



## **BEDES Technical Working Group**

Fourth Meeting—March 25, 2013 (1:30-3:30 EDT)

Web login is [www.readytalk.com](http://www.readytalk.com), Access code 2642120

Call-in number is 1-866-740-1260, Access code: 2642120

Convener: Rick Diamond, LBNL

Facilitator: Dr. Jonathan Raab, Raab Associates, Ltd.

### Draft Meeting Summary

- 26 people participated. Please see Appendix A for Attendance list.

#### **1:30 Welcome, Introductions, and Today's Agenda**

- Rick Diamond welcomed the group, introduced Robin Mitchell, and noted that the team has made some changes to make remainder of stakeholder process as efficient as possible. Jonathan Raab then reviewed the agenda.

#### **1:40 Revised Schedule at TWG/Sub-Group Stakeholder Engagement Process**

- Jonathan Raab gave an overview of the proposed stakeholder engagement process changes, including these key points:
  - Introduction of a website as an asynchronous way to gather feedback between meetings.
  - Module 1 will be available for online review
  - Time schedule is extended for stakeholder process and LBNL submittals to DOE. Sub Groups are rolled into TWG

#### **2:10 Refined Format for Module I**

- Robin Mitchell, LBNL, presented the revised proposed format which can be found as a shared Google document of the BEDES mockup where participants can make comments and start discussions. The TWG members then discussed the specific content of the Google doc.
- Discussion
  - Sometimes there is not a one-to-one correspondence for variables (in mappings). This does not mean that there are not similar fields between two specs which can be used as proxies though (floor area, percent floor area). If there is not one-to-one correspondence, the mapping will include a description of how it can be mapped to BEDES 1.0
  - Will there be unique identifiers for the terms in BEDES?
  - Unit of measure - will you have two versions of this? IP and SI?

- In the perfect world we would have SI and IP, but can we just include IP for now?
    - DOE uses SI in some cases such as EnergyPlus
  - Should there be another column that includes the range of values?
  - What is the full list of data types that will be used?
  - Consider having the column headers for different specs in a different color than the main columns for BEDES 1.0, or other way to separate them
- **Conclusion:** The mockup is good. There may be unique identifiers for BEDES, but later in the process. LBNL concluded that the base units would be in IP, as the audience for this document is in the United States. LBNL will put a description of the different data types at the beginning of the BEDES document. LBNL will format BEDES 1.0 so that there is differentiation between the definition section and the spec mapping section.

2:30 **Google Site and Stakeholder Engagement Approach**—Robin Mitchell, LBNL

- Robin Mitchell gave an overview of the site sign-up and logistics and noted that this is intended to garner more in depth feedback from users. This is the “technical working site”. You can add comments and/or files and post topics to discuss on the Technical Working Group forum. TWG Members were positive about the addition of an asynchronous forum. Then TWG discussed the following substantive posts on the forum:
- Metadata:
  - TWG reviewed two metadata postings followed by a TWG discussion around how to tackle metadata going forward.
  - Discussion: Have a separate section to compile the metadata and have them apply to the entirety of BEDES (some might not apply to a lot of fields and people wouldn’t use it). This is consistent with the rest of BEDES in that we aren’t policing the use of BEDES. Suggestion that metadata should be applied to specific fields
  - **Resolution:** Agreement around structuring metadata as an umbrella list to cover all of BEDES but perhaps suggest metadata for fields (this may be too specific and limit implementation). LBNL will make a proposal, as part of module 1, and post that to the TWG forum for discussion. Group has time to comment online on the original metadata topic over the next few days ahead of new LBNL metadata posting
- Occupancy Types:
  - Robin then discussed the restructuring effort undertaken by Andrea Mercado, Bob Hendron, and herself regarding the data structure as presented in the original graphic (split by Commercial Facility, Residential Facility, and Activity Areas). Proposal to split by Occupancy Classification instead of by Residential and Commercial, and add a Space Function term that will be used instead of Activity Area, which will be deleted
  - Discussion:

- Currently aligns with CBECS and Portfolio Manager. More definitions are being added to fill gaps in the current list. Can have one or many instances. May want to have a field for Primary Occupancy Type.
- Add Space Function (derived from ASHRAE standards).  
Delete Activity Area
- There can be one or many space functions associated with an Occupancy Classification. The implementation will establish the necessary relationships between these. LBNL is working to make the list as complete as possible.
- This format was chosen because we wanted to be able to have multiple functions within an occupancy classification, such as corridors, gyms, etc.
- Some of the Space Function list items will be merged, such as the distinction between age groups in the classroom list. We should consider the idea that terms can have a third level of modifiers.
- Suggestion that Primary Occupancy Classification should be defined as a separate term, and not have a field to indicate which Occupancy Classification is the primary one.
- **Conclusion:** This refactoring seems reasonable. LBNL will continue with this restructuring as they finish Module 1.

3:00 **Detailed Tour of Google Site (optional)**—Robin Mitchell, LBNL

- Marshall added that another way to submit comments to the forum is to reply to the emails that are sent when a new topic or comment is posted. This can be an easier way to interface with the forum than accessing it directly.
- None of the TWG members expressed a need for a detailed tour, so the meeting adjourned around 3:00

# Appendix A

## 3.25.14 TWG Web Meeting Attendance

| <b>Name</b>           | <b>Company</b>                         |
|-----------------------|--|
| Adam Wallen           | Skyfoundry                             |
| Andrew Fritsch        | Actionet/FEMP                          |
| Barbara Hernesman     | CalCERTS, Inc.                         |
| Bob Hendron           | NREL                                   |
| Brandon Gallagher     | CakeSystems                            |
| Chris Tremper         | DOE                                    |
| Cindy Jacobs          | US EPA                                 |
| Daniel Fehrenbach     | Elevate Energy (formerly CNT Energy)   |
| Darren Port           | NEEP                                   |
| Devan Johnson         | kW Engineering                         |
| Elena Alschuler       | US Dept of Energy                      |
| Erik Larson           | Building Energy Inc.                   |
| Hilary Firestone      | LA Mayor's Office                      |
| Jessica L Knapstein   | Energetics Inc                         |
| John Mejia            | LBNL                                   |
| Jon Keck              | Bright Power                           |
| Jonathan Raab         | Raab Associates                        |
| Julie Caracino        | National Home Performance Council      |
| Krishnan Gowri        | Pacific Northwest National Lab         |
| Magnus Cheifetz       | Building Energy                        |
| Marc Costa            | The Energy Coalition                   |
| Marshall Duer-Balkind | District Department of the Environment |
| Mike Brauch           | Actionet                               |
| Rick Diamond          | LBNL                                   |
| Robin Mitchell        | LBNL                                   |
| Steve Abercrombie     | Smart Buildings Center                 |

26 participants