

Meeting Minutes

TC 7.06 Building Data Exchange Subcommittee

Tuesday, February 11, 2025, 10:00 – 12:00 EST

Pocket Lake, Lobby Level

ASHRAE Code of Ethics Commitment

In this and all other ASHRAE meetings, we will act with honesty, fairness, courtesy, competence, integrity, and respect for others, and we shall avoid all real or perceived conflicts of interests. (See full [Code of Ethics](#).)

Attendees

~20 people in attendance (in person and virtually)

Minutes

10:00	Introductions	All
	Acknowledgment of previous meeting minutes (http://tc0706.ashraetcs.org/)	
10:10	Announcements and Remarks	Long
10:15	Old Business / Action Items	Long
10:30	Round Table on Building Data Exchange Updates	
	Standards and Schema	All
	• 229P: Protocols for Evaluating Ruleset Application in Building Performance Models	Goel

JSON data scheme. This is about compliance, 90.1-2019. Tool agnostic – not specifically for EnergyPlus.

New term called a compliance parameter. Not to be used by a simulation tool. What are these used for? Open committee to the data schema.

Been through 1 public review. Four tools are participating, energy gauge, openstudio.

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- SSPC 205-2023: Representation of Performance Data for HVAC&R and Other Facility Equipment Hitchcock

Review of data model for heat pumps. Manufacturers are determining how much data to share vs exposing their performance.

Specifying down at the data level.

- 232: Common Content and Specifications for Building Data Schemas McDowell

Standard released late last year. Set of common data structures for exchange of building performance data using a meta schema. E.g., how to format numbers. Come out of IBPSA's BDE.

205 is using it to define their data models.

- gbXML Roth

Autodesk is updating the schema – RP 1815 – occupant behavior in buildings. New elements were added.

Still discussing making gbXML an ANSI standard.

Still around 60 tools using gbXML.

- 231P: CDL - A Control Description Language for Building Environmental Control Sequences West

No update

- BEDES and Mapping Manager

No update

- HPXML Balbach

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Extending HPXML for simulation. They have a validator that allows checking for use cases.

IRA use case for BPI2400, for calibrating residential models. NFPA70 – national electric code. Use case for electrical design.

Working on modeling electrical model. Main service panel through loads. Looking into retrofits for upgrade potentials.

There are around 40 software tools using HPXML. Used by HERS rating.

Just defines areas and orientations, not full geometry.

HPXML workflow using ResStock. Easy to modify the XML file and runs the EnergyPlus model (through OpenStudio). Does not create full 3d model.

- BuildingSync

Marzullo

No update

OTHER WORK

- USACE
 - Contracted a study for using semantic models for vendors. The report is still with ACE and they are implementing some solutions.
 - They want a standard metadata requirement for the ACE. Naming conventions, point list conventions.
 - How to get 3 integrators on the same project for a BMS front.
 - Chris Battisti
- Campus / portfolios
 - How to handle a single interface for an entire campus? More FDD, not modeling.
 - REST, MTTQ, Opix, Custom API
 - How to handle when in a cloud-based enterprise when there are many different servers?
 - How to handle FDD or tracking the alarms?

Controls & Optimization

All

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- Std 223P / BRICK

Bender

Final editing, final public review in the next couple months. Lots of updates.

- Haystack

TBD

No updates.

Design & Construction

All

- IBPSA BDE

Rao

No update

- BuildingSync Gem

Marzullo

No update

- City Scale Building Formats

Bobker

CityGML, GeoJSON.

Public Agency Programs, Organizational
Updates, Compliance, and Reporting

All

- ASHRAE Building EQ

Roth

Can use various formats, gbXML, BuildingSync, etc. Creates various reports that can be used for Building EQ evaluation. Ties into standard 211 spreadsheet.

Not widely used.

What is unique that is different from ESPM? Building type, zip code, and EUI from standard 100 to determine the performance from utility data. Data are global. More building types than ESPM.

Is there a plaque or something that highlights compliance?

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Project is now an MTG – limited funding. Writing an RTAR.

The project is being used in teaching.

Looking to tie into BETTER tool and/or QBAT.

- Asset Score / QBAT

No updates

- Audit Template

No updates

- UBID

No updates

- Home Energy Score

Balbach

New multifamily score for the whole building. Very simple, similar to ASHRAE Building EQ, but for homes. Looks at comparisons of your score with/without improvements. Score between 0-10... 10 great, 0 bad.

Used for utility incentive programs.

- CTS / FEMP

No update

- SEED Platform

No update

- BETTER

Has an API, will be looking into connecting with Building EQ.

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10:55 New Business

File formats:

- JSON, YML, XML, etc. What is the version that people are using?
 - Tied to your use case?
 - JSON is much better these days.
 - Availability of reading libraries. Natural readability.
 - Format is not as important as the information.
 - How to interpret the data (nice meta schema)
- When to use JSON vs XML?
 - Which libraries are you using?
 - In general, shifting of XML to JSON. This is now the default.
 - Translating directly from XML to JSON is not perfect.
 - EnergyPlus can read msgpack
- Validation
 - Is there a schematron equivalent in JSON?
 - Not that we know of
- Updates to data.ashrae.org

New Action Items

None

11:22 Adjourned