



1791 Tullie Circle, N.E./Atlanta, GA 30329
404-636-8400

DRAFT

TC/TG/MTG/TRG MINUTES COVER SHEET

(Minutes of all Meetings are to be distributed to all persons listed below within 60 days following the meeting.)

TC/TG/MTG/TRG No. 6.7 DATE Aug 14, 2017

TC/TG/MTG/TRG TITLE Solar Energy Utilization

DATE OF MEETING June 27, 2017 LOCATION Long Beach, CA

MEMBERS PRESENT	YEAR APPTD	MEMBERS ABSENT	YEAR APPTD	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Costas Balaras	2016	Vinay Ananthachar	2014	Walt Vernon
Ongun Kazanci	2016	Reda Djebbar	2014	Isha Sharma
Svein Morner	2016	Gaylen Atkinson	2014	Jasim Mandi
Cary Smith	2016	Tim Merrigan	2016	Ryan Shanley (Standards)
Jim Leidel	2014			John Hamilton
Mehdi Zeyghami	2016			Farzin Rad
Khalid Nagidi	2014			
Maria Todorovic	2016			
Mike Case	2016			
Janice Means	2014			
Richie Mittal	2016			
Konstantinos Kapsis	2016			

DISTRIBUTION: All Members of TC/TG/MTG/TRG plus the following:

TAC Section Head: Mark Hegberg	SH6@ashrae.net
All Committee Liaisons As Shown On TC/TG/MTG/TRG Rosters (Research, Standards, ALI, etc.)	Mr Cyrus H Nasser (Standards) sl6@ashrae.net Mr Harvey M Sachs (Research) RL6@ashrae.net Mrs M Maggie Moninski (CCTC) ctt6@ashrae.net Mr Lynn F Werman (2019 HVAC APPLICATIONS) lynnwerman@yahoo.com Mr Nicolas Lemire (2020 HB Systems & Equipment) nlemire@pageaumorel.com
Mike Vaughn, Manager Of Research & Technical Services	MORTS@ashrae.net

Note: These draft minutes have not been approved and not the official, approved record until approved by the TC.

DRAFT MEETING MINUTES
ASHRAE TC 6.7 – SOLAR ENERGY UTILIZATION
Annual Meeting – June 27, 2017
Long Beach, CA, USA

1. The meeting was called to order by Chair Costas Balaras at 1:09 pm, June 27, 2017 and introductions were made.

2. Chair read from the ASHRAE code of ethics.

3. Introductions were made and an attendance sheet passed around.

4. Chair reviewed agenda and requested Dr. Case to track action items, acting as secretary. At start of meeting, 4 of 9 voting members were present (Costas Balaras, Jim Leidel, Khalid Nagidi, Cary Smith) were present. Dr Kapsis, incoming chair of programs subcommittee joined via skype. Lacking a quorum, Chair deferred approval of minutes until anticipated arrival of Ms. Means.

5. Chair modified agenda to start with item 6, Updates – standing committee liaisons. Mr. Ryan Shanley, ASHRAE Assistant Manager of Standards addressed the committee, noting the following: ASHRAE standards committee is looking for input on model code involvement from TCs to submit recommendations and that TCs can have ASHRAE staff present proposals at code hearings (Appendix 1). He mentioned that ASHRAE serves as TAG administrator for ISO documents, etc. Brian Cox is the cognizant staff member to talk with. Also, ASHRAE members can apply for membership to a standards project committees. Mike C asked whether ASHRAE endorses ISO standard. Mr. Shanley to find out and communicate information back to the TC and Dr Case.

AI 1

6. Announcements

6.a. The Las Vegas roster update and request for the TPS change was submitted by the chair to the section head (Appendix 2). Unfortunately, the information was not passed on to TAC. Eventually, the information was communicated again to MORTS in February. TAC will address the request for a name change tomorrow (June 28).

6.b. Technical subcommittees can meet by web meeting. This is encouraged. Put on radar screen to have remote SC meetings. Chair particularly suggested that Program subcommittees do so before Chicago meeting.

6.c. Society President can send letter of appreciation to employees. In July there will be email from Society to give information about requesting a letter.

6.d. Can now get name badges for those who are only going to TC meetings and not attending the program sessions.

6.e. Information is available from Mike Barker about solar applications (Appendix 3).

6.f. The Society will celebrate 125 years in 2020 – a big event is planned for the winter and annual meetings.

6.g. TCs can now develop technical bulletins. These are brief 1-2 page descriptions about special interest items. They must be approved by TAC.

6.h. There is a new TC minutes cover sheet. It is available on line at <http://ashrae.org/tcs>. It is no longer necessary to send minutes to the TAC chair.

6.i. There is a new TAC template to explain what TCs do for Society use to present to local chapters. Find it online at ashrae.org/tcs.

6.j. "Basecamp" is a web application for communication, documents, etc. Some discussion among the committee and consensus to request TC 6.7 access. Chair will request. Will try to get set up by the end of summer.

AI 2

7. Approval of minutes

7.a. At 1340, Chair announced that TC 6.7 now has a quorum, with 5 of 9 members present.

7.b. Chair reminded attendees that draft minutes from Las Vegas had been posted.

7.c. Ms. Means moved to approve, Mr. Nagidi seconded.

7.d. Discussion: Ms. Means noted that minutes say 7 voting members present, but there were only 6. This affects votes taken at meeting. She suggested that the TC should vote on St. Louis minutes after Las Vegas minutes. The Las Vegas minutes were corrected to reflect the change in the number of voting members present.

7.e. **The motion to approve the Las Vegas minutes as amended passed: 5-0-0-4-CV.**

7.f. The Chair entertained a motion to re-vote on approval of the St. Louis meeting minutes. Mr. Smith moved, Mr. Nagidi seconded.

7.g. There was no discussion.

7.h. **The motion to approve the St. Louis meeting minutes passed: 5-0-0-4-CV**

7.i. Dr. Case requested that all committee members who have any notes or materials from the 2016 Winter Meeting in Orlando send them to Dr. Case. At the Orlando meeting, members voted on a name change, TPS, and had presentations. Dr. Case to send out reminder.

AI 3

7.j. Chair noted that the draft minutes from the Long Beach meeting and the updated minutes from the Las Vegas meeting will be uploaded on the TC website.

AI 4

7.k. There was discussion on whether to keep meeting agendas on web site. Chair pointed out the agendas are included in the minutes, so there is no need to keep them on-line. No more discussion ensued.

8. Old Business

8.a. Action items from Las Vegas minutes.

8.a.1. Item 1 – Mr. Balaras to send a copy of TC 6.7 roster to Mr. Smith. Not to be distributed beyond ASHRAE. - done

8.a.2 Items 2a (Mr Morner to look into ASHRAE policy. Check ASHRAE guidelines and check with other TCs) and 2b (Chair to respond to the current request about the initiated process.) – both done. There was discussion of whether to allow links from web site to other sites. The TC web site currently has two but setting a precedent of including unsolicited information, future requests may be difficult to control. The TC might get too many requests for links. Does allowing links constitute implicit endorsement? Generally need disclaimers for links to other organizations. What might seem to work would be to add links to NREL, DOE, Universities, code authorities, and ASHRAE Research. For others who request the TC to add links, review might involve too much of a burden. Ms. Means took an action to compile a list of links that the TC would like to have posted. Others are invited to contribute.

AI 5

8.a.3. Item 3. Subcommittee Chairs are encouraged to take advantage and have at least one conference call or web meeting before Long Beach; announce/invite all VM and corresponding members. This was not accomplished. Will attempt to do better before Winter meeting.

8.a.4. Item 4. Mr. Morner to investigate and set up Basecamp for TC6.7. Mr. Morner investigated. Basecamp request to be initiated by Chair.

8.a.5. Item 5. Mr. Smith to investigate with ASHRAE Standards Committee adoption of ISO 9806 in place of ASHRAE STD 93. Action will be taken care of by interaction with Mr. Shanley. Dr. Case to follow up.

Same as
AI 1

8.b. ASHRAE Learning Institute (ALI) Successful Solar Applications Course Update. ALI has an interest in continuing this successful course offered by the late Henry Healey. Mr. Nagidi is willing to work as champion to update the course. Chair to follow up and request more information from the ASHRAE staff. Svein Morner might have entire course from a seminar that was accidentally posted.

AI 6

9. Subcommittee reports (subcommittee meeting notes attached)

9.a. Handbook – Dr. Todorovic

9.a.1. Chapter 35 of the HVAC Applications handbook is coming up for revision in 2019. TC 6.7 will need to vote and approve revisions in the summer of 2018. Dr. Kapsis will follow up with Dr. Todorovic to assist her in obtaining access to the online handbook update application and providing access Dr. Kapsis and other interested members. Dr. Kapsis will lead effort. Mr. Nagidi will provide calculation examples. Dr. Morner and a guest, Ritchi Mittal offered to assist as well.

AI 7

9.b. Programs – Mr. Nagidi

9.b.1 Chair congratulated Mr. Nagidi on putting together a successful program for Long Beach with two sessions (seminars #7 and #17).

9.b.2. Three programs are proposed for the Winter Meeting in Chicago. Dr. Kapsis will be incoming chair for Programs. There will be four speakers – see subcommittee notes.

Mr. Smith mentioned that he has confirmed Ed Lorenz. Need a conference call to organize.

9.b.3. Due date is August 1 for submissions for seminars for Chicago. There is still time until August 28th to submit conference paper for Houston. Mr. Nagidi went over tracks for Chicago and Houston.

9.b.4. TC 7.4 (Exergy Analysis) is proposing a forum for Chicago titled “There is no PVT design and operation standard but who is going to do that?”

- Moved to cosponsor by Subcommittee Chair.
- No discussion
- **Motion to cosponsor forum with TC 7.4 in Chicago passed 5-0-0-4-CV**

9.c. Research – Mr. Leidel

9.c.1. There are no Research Topic Acceptance Requests (RTAR) currently in the system.

9.c.2. One idea is to do a Design Guide RTAR – for PhotoVoltaic Thermal (PVT) and PhotoVoltaic (PV). There was discussion of the merits and complexity of PVT/PV design.

- Goal is to pull together information from multiple sources that would help A/E firms make design decisions.
- Dr. Morner – 90.1 has a generation subcommittee. This is a good time for a design guide to interact with 90.1. It may involve Handbook work. There was general discussion of scope.
- **Mr. Leidel will do a rough draft and set up a webex the first week of August**
- There will probably be other TCs such as TC 2.8 that should be involved.
- Shooting for submission by Aug 15th. The next date is Dec 15th.

AI 8

9.c.3 Mr. Leidel sent out two draft RTARS and a spreadsheet of ideas by email.

9.d. Standards – Dr. Case – incoming chair

9.d.1. Dr. Case went over highlights from the subcommittee meeting.

9.d.2. Dr. Todorovic would like to start a standard on building integrated PV. Proposing new ASHRAE standard. (look into process for new standard). She will prepare a short write up. Need Technical Product Specification (TPS).

AI 9

9.e. Website – Dr. Morner - Keep sending items to Dr. Morner to be posted on the TC web site.

AI 10

10. New business

10.a. Dr. Morner – The 90.1 PV subcommittee point of contact is Richard Lord. Need to get in touch with him and let them know that we are interested. Find who is in charge of

AI 11

subcommittee. Next revision is 2019. **ACTION: get in touch with Richard Lord. Swein and Khalid.**

10.b. Roll-on/Roll-off. Chair discussed issues with getting proposed roster changes to ASHRAE staff. After Las Vegas, the revised roster was submitted several times but it has not yet been updated on-line. Mr. Ananthachar and Dr. Djebbar will become non-quorum members. Updated roster will be available on the TC website. Chair to follow-up and confirm.

AI 12

11. Action Items

11-1. Dr. Case follow up with Mr. Shanley to find out whether ASHRAE endorses ISO standards (5 and 8.a.5).

11-2. Chair request Basecamp setup for TC 6.7 (6.j.).

11-3. Dr. Case to send out reminder asking for minutes from Orlando.

11-4 Dr Morner to upload minutes on the TC website

11-5. Ms. Means to compile a list of links to add to web site. Other TC members should send suggested links to her.

11-6. Chair follow up with ASHRAE Learning Institute staff about update Solar Applications course.

11-7a. Dr. Kapsis will follow up with Dr. Todorovic to assist her in obtaining access to the online handbook (9.a.1).

11-7b. Dr. Kapsis will organize a conference call to prepare for Winter program in Chicago (9.b.2).

11-8. Mr. Leidel will do a rough draft and set up a webex for RTAR discussion the first week of August (9.c.2).

11-9. Dr. Todorovic to a short write up on proposed new Building Integrated PhotoVoltaic (BIPV) standard. (9.d.2).

11-10. Members can send material to Dr Morner for sharing on the TC website.

11-11. Mr. Morner and Mr. Nagidi to get in touch with Richard Lord (10.a).

11-12. Chair to follow up and confirm that updated TC roster is available on-line (10.b).

12. TC 6.7 adjourned at 3:30 pm.

Respectfully submitted,

Mike Case, TC 6.7 Acting Secretary



Shaping Tomorrow's
Built Environment Today

TC INVOLVEMENT IN ASHRAE AMERICAN STANDARDS, INTERNATIONAL STANDARDS AND CODES

ASHRAE AMERICAN NATIONAL STANDARDS

Once a recommendation for a new standard or guideline has been approved responsibility for the document moves from the Technical Committee (TC) to the Project Committee (PC), however, TCs can still be involved in numerous different ways. TCs and TC members can get involved by:

- Signing up for the ASHRAE Standards Action List serve (<https://www.ashrae.org/listserves>)
- Apply for membership on the committee
- Attend SPC and SSPC meetings and actively participate in discussion that are related to your TC.
- Allocate time at TC meetings to review and comment on addenda and standards
- Submit change proposals for updates to standards through the PC of interest
- Speak with the Chair of SPC/SSPC to request a formal liaison with the TC

U.S. MODEL CODE INTERACTION

ASHRAE Standards are often the basis for the U.S. model codes either by referencing an ASHRAE Standard in its entirety or portions of the Standard. The TC can become involved and request ASHRAE's involvement in a particular model code process.

- Identify the codes of interest. Typically includes:
 - International Code Council - IECC (International Energy Conservation Code), IMC (International Mechanical Code), IFC (International Fire Code)
 - International Association of Plumbing and Mechanical Officials -UMC (Uniform Mechanical Code), UPC (Uniform Plumbing Code), USEHC (Uniform Solar Energy and Hydraulics Code)
 - National Fire Protection Association -NFPA 90A/B, NFPA 5000, NFPA 900
- Write a proposal or comment with strong technical substantiation to submit to the code change process for submission to Code Interaction Subcommittee for submission as an ASHRAE proposal/comment.
- Review the publicly distributed proposed changes to the code(s) of interest.
- Coordinate with ASHRAE staff for adjustments to proposals and for representation at Code hearings for the proposals submitted by your TC or PC either with testimony or public comment

INTERNATIONAL STANDARDS

ASHRAE is involved in the development of International Standards through the International Standards Development Organization (ISDO). This year one of the initiatives for ASHRAE is globalization of Standards. ASHRAE is the Secretariat and Technical Advisory Group (TAG) Administrator for the following International Organization for Standardization (ISO) Technical Committees:

- ISO/TC 86, Refrigeration and air-conditioning (includes subcommittees) – Ties into ASHRAE Standards 15 and 34
- ISO/TC 205, Building environment design (includes working groups) – Ties into ASHRAE Standards 135, 135.1, 201, 205, 90.1, 62.1, 62.2, 55

ASHRAE is the TAG Administrator for the following ISO Technical Committees:

- ISO/TC 59/SC 13, Buildings and civil engineering works- ties into the ASHRAE MTG BIM Building Information Modeling
- ISO/TC 142, Cleaning equipment for air and other gases - ties into ASHRAE Standard 52.2 and Guideline 26
- ISO/TC 163, Thermal performance and energy use in the built environment – Ties into ASHRAE Standards 90.1, 90.2, 189.1, 189.3

TCs can get involved in the following ways:

- Join a Technical Advisory Group (TAG)
- Join the TAG and attend ISO meetings as an expert
- Agree to be a resource for the TAGs to reach out to for review of these documents.

ADDITIONAL RESOURCES

There are additional resources available for TCs to better understand the process for involvement. These can be found here:

- TCs and PCs Similarities and Differences - <https://www.ashrae.org/TC-Training>
- ASHRAE Code Interaction - <https://www.ashrae.org/CIS>
- Introduction to International Standards - <https://www.ashrae.org/pdtoolkit/training>
- Information on ASHRAE Standards development - <https://www.ashrae.org/pdtoolkit/training>
- Direct questions to standards.section@ashrae.org, zreinic@ashrae.org for ASHRAE standards, sterguson@ashrae.org or pc@ashrae.org for codes, isdo@ashrae.org for international standards

APPENDIX 2

Roster SY 2017-18 and TC Name & Scope

T-TAC-TC06.07			
Position	Name	Continuing from Current Year? (Y/N)	
MANDATORY	Chair (must be ASHRAE member, the term is 2 or 3 years. Please see # applying for chair job)	Dr Constantinos A Balasoiu, Ph.D., P. Eng.	Y
	Vice Chair (must be ASHRAE member)	Ms Khalid Nagdi	N
	Secretary	Dr Michael P Case	N
	Research Subcommittee Chair	Ms James Leidel	Y
	Standards Subcommittee Chair	Dr Michael P Case	N
	Program Subcommittee Chair	Ms Konstantinos Kapris	N
	Handbook Subcommittee Chair	Dr Marija S Todorovic, PhD	Y
	Webmaster	Dr Sven O Homan, PhD, PE	Y
Additional Placement			
Subcommittee or Position	Name	Continuing from Current Year? (Y/N)	Statistics for the Upcoming Session Year
Member-Non Quorum	Ms Vinay Ananthashah, PE	N	Number of Voting Members (min. 6)
Member-Non Quorum	Dr Rieka Debbbar, PhD	Y	Number of Members Non Quorum (min. 2)
All Coordinators			Total Voting Members (min. 2)
MTS/OCI Liaison			Non Quorum
Position or Sub-Committee Chair			Corresponding Member (min. 46)
			Total Number on Committee
			58

NEW MEMBER SECTION Add additional member names, ASHRAE Numbers, and Status in this section

Name	Employer	Bin on file Y/N?	Status Code
Ms Dorothea A Charalambopoulos	D A Charalambopoulos & Assoc	Y	AC
Ms Danielle Meola	Montana State University		AC

Membership List and Status Add additional member names, ASHRAE Numbers, and Status at the bottom of the list.

T-TAC-TC06.07

new members here. Confirm/update existing member status here. Add new members above in blue "NEW MEMBER SECTION"

Name	Employer	Appointed Year	End Year	Position	Status Code (Required)
Ms Timothy J Manigan, PE	NREL	07/01/2015	06/30/2020	Member	NC
Ms Cary Smith	Sound Geothermal Corp	07/01/2016	06/30/2020	Member	NC
Ms Vinay Ananthashah, PE	Eversource Energy	07/01/2014	06/30/2018	Vice Chair	PNQ
Ms James Leidel	Oakland University	07/01/2014	06/30/2018	Research Subcommittee Chair	NC
Dr Rieka Debbbar, PhD	Natural Resources Canada	07/01/2014	06/30/2018	Member-Non Quorum	PNQ
Ms Gaylen V Robinson	Arlinson Electronics Inc	07/01/2014	06/30/2018	Member	NC
Ms Janice K Means, PE	Lawrence Technological University	07/01/2014	06/30/2018	Member	NC
Dr Constantinos A Balasoiu, Ph.D., MDA		07/01/2015	06/30/2018	Chair	NC
Ms Khalid Nagdi	EMCC	07/01/2014	06/30/2017	Program Subcommittee Chair	AV
Dr Sven O Homan, PhD, PE	Sustainable Engineering Group	07/01/2016		Webmaster	AV
Dr Marija S Todorovic, PhD	University Of Belgrade	07/01/2015		Handbook Subcommittee Chair	AV
Ms Konstantinos Kapris	Concordia University	08/12/2016	08/12/2018	Provisional Corresponding Member	AC
Ms Eleftherios Bourdalis	Technical University of Denmark	06/25/2016	06/25/2018	Provisional Corresponding Member	AC
Ms Orhan Bek Kazanci	Technical University of Denmark, CI	06/25/2016	06/25/2018	Provisional Corresponding Member	AC
Dr Michael P Case	US Army EPDC	04/02/2016	04/02/2018	Provisional Corresponding Member	AV
Ms Mehdi Zeyghani		01/28/2016	01/28/2018	Provisional Corresponding Member	AC
Ms Rieha Mittal	Qventive Engineering Pvt Ltd	07/25/2016	07/25/2018	Provisional Corresponding Member	AC
Ms Didier J Thevenard	Canadian Solar Solutions Inc.	01/25/2016	01/25/2018	Provisional Corresponding Member	AC

D Al Rashid Al-Ab		07092011	Corresponding Member	NC
Prof William P Buhler, PhD, PE	The Pennsylvania State University	07092007	Corresponding Member	NC
D Muhammad Abu-Rafea Elwas	University of Texas at Tyler	07092016	Corresponding Member	NC
M Joseph M Bhattar	Johnson Controls	07092012	Corresponding Member	NC
D Andrew D Chaston, PE, PEng	University of Dayton	07092012	Corresponding Member	NC
D Charles J Connor, P.E.P.N.D	Solar Engineering Company	07092013	Corresponding Member	NC
D Elena Dascalaki	National Observatory of Athens	07092016	Corresponding Member	NC
M Myra Dayan		07092014	Corresponding Member	NC
M Brian P Dougherty	NIST	07092012	Corresponding Member	NC
M Kehon Friedrich	McMaster University	07092013	Corresponding Member	NC
D David V Goflach	United Technologies Research Cen	07092014	Corresponding Member	NC
D Richard B Hayter, PhD, PE		07091994	Corresponding Member	NC
M Mari A Hesel, PE	SunEarth	07092013	Corresponding Member	NC
Ms Pamela M Honekus	Leppard Johnson & Associates	07092008	Corresponding Member	NC
M Joshua D Kading	Burns & McDonnell	07092014	Corresponding Member	NC
M Christopher G Kamps, PE		07092013	Corresponding Member	NC
M Sanford A Klein	University Of Wisconsin	07092002	Corresponding Member	NC
M Wilfred Laman, PE		07092013	Corresponding Member	NC
M Kaiwee Lettano	US Air Conditioners Distributors	07092013	Corresponding Member	NC
D Andrew I Lovrenovic	AI Research	07092009	Corresponding Member	NC
M Lucio Marquez, PhD	Thermool Consulting	07092009	Corresponding Member	NC
M Filippo Meezas		07092013	Corresponding Member	NC
M Ram Narayananarunthy	EPRI	07092016	Corresponding Member	NC
M Seenu Sundarajan Pillai, I		07092016	Corresponding Member	NC
D Ming Ou, PhD	School Of Civil Engineering	07092012	Corresponding Member	NC
D T Agam Reddy, PE	Arizona State University	07092006	Corresponding Member	NC
M William A Schalk, PE	JBA Consulting Engineer	07092012	Corresponding Member	NC
M Dhas Shah		07092012	Corresponding Member	NC
D Vijay K Sui	ALERS INTERNATIONAL	07092014	Corresponding Member	NC
D Athar Syed	Hayden Mechanical and Electrical L	07092007	Corresponding Member	NC
M Christian Vachon	Enerconcept Technologies	07092014	Corresponding Member	NC
M Michael R Vassmer	National Renewable Energy Lab	07092005	Corresponding Member	NC
M Scott E Vajaland		07092012	Corresponding Member	NC
M Edele V Walbord	Viermann Manufacturing Co	07092006	Corresponding Member	NC
D Ceek Cui Yauwuk, PhD	University of Hartford	07092011	Corresponding Member	NC
D Yanda Zhang	ZVD Energy, Inc.	07092012	Corresponding Member	NC
D Yongfang Zhong	Gamma Technologies, L.L.T	07092012	Corresponding Member	NC

Fw: TC 6.7 Roster Activity Reports, Request for TPS change

CA:BJL:AJMS

2/1/2017 8:05 PM



Mike, I hope that you had a pleasant return to Atlanta and recovered[ing] from another hectic meeting.

I am trying to follow-up on TC 6.7 request for a change in the TPS of the TC that we have voted during our TC meeting in Vegas. Can you please advise if there is anything else we need to do from our end to get this in the process for TAC to consider ? I have attached the recommended changes in "TC6.7 TPS Changes.docx" along with the other reports to our section head. Please advise if we need to make some additional official request to TAC or this is sufficient and we will hear in due time.

Warm regards from Athens

Costas

Constantinos A. Balaras, Ph.D., FASHRAE, FASME
 Dr. Mechanical Engineer, EUR ING, Registered Engineer
 Research Director
 Group Energy Conservation (SREG)
 Institute for Environmental Research & Sustainable Development (IERSD)
 National Observatory of Athens (NOA)
 1, Metaxa & Vass. Pavlou, GR-15201 Athens, Greece
 Tel: +30 210 8000012 Fax: +30 210 8000004
 Email: costas@noa.gr Website: www.enr-igsm.org
 RG: http://www.researchgate.net/profile/Constantinos_Balaras
 LinkedIn: <http://www.linkedin.com/in/costasbal>
 Live in or Facebook: <http://www.facebook.com/CSofStafSera/Constantinos>

-----Original Message-----

From: costas@noa.gr
 Sent: Wednesday, February 01, 2017 11:14 AM
 To: sh6@ashrae.net
 Cc: mhagberg@comcast.net
 Subject: TC 6.7 Roster Activity Reports

Mark, attached is the Roster update and Activity forms for TC 6.7, along with a request to change the TPS that was voted during the TC meeting in LV.
 Thank you,
 Costas

RE: ASHRAE TC 6.7 Title-Purpose-Scope Change Request

4/5/2017 4:30 PM

Vaughn, Michael

To: CA BALARAS, Seymour, Lizzy

Cc: Thomas, Tara; Mike Bilderbeck

Attachments:  Fe_TC 6.7 Roster Activity Reports_Reg...  T06.7 TPS_Changes.docx

Hi Everyone,

TAC currently has no plans at this time for a spring meeting so we were carrying the TC 6.7 proposed name change over until the Long Beach meeting along with a proposed merger of two other TCs.

Since the proposed TPS does not appear to be controversial, I've copied the TAC Chair, Mike Bilderbeck, on the e-mail to see if he would be willing to allow a 2-week TAC letter ballot vote on this TPS instead of waiting until Long Beach meeting.

Sincerely,

Mike


Michael Vaughn
Senior Manager of Research and Technical Services
ASHRAE
1791 Tullie Circle NE
Atlanta, GA 30329
Tel: 478-529-1211
mvaughn@ashrae.org
www.ASHRAE.org

Shaping Tomorrow's Built Environment Today

Re: TC 6.7: 2017-2018 Roster Update Workbooks and Webinar Training Registration!

6/7/2017 6:11 PM

Tara, Thomas, Tara

Attachments:  TC 6.7 Roster Activity Reports.rtf  Request for TPS change_FO...  TC Activity Form_TC 6.7 SUBMITTED...  Roster Update Form_TAC-T06.07_SUR...  T06.7 TPS_Changes.docx  Mike Vaughn to Tara on 6/7/2017

1 This message is high priority.

Tara, They were submitted on Feb 1st to our section head (see attached) and to Mike Vaughn wrt our request for TPS change and then were also sent to you by Mike wrt the same TPS question.

In any event, I hope that you have all that you are looking for. Otherwise please advise.

Best regards

Costas

Constantinos A. Balaras, Ph.D. FASHRAE FASME
Dr. Mechanical Engineer, EUR ING, Registered Engineer
Research Director
Group Energy Conservation (GEC)
Institute for Environmental Research & Sustainable Development (IERSD)
National Observatory of Athens (NOA)
1 Soranou & Efessiou, GR-15201 Athens, Greece
Tel: +30 210 8208333 Fax: +30 210 8102036
Email: costas@noa.gr Website: www.meteo.noa.gr

From: Thomas, Tara

Sent: Wednesday, June 07, 2017 5:53 PM

Re: costas@noa.gr

Subject: RE: TC 6.7: 2017-2018 Roster Update Workbooks and Webinar Training Registration!

Please send me the updates to the roster for the upcoming year, immediately. These updates were due in February.

Sincerely,

Tara


Tara Thomas
Administrative Assistant
ASHRAE
1791 Tullie Circle NE
Atlanta, GA 30329
Tel: 678-529-1203
ttomas@ashrae.org
www.ASHRAE.org

Shaping Tomorrow's Built Environment Today

TC 6.7 Solar Energy Utilization and Other Renewable Energies

Scope

Technical Committee 6.7 is concerned with all equipment, processes and systems which collect, convert, store and utilize solar energy or ~~dissipate energy by nocturnal radiation~~ other renewable energy sources. Overlap with other TCs is recognized where specific systems are included to utilize or distribute energy as heat or electricity.

Vote: 7-0-0 (CV)

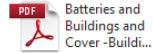
Information from Mike Barker

Solar Energy Utilization - ASHRAE TC 6.7

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To: Balaras C.; James Leidel; Nagidi Khalid_1;

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RE : Solar Energy Utilization - ASHRAE Technical Committee 6.7

Greetings from sunny South Africa

Please find two Articles that may have a bearing on your deliberations. You may wish to investigate the capabilities of the DER-CAM Software Package from Berkley Labs, in conjunction with the powerful ASHRAE FSGIM Standard.

Economic and Environmental model of Customer DER Adoption
- <https://building-microgrid.lbl.gov/projects/der-cam>

MicroGrids in Buildings - Modeling the Economic Viability
- <http://www.cibsejournal.com/technical/the-balance-of-power-modelling-a-microgrid-in-durban-south-africa/>

I am an occasional ASHRAE Member, and would like to volunteer my services to TC 6.7 as an observer, and as a Social Media Reporter (I am a manager of the various IBPSA LinkedIn Groups, and the ASHRAE LinkedIn Group)

ASHRAE - ~7700 members - <https://www.linkedin.com/groups/76279>
IBPSA - International Building Performance Simulation Association ~6900 members - <https://www.linkedin.com/groups/75552>

Technical Committee 6.7 is concerned with all equipment, processes and systems which collect, convert, store and utilize solar energy or other renewable energy sources. Overlap with other TCs is recognized where specific systems are included to utilize or distribute energy as heat or electricity.

Thanks,

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