I. CALL TO ORDER
Chairman Darin Nutter called the meeting to order at 10:04am and welcomed everyone.

II. REVIEW OF AGENDA
Dr. Nutter led a review of the agenda noting that several New Business items would be discussed in MBO Status. No changes were made.

III. APPROVAL OF MINUTES FROM JANUARY 26, 2015 MEETING
Bill Simpson moved and Cameron Labunski seconded approval of Minutes from the January 26, 2015 meeting without change. Motion passed unanimously (CNV). Minutes will be posted on the PDC page of the ASHRAE Website.

IV. ANNUAL CONFERENCE SLATE OF COURSES
Karen Murray provided registrations to date:
Total courses 9 (2 PDSs and 7 SCs)
Highest registration numbers:
   11 - Laboratory Design: The Basics & Beyond, John Varley
   8 - Complying with Standard 90.1-2013: HVAC/Mechanical, Mack Wallace
   5 - Commissioning Process & Standard 202-2013, Walter Grondzik

V. FALL ONLINE COURSES
Courses will be voted on by email ballot.
VI. REVIEW OF ACTION ITEMS (See APPENDIX A for updates.)
Dr. Nutter led a review of Open Action Items as of January 26, 2015.

VII. OLD BUSINESS
A. MBO Status (See APPENDIX B for updates.)
Dr. Nutter led with discussion of Objective 5 - Position PDC to offer new residential courses. He reviewed the Final Report of ASHRAE and the Residential Construction Market. The major take-away being the need to enhance outreach to the residential community starting at the chapter level. The role of the PDC would be to develop products for use at the chapter level. Course ideas are recorded below in Item VIII.B.

Mr. Labunski followed with a status on objectives assigned to the Planning Subcommittee:
• Objective 1 - Develop courses that reach a wide range of audiences. The objective is ongoing. For courses to reach a wide range of audiences, the depth and breadth of the materials and objectives should relate to as many members as possible.
• Objective 4 - Develop strategies to offer products for international members. This too is ongoing. Moving forward, the technical information offered in ASHRAE courses must cover all aspects, including applicable international use.

Jim Bochat provided a status on objectives assigned to the Operations Subcommittee:
• Objective 2 - Engage membership for new course ideas that align with the Strategic Plan. Mr. Bochat reported that he is working with several PEC and Member Council volunteers to survey chapter presidents and CTTCs to determine what ASHRAE can do to better improve training at the chapter level. Several PDC members voiced concern that surveying only chapter presidents and CTTCs would not necessarily provide an overall chapter viewpoint. Other comments included the need for good speakers to attract engineers and sales people, and the need to increase company awareness of the value of the training.
• Objective 3 - Improve existing courses through assessment. This is an active, continuous objective. A feedback loop is in place to keep the PDC liaison and course instructors aware of course comments. The process will be revised as needed to approve assessment.

ACTION: Staff asked to resend 2015 Winter Conference course evaluation summary to the PDC noting the liaison for each course. Complete.

B. ASHRAE Career Enhancement Curriculum
Dr. Nutter reviewed the existing (pilot) program topics, Energy Savings Practices and IAQ Practices. No suggestions were made for additional courses.

Staff Note – Since the Spring Conference Call, the first person has completed all required coursework for the Energy Savings Practices certificate. A Certificate of Completion and letter of thanks will be prepared.

VIII. NEW BUSINESS
A. International Survey
To be discussed at June meeting.
B. Residential Course Ideas
Kay Thrasher and Fred Betz prepared draft outlines for 2 residential courses. Ms. Thrasher noted that her chapter tends to received good responses to residential course offerings. She and Mr. Betz suggested: (1) residential courses for owners that focus on making the buildings work well, and (2) residential courses for contractors that focus on whole building operations. Courses should be oriented to building operations rather than Standards. Kristin Schaefer recommended broadening #2 to include courses at or with residential organizations, builders’ associations, home shows, etc. to target general contractors. The outlines correspond with MBO Objective 5 mentioned above.

**ACTION:** - PDC asked to review the outlines and provide comments before the June PDC meeting. (Outlines included as APPENDIX C.)

IX. NEXT MEETING
June 29, 2015, 8:00am-12:00pm
Hilton Atlanta
Room 213 (2nd floor)

Subcommittees will meet by joint conference call prior to the meeting.

X. ADJOURN
The meeting adjourned at 11:30am.
# APPENDIX A: Action Items

## ACTION ITEMS

**Meeting January 26, 2015**

<table>
<thead>
<tr>
<th>No.</th>
<th>Page</th>
<th>Responsible</th>
<th>Action</th>
</tr>
</thead>
</table>
| 1   | 3    | Staff       | Locate existing guidelines for review of course proposals. *Complete. Course Development Guidelines are located in the PDC Reference Manual.*  
Follow-up:  
Staff asked to create a draft list of review requirements for new unsolicited proposals for discussion prior to the Annual Meeting. |
| 2   | 5    | Staff       | Ensure cognizant TCs are included in review of all new courses. *Complete. Action will be continuous.* |
| 4   | 5    | Betz/Thrasher | Discuss residential course ideas at the spring conference call. *Complete. Discussed in Item VIII.B. Residential Course Ideas.* |
| 5   | 6    | Staff       | Add the question “Do you speak other languages” to the ALI course proposal form. *Complete.* |
| 6   | 6    | Staff       | Send ASHRAE Member breakdown to committee. *Complete. Provided March 2015 Membership Dashboard* |
| 7   | 6    | Staff       | Include International Survey Results on June agenda. *Complete.* |
| 8   | 6    | Staff       | Discuss course marketing with Director of Marketing. *Complete. Marketing ideas to be developed.* |
| 9   | 6    | Staff       | Create proposed course sunset list. *Complete. PDC Voted to Sunset:*  
- *Introduction to Green Buildings, Sustainable Design & Construction* (SC 19) – replaced by newer course  
- *IAQ & Productivity: How to Maximize Investments in Indoor Climate* (SC 59) – low attendance  
- *Groove Mechanical Piping System Technology and Design* (SC 60) – narrow focus and low attendance.  
The PDC agreed that *Maximizing Customer Benefits Using Key Electric Utility Products* (formerly Electric Rates, Rules and Regulations) may be of interest to younger audiences and worth offering again online. |
Follow-up: Darin Nutter to reach out to the authors to discuss.

10 7 Staff Discuss final completion dates for Water System Design and Heating System SDLs with Mark Hegberg. Complete.
- Water System Design (IP) – Proofs received and turned over to Special Pubs for review on 5/4/2015.
- Heating System – June 15 established as final deadline.

11 7 Staff Add products such as 3- and 6-hour courses to PDC Reference Manual. Complete.
## APPENDIX B - ‘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><strong>Ongoing.</strong> Identify products/methods for use by region/chapters. Proposals should relate depth and breadth of materials and objectives to as many members as possible.</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><strong>Ongoing.</strong> 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><strong>Ongoing.</strong> 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><strong>Ongoing.</strong> Develop strategy and approaches to potentially offer useful courses to international members (must add value but not lose money). Consider technical information that covers all aspects, suitable for international use. Establish review guidelines.</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><strong>Ongoing.</strong> 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 C – Residential Course Ideas

Residential course #1 for owners of stand-alone housing
- Types of A/C systems
  - Air, water
- Types of heating
  - Gas, Electric, Oil, Other
- Ventilation and exhaust (flues, fans, etc.)
- Building sealing importance
  - Envelope
  - Ducts
- Impact of better insulated attic, walls, and windows
- Impact of higher efficiency equipment
- Impact of maintenance on operating cost
- Ductwork pros/cons per type
  - Flex duct, duct board, metal, joist/stud space
  - HVAC outlet locations – supply, return, exhaust
- Humidification and Dehumidification

Residential #2 for contractors
- Impact of building insulation and sealing on heating and cooling loads
- Impact of building windows and doors on loads
- Building orientation and overhangs
- Ventilation requirements
- Exhaust and its impact (hoods, etc.)
- Equipment efficiency
- Equipment over/under sizing consequences
- Humidity control and how it relates to equipment
- ERV/HRV equipment benefits