



PV Taiwan TC Chapter

Meeting Summary and Minutes

Taiwan Summer Standards Meeting 2020

Friday, May 29, 2020, 14:00 – 15:00

No. 3, Ln. 270, Sec. 3, Beishen Rd., Shenkeng Dist., New Taipei City 222, Taiwan

TC Chapter Announcements

Next TC Chapter Meeting

September 18, 2020

Meeting Room 317, 78th Building, No. 195, Section 4, Zhongxing Road, Zhudong Township., Hsinchu, Taiwan

Table 1 Meeting Attendees

Co-Chairs: Ray Sung (UL)

SEMI Staff: Cher Wu

<i>Company</i>	<i>Last</i>	<i>First</i>	<i>Company</i>	<i>Last</i>	<i>First</i>
ITRI	Li	Yu Tai	Kington	Shih	Jason
ITRI	Hsieh	Hofan	PV Guider	Lin	Jay (C.C.)
ITRI	Long	Mickey	SinoCon	Pan	Vivian
ITRI	Chang	Wen-Chen	Tend Think Solar Corp.	Chen	Kai Lin
ITRI	Wu	T.C.			

Table 2 Leadership Changes

<i>WG/TF/SC/TC Name</i>	<i>Previous Leader</i>	<i>New Leader</i>
None		

Table 3 Committee Structure Changes

<i>Previous WG/TF/SC Name</i>	<i>New WG/TF/SC Name or Status Change</i>
None	

Table 4 Ballot Results

<i>Document #</i>	<i>Document Title</i>	<i>Committee Action</i>
6537	Reapproval of SEMI PV56-1214, Test Method for Performance Criteria of Photovoltaic (PV) Cell and Module Package	Passed
6538	Reapproval of SEMI PV57-1214, Test Method For Current Voltage (I V) Performance Measurement Of Organic Photovoltaic (OPV) And Dye Sensitized Solar Cell (DSSC)	Passed

#1 **Passed** ballots and line items will be submitted to the ISC Audit & Review Subcommittee for procedural review.

#2 **Failed** ballots and line items were returned to the originating task forces for re-work and re-balloting or abandoning.

Table 5 Activities Approved by the GCS between meetings of the TC Chapter

<i>#</i>	<i>Type</i>	<i>SC/TF/WG</i>	<i>Details</i>
None			



Table 5 Activities Approved by the GCS between meetings of the TC Chapter

#	Type	SC/TF/WG	Details

Table 6 Authorized Activities

Listing of all revised or new SNARF(s) approved by the Originating TC Chapter.

#	Type	SC/TF/WG	Details
None			

#1 SNARFs and TFOFs are available for review on the SEMI Web site at:

<http://downloads.semi.org/web/wstdsbal.nsf/TFOFSNARF>

Table 7 Authorized Ballots

#	When	TF	Details
None			

Table 8 SNARF(s) Granted a One-Year Extension

#	TF	Title	Expiration Date
None			

Table 9 SNARF(s) Abolished

#	TF	Title
None		

Table 10 Standard(s) to receive Inactive Status

Standard Designation	Title
None	

Table 11 New Action Items

Item #	Assigned to	Details
2020-May-01	Yu-Tai Li (ITRI)	Work on the Reliability test method for flexible and light-weight Si- PV module

Table 12 Previous Meeting Action Items

Item #	Assigned to	Details
2020-May-01	Mickey Long (ITRI)	To draft Standards Watch to promote certification by a third-party. – OPEN

1 Welcome, Reminders, and Introductions

Committee Co-Chair Ray Sung (UL) called the meeting to order at 14:00. The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed. Attendees introduced themselves.

Attachment: Meeting Reminder 2020

2 Review of Previous Meeting Minutes

The TC Chapter reviewed the minutes of the previous meeting.

Motion: Approve previous meeting minutes as written

By / 2nd: Jason Shih (Kington) / T. C. Wu (ITRI)

Discussion: None.

Vote: 9-0 in favor. Motion passed

Attachment: 20191004 PV Meeting Minutes

3 Liaison Reports

3.1 PV China TC Chapter

- Meeting Information
 - Last meeting
 - October 25th, 2019, Beijing, China
 - Next meeting
 - June 30, 2020, Shanghai, China
- Leadership Changes
 - PV Silicon Wafer Task Force: Yuepeng Wan – GCL, Dongli Hu – GCL, Rui Zhou – LONGi
- Ballot Results

Photovoltaic

#	Title	TC Chapter Action
5842D	New Standard: Test Method for Metal-Wrap-Through Solar Cell Via Resistance	Passed with Technical Changes. Ratification ballot to be issued.
5983C	New Standard: Test Method for In-line Sheet Resistance Inspection	Failed and return to TF for re-work and rebalot.
6070E	New Standard: Guide for Identifying Cell Defects in Crystalline Silicon PV Modules by Electroluminescence (EL) Imaging	Passed with editorial changes.
6191	New Standard: Guide for the Design of Testing and Sorting Equipment for Crystalline Silicon Solar Cells	Passed with Technical Changes. Ratification ballot to be issued.

Photovoltaic Materials

#	Title	TC Chapter Action
6458	New Standard: Specification for Silicon Powder Used in Polysilicon Production	Failed and return to TF for re-work and rebalot.

- Authorized Activities

#	Type	TF	Details
6610	SNARF	PV Module TF	Revision to PV86-1018, Specification for Crystalline Silicon Photovoltaic Module Dimensions

#	Type	TF	Details
6609	SNARF	PV Silicon Wafer TF	Revision to PV22-0817, Specification for Silicon Wafers for Use in Photovoltaic Solar Cells

- 5-Year-Revision

#	Type	TF	Details
6611	SNARF	Crystalline Silicon Solar Cell TF	Revision to PV54-0514, Specification for Silver Paste, Used to Contact with N+ Diffusion Layer of Crystalline Silicon Solar Cells
6608	SNARF	PV Diffusion Furnace Test Methods TF	PV53-0514, Test Method for In-Line Monitoring of Flat Temperature Zone in Horizontal Diffusion Furnace
6607	SNARF	PV Silicon Raw Materials TF	PV50-1114, Specification for Impurities in Polyethylene Packaging Materials for Polysilicon Feedstock

- Authorized Ballots

#	When	TF	Details
6541	Cycle 9-2019/1-2020	BIPV TF	Revision to PV54-0514, Specification for Silver Paste, Used to Contact with N+ Diffusion Layer of Crystalline Silicon Solar Cells
6458A	Cycle 1-2020	PV Silicon Raw Materials TF PV Silicon Wafer TF	New Standard: Specification for Silicon Powder Used in Polysilicon Production Revision to PV22-0817, Specification for Silicon Wafers for Use in Photovoltaic Solar Cells

- Activities Request Approval via GCS between Meetings

#	Type	TF	Details
6611	SNARF	Crystalline Silicon Solar Cell TF	Revision to PV54-0514, Specification for Silver Paste, Used to Contact with N+ Diffusion Layer of Crystalline Silicon Solar Cells

Action Item: None

Attachment: China PV&PVM Committee Chapter Liaison Report October 2019 -v2

3.2 PV Materials NA TC Chapter

- No meetings since July 2019.

Action Item: None

Attachment: PV Materials NA TC Chapter Liaison Report July 2019

3.3 PV & PV Materials Japan TC Chapters

- No update received.

3.4 SEMI Staff Report

- Cher (SEMI TW) gave the SEMI Staff Report. Of note:
 - 2020 Critical Dates for SEMI Standards Ballots
 - Please see: https://www.semi.org/en/standards/Critical_Dates
 - Standards 5 Year Review from PV TC Taiwan Chapter

<i>Display Name</i>	<i>Description</i>	<i>Available Date</i>
SEMI PV72-0316	Test Method to Evaluate an Accelerated Thermo Humidity Resistance of Photovoltaic (PV) Encapsulation	2016/3/30
SEMI PV69-1015	Test Method for Spectrum Response (SR) Measurement of Organic Photovoltaic (OPV) and Dye-Sensitized Solar Cell (DSSC)	2015/10/30
SEMI PV57-1214	Test Method for Current-Voltage (I-V) Performance Measurement of Organic Photovoltaic (OPV) and Dye-Sensitized Solar Cell (DSSC)	2014/12/18
SEMI PV56-1214	Test Method for Performance Criteria of Photovoltaic (PV) Cells and Modules Package	2014/12/18

Attachment: PV TC Meeting Material 20200529

4 Ballot Review

NOTE 1: TC Chapter adjudication on ballots reviewed is detailed in the Audits & Review (A&R) Subcommittee Forms for procedural review. The A&R forms are available as attachments to these minutes. The attachment number for each balloted document is provided under each ballot review section below.

<i>Document #</i>	<i>Document Title</i>	<i>Committee Action</i>
6537	Reapproval of SEMI PV56-1214, Test Method for Performance Criteria of Photovoltaic (PV) Cell and Module Package	Passed
6538	Reapproval of SEMI PV57-1214, Test Method For Current Voltage (I V) Performance Measurement Of Organic Photovoltaic (OPV) And Dye Sensitized Solar Cell (DSSC)	Passed

Attachment: A&R 6537 final & A&R 6538 final

5 Task Force Reports

5.1 OPV, DSSC&PSC TF

- None.

5.2 PV Reliability Test TF

TF Leader: Y.T.Li ITRI /Dr. GJ Lin (PV guider)

The TC Chapter reviewed TF report.

Motion: Approve TF to draft a new SNARF for the topic of Reliability test method for flexible and light-weight Si-PV module

By / 2nd: Jason Shih (Kington) / Jay Lin (PV Guider)

Discussion: None

Vote: 9-0 in favor. Motion passed

Attachment: 20200529 PV Reliability Test Method Task Force

6 Old Business

Dr. Mickey Long will draft Standards Watch to promote certified by a third-party. – **OPEN**

7 New Business

7.1 Next TC meeting will review the 5-year PV standards.



8 Next Meeting and Adjournment

The next meeting is scheduled on September 18, 2020 in Hsinchu. See <http://www.semi.org/standards-events> for the current list of events.

Adjournment was at 15:20.

Respectfully submitted by:

Cher Wu

Senior Executive Consultant

SEMI Taiwan

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Email: cherwu@semi.org

Minutes tentatively approved by:

Ray Sung (UL), Co-chair	June 8, 2020
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Table 13 Index of Available Attachments^{#1}

<i>Title</i>	<i>Title</i>
01_Meeting Reminder_2020	04_PV TC Meeting Material_20200529
02_20191004_PV Meeting Minutes	05_A&R 6537_final & A&R 6538_final
03.1_China PV&PVM Committee Chapter Liaison Report October 2019 -v2	06_20200529_PV Reliability Test Method Task Force
03.2_PVMaterials NA TC Chapter Liaison Report July 2019	

^{#1} Due to file size and delivery issues, attachments must be downloaded separately. A .zip file containing all attachments for these minutes is available at www.semi.org. For additional information or to obtain individual attachments, please contact [SEMI Staff Name] at the contact information above.