure our code development followed our ToR and the direction of the

CCBFC - no direction received to alter or cease development of PCFs

As I disclosed in the first session of this hearing, I was an employee of Codes Canada during this time and served the Commission as Deputy Chair. And while I was in attendance at that meeting, I recall frequent staff discussion before and after that the staff guidance from the EC was being ignored by the TG-EEHSB and by SCEE. I'd leave it at that and suggest that current Codes Canada staff speak to it and I would suggest that the EC conduct these discussions in-camera.

In CHBA's opinion, the comment made by the respondent is disrespectful of the very hard work of staff who support the code committees and possibly also disrespectful to the EC.

5. Changes in Sections 9.1. to 9.35. as a result of PCF 1617 need a CCR

We would like to add here that if a change in Part 9 is required as a result of a significant and ambitious proposed changes in Section 9.36. that affects the house-as-a-system – in other words the whole of Part 9 – it should not need a CCR

6. Because we can build it today – the proposed change works without further changes

First, the issues CHBA has identified are the issue netzero builders are finding with current requirements, and with building net zero homes to increased requirements. Our Concern is that when you apply netzero requirements to UNCHANGED minimum requirements, there may be significant issues – that likely need to be resolved in Part 9 before PCF 1617 is published. To the specific example of cooling: netzero builders regularly include air conditioning because it is a known issue. This change in Section 9.32 should not wait until we figure things out. Figuring things out means that people will have spend more money and more time that is not necessary if code committees act on it today.

7. Risk is managed by 'figuring it out as we build these houses'

Addressing risk in this way is precisely our concern. This risk management approach will spend the money of builders, building officials, warranty providers and homeowners. But rather than leaving the entire responsibility to SCs on risk, we believe that NRC and NRCan also bear some responsibility in managing or not properly managing this risk.



Clarification and conclusion

- CHBA's recommendations
- When all is said and done



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On to our concluding remarks.



Clarifying CHBA's recommendations

In response to questions raised during the first session

- The codes could be published without subsections 9.36.6. (PCF 1617) or 9.36.7. (PCF 1611),
- OR
- The codes could be published with subsections 9.36.6. and 9.36.7. reserved
 - The work to resolve issues in relation to PCFs 1617 and 1611 could re-commence as soon as possible, and the PCFs could be published as soon as the process is complete
 - PCF 1610 is not affected by the outcome of this appeal

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As I noted earlier, the respondent referred to the outcomes CHBA was seeking as out of scope for this appeal, and I clarified that the outcome we are seeking is that the respondent finishes the job with respect to PCF 1617 before the PCF is put before CCBFC for approval.

We made some recommendations for next steps at the September 1, 2021 appeal hearing session with a view to finding a solution to moving forward with the publication of the 2020 codes.

We were asked for clarification, so we reviewed the PCFs in question again. In response to the questions raised during the first session, we suggest that the codes can be published without subsections 9.36.6. or 9.36.7, or be published with those sections reserved. We suggest that the work to resolve the issues related to PCFs 1617 and 1611 re-commence as soon as possible, and the PCFs could be published as soon as the process is complete.

PCF 1610 is not affected by the outcome of this appeal and CHBA therefore does not consider the publication of PCF 1610 an issue at this time.



When all is said and done

CHBA called for a national approach to the development of code requirements for energy efficiency

- CHBA was the proponent of the CCR in 2009 for the development of 2012 9.36 requirements to create a national approach

Governments called for a new minimum level of acceptable performance

- Surely it is not governments' intent that this should come with unnecessary and excessive cost, burden, liability or potential serious negative consequences

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Reference document 60: 11 May 2020 Report of the SC-EE Working Group on Unintended Consequences

When all is said and done, CHBA supports the development of code requirements for energy efficiency. In fact, CHBA was the proponent of the CCR in 2009 for the development of 2012 9.36. requirements to create a national approach. We believe, however, that code requirements should not come with unnecessary and excessive cost, burden or liability.

Governments called for a new minimum level of acceptable performance in relation to energy efficiency in homes. Surely it is not governments' intent that new minimum acceptable targets should come with unnecessary and excessive cost, burden, liability and potential serious negative consequences for consumers, industry (including warranty providers and insurers), and governments themselves. Clearly, this would not be in the best interest of Canadians.

And yes, governments set a deadline to have this in the codes—by 2030. We have time to get this right.

As our supporting speakers noted, it is disappointing that PCF 1617 isn't ready for publication. We are not here to debate the technical merit of the proposed change. But the fact is that numerous issues have been identified in relation to the proposed change, and while they may have been "addressed"—as in having been discussed—they have not been resolved. And among these issues are several issues identified by the SC-EE Working Group as critical to resolve prior to the publication of the PCF. We can't say there are no conflicts, because as the respondent confirmed, the fact is that the work that is necessary to de-risk the proposed change has not been completed. And it is this situation that we find ourselves in, that *is*, in fact, the proverbial "show-stopper".

But the term "show-stopper" noted in the respondent submission—we have heard this many times in meetings—this was never CHBA's term. We're not saying "stop the show". Since SC-EE was created, and prior to that, we've been saying "let's get on with it". We have communicated since the outset, and repeatedly, that this work needs to get done, and have repeatedly urged all of the committees and working groups and task groups involved to

complete this work so that we can all have confidence in publishing and adopting PCF 1617. It is critical that this work be completed prior to publication when this proposed change has such significance.

As I said earlier, we acknowledge that a huge amount of work has been done. All of the volunteers and Codes Canada staff have been working tirelessly on all of this—in very challenging times. We're not here to point fingers, or place blame, or talk about who was responsible, or why some of the work did not get completed. The fact is that the evidence shows that we still have work to do. The industry is here to ask that this work be completed with due diligence.

We are talking about people's homes. We are talking about the health and safety of Canadians. We can't cut corners on this. Not when there is so much at stake.

As Mr. Clemmensen observed, when the pressure is high, it is all the more important to make good decisions, and to get it right.

So when all is said and done, we are trusting the Commission to make sure this happens.

Thank you.



Thank you

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Documents cited in this presentation



- 1: CHBA Letter of Appeal, March 19, 2021, including attachments
- 18: EC Memo advising SC-EE on adverse reaction and that airtightness levels should be consistent
- 22: June 20, 2021 Memo from SC-HSB to SC-EE, including the report of the HSB Working Group on Cross-Committee Coordination SC-EE doc [35]
- 23: July 16, 2021 Report to CCBFC from SC-EE
- 24: Email from NRC noting the 30-day extension and changing the appeal to SC's actions
- 28: Email from NRC noting the date of the attempted resolution
- 33: 2019-09-12 NRCan report to SC-EE on impact analysis
- 35: Report of the SC-EE Working Group on Unintended Consequences
- 49: 2019-09-12 NRCan report to SC-EE on impact analysis
- 60: 11 May 2020 Report of the SC-EE Working Group on Unintended Consequences
- 67: Respondent submission notes as presented September 1, 2021, A. Pride
- 68: SC-HSB Brief presented September 1, 2021, M. Brown
- 70: 2021-09-01 Remarks by Bob Deeks to the Appeal Committee
- 72: 2021-09-01 Remarks by Bruce Clemmensen to the Appeal Committee

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