I. CALL TO ORDER
Chairman Darin Nutter called the meeting to order at 8:04am and welcomed everyone. Committee Members, guests and staff introduced themselves.

II. REVIEW OF AGENDA
Dr. Nutter led a review of the agenda. The following items were added to IV: Strategic Plan Initiatives, YEA Report

III. APPROVAL OF MINUTES FROM 10/14/14 CONFERENCE CALL
Bill Simpson moved and Charlie Henck seconded approval of Minutes from the October 14, 2014 conference call without change. Motion passed unanimously (CNV). Minutes posted on PDC page, ASHRAE Website.

IV. BOARD ExO REPORT
Dennis Wessel provided an overview of the Society Update from the Presidential Elect Advisor Committee (PEAC). He highlighted items including the ASHRAE App, ASHRAE and IAQA joining forces, streamlining Standard 189.1 and IgCC, ASHRAE residential initiatives and newly released publications. Staff Liaison will send a copy of the PEAC presentation to the Committee.
STRATEGIC PLAN INITIATIVES
Daryl Boyce discussed several Strategic Plan initiatives that relate to the PDC:

- Develop owner and operator training
  Mr. Boyce emphasized the potential value of relations with BOMA and IFMA and joint operator training with APPA. PDC will be asked to work in collaboration with APPA to define the needs for building operator training and course development.

- Develop practical training programs for delivery at the chapters/regional level
  This would involve development of a pilot program with one or two chapters delivering existing courses/course materials and determining new material needs.

- Ensure Professional Development programs are valuable to employers
  This initiative will mostly involve staff work.

- Develop & enhance programs for younger ASHRAE members and potential members
  The intent here is to help younger members determine their development needs and a plan to meet those needs. A working group of PDC and YEA members will be created to establish proprieties.

Further direction and budget are expected to be locked down after the Wednesday council meeting.

Dr. Nutter emphasized that the initiatives align with MBOs to engage members with new course ideas.

Fred Betz expressed interest in owner/operator training and agreed to be the initial PDC contact/lead to determine direction. He recommended also seeking input from TC 7.8.

Billy Austin of Members Council asked the PDC to consider how ASHRAE can offer chapters a more effective means of delivering ASHRAE educational products at reduced cost. What are the current issues and how could improvements be made? The questions are directly related to the Strategic Plan and Mr. Austin stated that an ad hoc committee already exists in Members Council. He invited PDC members to work with the ad hoc committee to determine issues and needs.

YEA REPORT
Jeanne Duce, Region XII YRC, thanked the PDC and staff for their support. She reported that YEA is moving forward with the Technical Weekend. The event will take place November 6-8, 2015 at ASHRAE HQs in Atlanta. Tom Lawrence and Jeff-Ross Bain will present the Basic and Advanced High-Performance Building Design ALI courses.

V. FINANCIAL REPORT
Steve Comstock reported that year to date PDC revenues are on track. Though online course revenues are low, conference course revenues are expected to increase and SDL revenues are expected to exceed forecast. In-company and chapter courses are in line with forecast. He stated that HVAC Training drives most of the success.
VI. CHAIR’S REPORT
A. Status of 2014-15 MBOs
   MBOs discussed in Item IX and included in Appendix A.

B. Professional Practices Subcommittee
   Dr. Nutter reported that motions to (1) dissolve the Professional Practices Subcommittee,
   (2) make appropriate changes to the PDC Manual of Procedures (MOP) and (3) make related
   changes to the PDC section of the Rules of the Board (ROB) would be voted on at the
   Tuesday PEC meeting. Staff Liaison Note – The motions unanimously passed.

VII. STAFF REPORT/UPDATE
Karen Murray provided the following ALI course summary:

A. 2014/15 In-Company/Chapter Program Registrations
   In-Company – 31 courses/1,118 total registrants (Avg 36 per course)
   Chapter – 3 courses/120 registrants (Avg 40 per course)

   2013/14 In-Company/Chapter Program Registrations
   In-Company – 23 courses/697 total registrants (Avg 30 per course)
   Chapter – 16 courses/680 registrants (Avg 43 per course)

B. 2014 Fall Online Course Registrations
   13 Courses/256 total registrants (Avg 20 per course)
   Highest number of registrants: 35 - Healthcare Facilities (PDS)
   Lowest number of registrants: 5 - Evaluation Methods for High-Performance Bldgs (SC)

   2013 Fall Online Course Registrations
   13 Courses/369 total registrants (Avg 28 per course)
   Highest number of registrants: 77 - Energy Audits (PDS)
   Lowest number of registrants: 14 - IAQ Best Practices for Design Construction and
   Commissioning (SC)

C. 2015 Winter Conference Registrations
   20 courses/962 total registrants (Avg 48 per course) FINAL
   Highest number of registrants: 119 - Complying with Standard 90.1-2013:
   HVAC/Mechanical (SC)
   Lowest number of course registrants: 10 - Introduction to Building Enclosure
   Commissioning (SC)

   2014 Winter Conference Registrations
   23 courses/1,004 total registrants (Avg 44 per course)
   Highest number of registrants: 79 - High-Performance Building Design: Applications & Future
   Trends (SC)
   Lowest number of registrants: 8 - Electric Rates, Rules and Regulations (SC)

D. 2015 Spring Online Course Registrations
   12 courses/235 total registrants (as of April 1)
2014 Spring Online Course Registrants
13 courses/272 registrants (Avg 21 per course)
   Highest number of registrants: 34 - Energy Modeling Best Practices & Applications (PDS)
   Lowest number of registrants: 9 - Evaluation Methods for High-Performance Bldgs (SC)

E. ALI Courses at other Industry Events
2014-2015 – 29 courses/572 registrants (Avg 20 per course)

2013-2014 – 17 courses/850 registrants (Avg 50 per course)

F. 2014/15 HVAC Design Training
Level I – 7 completed courses/289* (Avg 54* per course)
Level II – 5 completed courses/159* (Avg 44* per course)
   *2 Level I and Level II courses remain to be presented.

2013-2014 HVAC Design Training
   Level I – 7 courses/361 (Avg 52 per course)
   Level II – 5 courses/223 (Avg 45 per course)

VIII. SUBCOMMITTEE BUSINESS [See Appendix B: Notes of 1/8/15 subcommittees conference call]
A. Planning
1. Review of Course Proposals
Cameron Labunski led a discussion of the following ALI course proposals that were reviewed during the January Subcommittees Conference Call. He called for a motion to approve each.

ASHRAE HVAC Optimization Training, Julia Keen (Kansas State Univ., ASHRAE BOD)
Jim Bochat moved and Kristin Schaefer seconded approval of the proposed course with the new title ASHRAE Introduction to Improving Existing Building Operation with author agreement (previously obtained) to clarify the intended audience, include Learning Objectives and recommend peer reviewers. Motion passed unanimously (CNV).

Variable Refrigerant Flow System Design & Application, Dermot McMorrow (Mitsubishi Electric, TC8.7)
Mr. Betz moved and Kay Thrasher seconded approval of the proposed course with author agreement (previously obtained) that the term “North America” be removed from the General Outline and replaced in the first Learning Objective with “all climate zones,” and the number of Learning Objectives be revised to correspond with the 3-hour presentation. Motion passed unanimously (CNV).

In an effort to ensure comprehensive course reviews, the committee recommended following established review guidelines and keeping cognizant TCs involved in the review process. It was noted that Dr. Keen’s course should be reviewed by TC7.3 (Operation and Maintenance Management) and Mr. McMorrow’s course reviewed by TC8.7 (Variable Refrigerant Flow)

ACTION: Staff asked to locate existing guidelines for review of course proposals. (Complete. Sent as separate attachment.)
ACTION: Staff asked to ensure cognizant TCs are included in the review process for all new courses. (Continuous.)

Dr. Nutter reported that he spoke with Richard Royal and Bryan Becker of the Refrigeration Committee about the idea to create 30-60 minute lectures on refrigeration topics for use at the chapter level – including international chapters. The Refrigeration Committee is concerned handbook refrigeration chapters are dated and ASHRAE may be losing an authoritative position. A proposal is expected.

B. Operations
Mr. Bochat emphasized the need for course liaisons and the need for liaisons to review course evaluations to determine if the specific courses should remain active.

IX. MBO DISCUSSION & BRAINSTORMING [See Appendix A]
Dr. Nutter led a review of the 2014-15 PDC MBOs, emphasizing specific Objectives.

A. MBO #5 – Full PDC
Position PDC to offer new residential courses. Develop strategy and approaches to offer useful courses related to residential built environment. Dr. Nutter asked PDC members to consider how PDC can be a part of the initiative.

Committee Comments
ASHRAE covers single target audience - residential mechanical contractors. Builders make up 80% of market. Training must add value, be tailored to their level. Green buildings for homes? Implementation through mechanical contractors? Extensive ad hoc committee research exists on how ASHRAE impacts the residential market. Rely on ad hoc committee to structure methodology (report exists). ACCA Solicit info from ad hoc. Develop courses targeted to residential owners. Better inform Home Builders Association. Focus on being in line with residential action group. Establish a working group with IAQA. Work with residential action group. Support work with the residential and IAQA groups. Mac Sherman is chair of the Residential Market ad hoc.

ACTION: Dr. Nutter to review ad hoc committee report ASHRAE and the Residential Construction Market and follow-up with PDC on content and potential development of new residential courses. (Under review. Sent as separate attachment for PDC reference.)

ACTION: Mr. Betz and Ms. Thrasher asked to discuss residential course ideas at the spring conference call. (Draft course outlines sent as separate attachment.)

B. MBOs #1 & #4 – Planning
#1- Develop courses that reach a wide range of audiences. Identify products/methods for use by region/chapters Identify products.
Current proposals reach that goal.

#4- Develop strategies to offer products for international members. Develop strategy and approaches to potentially offer useful courses to international members (must add value but not lose money)

Committee Comments
VRF may be appropriate course
Identify key countries to target for education opportunities
Discuss with REHVA
TC specific courses to regions
Pilot program – urban healthcare

**ACTION:** Staff asked to include the question “Do you speak other languages” to the ALI course proposal form. (Complete.)

**ACTION:** Staff asked to send ASHRAE Member breakdown to committee. (Complete. Sent as separate attachment.)

**ACTION:** Staff asked to include International Survey Results on spring agenda.

C. **MBOs #2 & #3 – Operations**

#2- Engage membership for new course ideas that align with the Strategic Plan. Solicit and/or survey new course ideas through TCs, YEA members, design guide developers and Chapters/CTTC

Committee Comments
National survey to all members – big undertaking
Relay info – DRC to chapter presidents to chapter members
Journal/Insights article stating ASHRAE Learning Institute (ALI) is developing courses to meet your needs, and asking What are the topics that matter most to you?... What is your preferred course delivery method?

**ACTION:** Staff asked to discuss with marketing director (Complete. Will discuss at Spring Conference call.)

#3- Improve existing courses through assessment. Review existing course assessment process; modify as needed to establish formal feedback loop

Committee Comments
Improve the feedback loop

**ACTION:** Staff asked to create proposed course sunset list. (Complete. Sent as separate attachment.)
X. OLD BUSINESS
   A. YEA Technical Weekend
      Discussed in Item IV.

   B. Development Status of Water System Design and Heating Systems SDLs - Hegberg
      Ms. Murray reported that ASHRAE has yet to receive revisions of either SDL.

      **ACTION:** Staff asked to discuss final completion dates with Mark Hegberg, giving him the option to meet the deadline or forego the obligation. (Complete. Will discuss at Spring Conference Call.)

   C. BEM Library
      Mr. Labunski reported that the group’s actions are not yet consistent with the initial charge. PDC discussion will continue if it becomes relevant.

   D. Committee Member Recommendations
      Dr. Nutter emphasized that this is a continuous request. He encourages current PDC members to let him know any time they have a new committee member recommendation.

   E. ASHRAE Career Enhancement Curriculum
      Dr. Nutter reviewed existing (pilot) program topics, Energy Savings Practices and IAQ Practices. The program will be further discussed during the spring conference call.

   F. Manual of Procedures (MOP)
      The PDC Manual of Procedures (MOP) can be found at www.ashrae.org/pdc. Committee recommended changes to the MOP should be directed to the Operations Subcommittee.

   G. Reference Manual
      The PDC Reference Manual can be found at www.ashrae.org/pdc. Committee recommended changes to the Reference Manual should be directed to the Planning Subcommittee.

      **ACTION:** Staff asked to add products such as 3- and 6-hour courses to the PDC Reference Manual. (Complete.)

   H. Review of Open Action Items [See Appendix C]
      No open items to review.

XI. NEW BUSINESS
   A. Reports from PDC Members who attended ALI courses
      No reports provided.

      As an item of interest, Bill Simpson informed PDC that the ASHRAE Student Activities Committee is seeking a means to recognize distinguished, well rounded young engineers. The committee is considering an ASHRAE Gold Member Award, similar to the existing distinguished service and fellow awards. Award requirements may include HVAC Design...
training and ALI course attendance. Efforts to establish the award are supported by Member Promotions, Student Activities and YEA.

XII. NEXT MEETING
April Conference Call

XIII. ADJOURN
The meeting was adjourned at 11:50am.
APPENDIX A - ‘14-’15 MBOs

<table>
<thead>
<tr>
<th>Objective</th>
<th>SP 2014</th>
<th>Compl. by</th>
<th>Fiscal Impact</th>
<th>Resp. Party</th>
<th>Comment/Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Develop courses that reach a wide range of audiences</td>
<td>3D</td>
<td>Jun 2015</td>
<td>None</td>
<td>Planning</td>
<td>Identify products/methods for use by region/chapters</td>
</tr>
<tr>
<td>2. Engage membership for new course ideas that align with the Strategic Plan</td>
<td>3D</td>
<td>Jun 2015</td>
<td>Varies</td>
<td>Operations</td>
<td>Solicit and/or survey new course ideas through TCs, YEA members, design guide developers and Chapters/CTTC</td>
</tr>
<tr>
<td>3. Improve existing courses through assessment</td>
<td>1B</td>
<td>Jun 2015</td>
<td>None</td>
<td>Operations</td>
<td>Review existing course assessment process; modify as needed to establish formal feedback loop</td>
</tr>
<tr>
<td>4. Develop strategies to offer products for international members</td>
<td>4A</td>
<td>Jun 2015</td>
<td>Varies</td>
<td>Planning</td>
<td>Develop strategy and approaches to potentially offer useful courses to international members (must add value but not lose money)</td>
</tr>
<tr>
<td>5. Position PDC to offer new residential courses</td>
<td>5A</td>
<td>Jun 2015</td>
<td>Varies; Likely positive</td>
<td>Full PDC</td>
<td>Develop strategy and approaches to offer useful courses related to residential built environment. (beginning of long-term effort)</td>
</tr>
</tbody>
</table>

Additional Recommendations for Strategic Planning:
None at this time
APPENDIX B – Notes from January 8, 2015 Subcommittees Conference Call

I. CALL TO ORDER
Chairman Darin Nutter called the meeting to order at 10:33am and welcomed everyone.

II. REVIEW AGENDA
Dr. Nutter led a review of the agenda. No changes were made.

III. PLANNING SUBCOMMITTEE
A. Update on Proposed Courses
No updates were presented.

B. Review New Proposals
Cameron Labunsky led a discussion of the following ALI course proposals presented to the committee for review:

**ASHRAE HVAC Optimization Training**, Dr. Julia Keen (Kansas State Univ., ASHRAE Board of Directors)
The proposal is for a 2-day course focusing on existing, post-construction HVAC systems. The training is intended to target introductory level participants with or without engineering job responsibilities. It will supplement the existing HVAC Design I and II courses.
Committee members recommended the author rename the course to ensure the title reflects introductory level training. The committee also recommended clarification of the intended audience and inclusion of Learning Objectives and recommended peer reviewers. The PDC will vote on the course at the Chicago meeting with suggested revisions included and addressed during course development.

**ACTION:** Staff asked to send suggested revisions to the author with a request for response before the Chicago meeting. (Complete.)

*Variable Refrigerant Flow System Design & Application*, Mr. Dermot McMorrow (TC8.7)
The proposal is for a 3-hour intermediate course intended to provide generic, non-manufacturer specific concepts of how to apply VRF systems to buildings. It will supplement fundamental technology presented in the 2012 ASHRAE HVAC Systems and Equipment h Handbook.

Committee members recommended the term “North America” shown in the first Learning Objective be replaced with “all climate zones” and the term be removed from the General Outline. VRF technology is moving quickly and applies to all climate zones. Committee members expressed concern if the high number of Learning Objectives could be covered in a 3-hour course.

**ACTION:** Staff asked to send suggested revisions to the author with a request for response before the Chicago meeting. (Complete.)

**Proposed Refrigeration Lectures**
Dr. Nutter informed the group that Richard Royal, former chair and current consultant with the Refrigeration Cmte, is preparing proposed topics for new 1-hour refrigeration lectures. A proposal from Mr. Royal is expected before the Chicago meeting.

**C. Review of PDC Reference Manual**
Mr. Labunski noted that the PDC Reference Manual requires annual review. He asked the subcommittee to review the manual and provide necessary changes to him prior to the Chicago meeting. The manual can be found at [www.ashrae.org/PDC](http://www.ashrae.org/PDC) (near the bottom of the page).

**IV. OPERATIONS SUBCOMMITTEE**

A. **Course Updates**
   1. SCs in Progress
      No updates were presented.

   2. PDSs in Progress
      No updates were presented.

B. **Approved Proposals** (Review of newly approved courses/projects that were voted on after the last Society meeting)
   1. Natural Refrigerants for Small Commercial Refrigeration Applications (Yanez)
      No report provided.
C. Course Liaisons
   Jim Bochat noted that several ALI courses need new liaison assignments and requested volunteers.

D. Review of Non-performing Courses
   Mr. Bochat informed the committee that several non-performing ALI courses require review. He expects those to be discussed at the Chicago meeting.

E. Review of PDC MOP
   Mr. Bochat asked the subcommittee to review the PDC Manual of Procedures (MOP) and provide necessary changes to him. The manual can be found at www.ashrae.org/PDC (near the bottom of the page).

V. PROFESSIONAL PRACTICES SUBCOMMITTEE
   Dr. Nutter provided a brief summary of the request to dissolve the PDC Professional Practice Subcommittee. The subcommittee was established to manage and coordinate broad, non-technical issues that affect ASHRAE and its members’ ability to advance the arts and science of HVAC&R. Since then, subcommittee activities have decreased and some believe that most if not all of the subcommittee responsibilities could be assumed by the Grassroots Government Affairs Committee (GGAC) or designated ad hoc committees. Dr. Nutter called for a motion to recommend the Professional Practice Subcommittee be dissolved.

   Bill Simpson moved and Hank Bagheri seconded the recommendation to dissolve the PDC Professional Practices Subcommittee and reassign responsibilities as determined appropriate. Motion passed unanimously. CNV.

   ACTION: PDC to submit a recommendation to the Publications and Education Council to dissolve the Professional Practices Subcommittee and revise the PDC Manual of Procedures (MOP) and Rules of the Board (ROB) to address the change. (Complete.)

VI. OLD BUSINESS
   A. Course Attendance/Review by PDC Members
      Dr. Nutter encouraged committee members to review the Chicago ALI courses and attend any that fit their time schedules. Free registration is available to PDC members who agree to provide course feedback. Committee members should contact Karen Murray for registration.

VII. NEW BUSINESS
   A. Course Announcement to TC/TG/TRG & Meeting Chairs
      Dr. Nutter added a request for new course ideas to the list of announcements that will be made at the TC Section Chairs’ breakfast in Chicago. The TC Chairs typically relay the announcements at their individual TC meeting. This is seen as a great opportunity to share information with all TCs.

VIII. MBO DISCUSSION
   A. Initiation of MBO Assignments
Dr. Nutter reviewed the MBOs and asked the subcommittee members to begin to think about the objectives. MBOs will be discussed in Chicago.

IX. ADJOURN

The call was adjourned at 11:37am.
APPENDIX C – Open Action Items as of January 8, 2015

Each member of the PDC to investigate whether a course to which he or she is the liaison should be removed, sunsettled, or revised. (Active projects listed below.)

No items to review.