

# Procedural Review Voting Sheet

## 2014 Cycle 7

REGION: **China**

COMMITTEE: **Photovoltaic**

EVENT: **SEMI China PV Standard TC 2014 Winter Meeting**

DATE OF MEETING: **Dec. 12, 2014**

PLACE OF MEETING: **Rongyuan Hotel, #225 Chezhan North Road, Changsha, Hunan, China**

COMMITTEE CO-CHAIRS: **Guangchun Zhang/CSI, Jun Liu/CESI**

SEMI STAFF: **Kris Shen**

A&R Voter: **Name/Company**

Date: **200X/MM/DD**

### I. Document Number & Title

<b>5477C</b>	<b>New Standard: Test Method For Determining B, P, Fe, Al, Ca Contents In Silicon Powder For PV Applications By Inductively-Coupled-Plasma Optical Emission Spectrometry</b>
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### II. Tally

#### Voting Tally:

A minimum of 60% of the voting interests that have voting members within the technical committee must return votes. (Regulations ¶ 9.6.1)

	Return		Distribution		Return Rate	
Yellow	92	÷	153	=	60.1%	>=60%
Lilac & Others	70					
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Total Vote	162					
Reject	1					
Accept	39					

<b>A&amp;R</b>		<b>Not approved</b>
		<b>Reason:</b>

### III. Rejects

#### Reject 1 (Larry Hartsough/ U.A.Associates)

##### Negative 1 of Reject 1

Negative	Referenced Section	
	Reason	<p><b>Negatives: 否决:</b></p> <ol style="list-style-type: none"> <li><b>The Location for TC Chapter adjudication is not listed in the background statement of the Letter Ballot and it must be. See Regulations 9.5. Because of this, even if the document is approved during adjudication, it will fail procedural review. The venue, such as Hotel or Conference Center name, is sufficient to list in the Location box.</b>            在投票信的背景声明中没有列出 TC 分会评判的地点，而在条例 9.5 中规定必须列出该地点。正因为如此，即使该文件评判时通过，在程序审查中也失败。只需在地点框中列出酒店或会议中心的名称等场地，就可以了。</li> </ol> <p><b>Comments: 编辑点评:</b></p> <ol style="list-style-type: none"> <li><b>This document is overall technically sound, but needs technical editing to conform to the Procedure Guide (PG) and Style Manual (SM), and to provide clarity and grammatical correctness. I suggest that the China PV TC Chapter cooperate with the NA TC Chapter to arrange technical editing <u>before</u> going to Letter Ballot.</b>            本文件是整体技术上可行，但是需要进行技术编辑，以符合程序指南 (PG) 和样式手册 (SM)，以确保本文件清晰度和语法的正确性。我建议中国光伏 TC 分会与 NA (北美?) TC 分会合作，在进入下次全球投票前，安排技术性编辑。</li> <li><b>It must be made clear that the paragraph below the table in the background statement applies to TF meetings only. The TC Chapter meeting to adjudicate a Letter Ballot must be held as announced in the background statement (see Regs ¶9.5).</b>            必须明确指出，背景声明中表下方的章节只适用于 TF 会议。必须按照背景陈述中的声明，召开 TC 分会会议评判全球投票 (见条例 ¶9.5)。</li> <li><b>¶2.2 is not a Scope statement, but deals with sample preparation. Insert the sentence as a new ¶10.2.1 and renumber the remaining sub-paragraphs under 10.2.</b>            ¶2.2 并不是“范围”陈述，而是对样品制备的处理。建议将此句作为新编章节 ¶10.2.1，并将 ¶10.2 中其他的章节重新编号。</li> <li><b>I can understand the motivation for Note 1, as it partially addresses the issues discussed in PG Appendix 3, line A3-4. It should be a numbered paragraph and not a Note, as it is important. Possible</b></li> </ol>

**wording: “Clean all containers, including those used to run the blanks, to avoid erroneous results due to different levels of contamination.” However, it does not describe how the problem would be identified (as instructed in the PG). Could that description be added? An alternative location for these topics might be as the first sub-paragraph in §10.**

我可以理解“Note 1”的意义，因为它部分地解决了程序指南 PG 附录 3 中，A3-4 行所讨论的问题。但是它应该作为一个有编号的段落，而不是“注意事项”，因为它是非常重要的。可能的措辞：“Clean all containers, including those used to run the blanks, to avoid erroneous results due to different levels of contamination.” “清洗所有的容器，包括那些用来做空白实验的容器，以避免由于不同程度的污染导致的错误结果”不过，这并没说明如何确定问题（按照程序指南 PG 的指导）。可以添加这样的描述么？这部分可以调整至§10 章节第一节。

- 5. Delete ¶5.1; it is neither needed nor customary. Renumber remaining subparagraphs.**

删除¶5.1；它既不必需也不符合惯例。将剩余项重新编号。

- 6. In the interests of consistency, I suggest that the meaning of ICP-OES in ¶5.2.1 be exactly the same as in PV17: inductively coupled plasma optical emission spectroscopy (emphasis added). This would also mean that the title and use of the term “spectrometer” should be corrected throughout. It appears that spectrometer and spectrometry are used more for mass analysis, although that is not consistent either. This is not a strong suggestion.**

基于一致性，我建议¶5.2.1 中 ICP-OES 的定义与 PV17 保持一致。PV17: inductively coupled plasma optical emission spectroscopy (emphasis added)。这也意味着，“spectrometer”一词在标题和正文中都要全部改正。看起来，“spectrometer”和“spectrometry”在质谱分析中使用更多，但这两个本身也不一致。这不是一个强烈建议。

- 7. Would it be possible to use one of the definitions of CRM (¶5.3.5 in this Draft) that is already in the COT, along with proper attribution? I am not sure what is meant by “NIST traceable” in your definition. If it is really important to use such material, then that term should be further explained/defined.**

能不能使用 COT 中已有的 CRM（本草案¶5.3.5）的定义，加上适当的属性？我不清楚你所定义的“NIST 溯源”是什么意思。如果使用的这种材料非常重要，那么该条款应做进一步解释/定义。

- 8. In that the analysis technology of PV49 is MS and of this Draft OES, how can the principle be the same, as stated in ¶6.1? If you mean that the sample preparation is the same, or similar, then say so.**

¶6.1 中 PV49 的分析技术是质谱分析，而这个草案是 OES，原理怎么能是一样的？如果你的意思是，样品制备是相同的或类似的，应该直接如此表述。

- 9. I do not understand how recovery of Boron can be >100%, as stated in**

	<p><b>¶6.2. How can you end up with more than is in the test sample?</b>  ¶6.2 中，我不明白硼回收率如何才能&gt;100%，你如何做到将硼的测定含量超过测试样品中含量？</p> <p><b>10. In ¶ 8.2.1, the Mannitol is described as “superior grade pure”, which appears to be a food grade category. Would it be more pure than “analytical reagent grade”?</b>  ¶8.2.1, 甘露醇被描述为“优级纯”，这似乎是一种食品级的类别。难道这个纯度比“分析纯”更纯？</p> <p><b>11. Suggested rewording of ¶12.1.2: Ensure that the content of the element in the test specimen is within the range of the working curve and that the standard curve linear correlation coefficient is at least 0.9995.</b>  ¶12.1.2 推荐措词：Ensure that the content of the element in the test specimen is within the range of the working curve and that the standard curve linear correlation coefficient is at least 0.9995。</p> <p><b>12. In ¶ 12.1.3, change ‘solution’ to ‘solutions’.</b>  ¶12.1.3, 将‘solution’ 改为 ‘solutions’。</p> <p><b>13. Suggested rewording of ¶14.1: Report the arithmetic mean of the parallel determination results for each element to three significant digits. The relative deviation of the parallel determination results shall be no more than 10%.</b>  ¶14.1 建议重新措辞：Report the arithmetic mean of the parallel determination results for each element to three significant digits. The relative deviation of the parallel determination results shall be no more than 10%.</p> <p><b>14. Suggested rewording of the first sentence of ¶ 15.1: One laboratory repeated this method 43 times, using the same {lot? Piece? chunk ??} for the test sample and under the same conditions.</b>  ¶15.1 的第一句话建议重新措辞：One laboratory repeated this method 43 times, using the same {lot? Piece? chunk ??} for the test sample and under the same conditions.</p> <p><b>15. Several of the parameters (power, distance, flushing time) listed in the Appendix do not have a tolerance or range. Would it be more accurate to label this table as typical nominal parameters for the instrument setup?</b>  一些在附录中列出的参数不具有耐受性或范围（power, distance, flushing time）。将此表格中参数标注为仪器设置的典型标称参数会不会更准确？</p>	
Withdrawal	No withdrawal made	GOTO “Related”
	Withdrawal document received by staff on	GO TO “Final” → (A)
Motion and	“Related” is mutually agreed upon.	

Related	Reason	*This motion can be appended to the motion for Persuasive (See Persuasive Section)	
		Negative is related (needs over 1/3 votes to pass)	
		Negative is not related (needs 2/3 or more votes to pass)	
		Reason	XXXX
	Motion by/2nd by	Name (Company)/Name (Company)	
Discussion			
Result of Vote (check ONE)	XX-XX		
	[Negative is related] >1/3	GO TO "Persuasive"	
	[Negative is not related] < 2/3		
	2/3=< [Negative is not related]	GO TO "Final" →(B)	
Persuasive	Motion and Reason	x	Negative is related and persuasive (needs over 1/3 votes to pass)
			Negative is related and not persuasive (needs 2/3 or more votes to pass)
		Reason	
	Motion by/2nd by	Guie Chen (ENFI)/Dengyuan Song (Yingli)	
	Discussion	<p><b>Negatives:</b></p> <p>1 Adopt.</p> <p><b>Comments:</b></p> <p>1 Have asked Kris Shen (the SEMI staff) for help to coordinate with SEMI headquarters for arranging technical editing.</p> <p>2 As announced in the background statement, the TC Chapter meeting to adjudicate a Letter Ballot is indeed held, time and location are list in the box.</p> <p>6 Generally, "spectrometry" refers to "the method", "spectrometer" refers to "the instrument". Besides, the title can't be changed. So we didn't make changes.</p> <p>8 Delete ¶ 6.1</p> <p>9 As the principle of error and deviation, recovery rate also have positive and negative deviation. Sample processing includes weighing, volume measuring and standard curve, is likely to cause positive or negative deviation.</p> <p>10 Have changed "superior grade pure" to "guaranteed reagent grade", and "Yes", "guaranteed reagent grade" is more pure than "analytical reagent grade".</p> <p>15 The ICP-OEC specifications listed in Appendix1 could be accepted as a reference, not a must conditions. Every ICP spectrometer has it's own operation parameters . The optimum parameters may be different from Appendix1. In the interests of accuracy, we delete the Appendix.</p> <p>3、 4、 5、 7、 11、 12、 13、 14 Adopt.</p>	
Result of Vote (check ONE)	37-0		
	X	<p>[Negative is related and persuasive] &gt;1/3</p> <p>[Negative is related and not persuasive] &lt; 2/3</p>	GO TO "Final" →(E)

		2/3=<[Negative is related and not persuasive] <90%	GO TO "Final" →(C)
		90%=< [Negative is related and not persuasive]	GO TO "Not Significant Finding Option"
Not Significant Finding Option	This option can only be used "if the committee finds a negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action". (Regulations ¶ 9.5.3.3.2)		
		It is mutually agreed upon to term the negative "not significant"	GO TO→(D)
		It is mutually agreed upon to term the negative "significant"	GO TO →(C)
	Motion	The negative is "not significant".	
	Motion by/2nd by	Name (Company)/Name (Company)	
	Vote	XX-XX Motion passed with simple majority	GO TO →(D)
XX-XX Motion failed with simple majority		GO TO →(C)	
Final	Negative is:		
	(A)	withdrawn (counted under h in disposition)	
	(B)	not related (counted under i in disposition)	
	(C)	related and not persuasive (significant)	
	(D)	not significant (counted under j in disposition)	
	X (E)	related and persuasive	DOCUMENT FAILS
	Comment generated. See comment #x		
A&R	Not approved		
	Reason:		

### Disposition of Reject 1

	Original number of Negatives	(g)
✓	# of Negatives withdrawn	(h)
	# of Negatives found not related	(i)
	# of Negatives found not significant	(j)
Final	$g-(h+i+j)=0$	Reject is <b>Not Valid</b> and is <b>not</b> included in the denominator of §VI. Approval Conditions Check
	$g-(h+i+j)>0$	Reject is included in the denominator of §VI. Approval Conditions Check
	Reject without a Negative	<b>Not Valid</b>

Note: If all of the negative material included with a reject vote is withdrawn, determined to be not related, or determined to be not significant, the reject vote is not valid. (Regulations ¶ 9.4.3.3)

A&R	Not approved
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	<b>Reason:</b>
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## IV. Comments

### Comment 1

<b>Comment</b>	<b>Referenced Section</b>	
	<b>From</b>	Rafael Vargas-Bernal (Instituto Tecnológico Superior de Irapuato)
	<b>Comment</b>	<b>In subsection 10.2.2, there is space between 8.2.2) and a comma.</b> 在第 10.2.2 节, 8.2.2 与逗号之间有个空格。
	<b>Discussion</b>	Adopt. 采纳意见。删除空格。
<b>Action proposed</b>	<b>x</b>	<b>The committee agreed to do one of the following actions.</b> <b>*No motion is required in this step.</b>
	x	No further action was taken by the committee.
		Refer to the task force for more consideration.
		New Business
		Other
	<b>Editorial Change</b>	
		<b>Case 1: No vote in this section :</b> <b>To be included and voted on in § 5. Summary of Editorial Changes.</b>
		<b>Case 2: Voted in this section :</b> <b>Original section number and at least one full sentence are required in “FROM” and “TO” fields.</b>
	<b>1</b>	<b>FROM: Section xxx</b> <b>To: Section xxx</b> <b>Justification (If necessary)</b>
	<b>2</b>	<b>FROM:Section xxx</b> <b>To: Section xxx</b> <b>Justification (If necessary)</b>
<b>Motion by/2nd</b>	<b>Name (Company)/Name (Company)</b>	
<b>Vote</b>	<b>XX-XX Motion passed (or failed)</b>	

A&R	Not approved
	Reason:

**Comment 2**

Comment	Referenced Section		
	From		
	Comment		
	Discussion		
Action proposed	x	The committee agreed to do one of the following actions.	
		*No motion is required in this step.	
		x No further action was taken by the committee.	
		Refer to the task force for more consideration.	
		New Business	
	Other		
	Editorial Change		
1	Case 1: No vote in this section :		
	To be included and voted on in <u>§ 5. Summary of Editorial Changes.</u>		
	Case 2: Voted in this section :		
	Original section number and at least one full sentence are required in "FROM" and "TO" fields.		
	FROM: Section xxx		
	To: Section xxx		
	Justification (If necessary)		
2	FROM:Section xxx		
	To: Section xxx		
	Justification (If necessary)		
Motion by/2nd	Name (Company)/Name (Company)		
Vote	XX-XX Motion passed (or failed)		
A&R	Not approved		
	Reason:		

## V. Summary of Editorial Changes

**Note: Original section number and at least one full sentence are required in “FROM” and “TO” fields.**

1	<b>FROM:Section 2.1</b> This Standard specifies a test method for determining the B, P, Fe, Al, Ca contents in silicon powder by Inductively Coupled Plasma Optical Emission Spectrometer.
	<b>TO: Section 2.1</b> This Standard specifies a test method for determining the B, P, Fe, Al, Ca contents in silicon powder by Inductively Coupled Plasma Optical Emission Spectrometry.
	<b>Justification: (If necessary)</b>
2	<b>FROM:Section 2.2</b> The silicon powder sample shall be separated by a standard 0.149mm sieve.
	<b>TO: Section 10.3.1</b> Separate the silicon powder sample by a standard 0.149mm sieve.
	<b>Justification: (If necessary)</b>
3	<b>FROM:Section 3.1</b> <b>NOTE1</b> Take the utmost care to ensure that all containers are clean, rinse them with copious amounts of DI water and then blow them with nitrogen.
	<b>TO: Section 10.1</b> Clean all containers, including those used to run the blanks, to avoid erroneous results due to different levels of contamination.
	<b>Justification: (If necessary)</b>
4	<b>FROM: Section 5.1</b> Refer to SEMI Standards Compilation of Terms (COTs) for a list of the most current terms and definitions.
	<b>TO: Section</b> Delete
	<b>Justification: (If necessary)</b>
5	<b>FROM:Section 5.3.5</b> <i>Certified Reference Material (CRM)</i> — a NIST traceable single or multi-element solution standard.
	<b>TO: Section 5.2.5</b> <i>Certified Reference Material (CRM)</i> — reference material, one or more of whose property values are certified by a technically valid procedure, accompanied by or traceable to a certificate or other documentation issued by a certifying body.
	<b>Justification: (If necessary)</b>
6	<b>FROM:Section 6.1</b> The principle of test method is similar to SEMI PV49
	<b>TO: Section</b> Delete
	<b>Justification: (If necessary)</b>
7	<b>FROM:Section 8.2.1</b> Mannitol (10g/L), superior grade pure.
	<b>TO: Section 8.2.1</b>

	Mannitol (10g/L), guaranteed reagent grade.
	<b>Justification: (If necessary)</b>
8	<b>FROM:Section 12.1.2</b> <i>The content of the element in test specimen shall be within the range of the working curve, and ensure the standard curve linear correlation coefficient is no less than 0.9995.</i>
	<b>TO: Section 12.1.2</b> <i>Ensure that the content of the element in the test specimen is within the range of the working curve and that the standard curve linear correlation coefficient is at least 0.9995.</i>
	<b>Justification: (If necessary)</b>
9	<b>FROM:Section 14.1</b> <i>The results to be reported — Adopt the arithmetic mean of the parallel determination results, the results retain three effective digitals. The relative deviation of the parallel determination results shall be no more than 10%.</i>
	<b>TO: Section 14.1</b> Report the arithmetic mean of the parallel determination results for each element to three significant digits. The relative deviation of the parallel determination results shall be no more than 10%.
	<b>Justification: (If necessary)</b>
10	<b>FROM:Section 15.1</b> Under the same experimental conditions, our laboratory repeated 43 times verification experiment with the same sample by this method.
	<b>TO: Section 15.1</b> One laboratory repeated this method 43 times, using the same lot for the test sample and under the same conditions.
	<b>Justification: (If necessary)</b>
11	<b>FROM:Section APPENDIX 1</b> TECHNICAL SPECIFICATIONS OF INDUCTIVELY COUPLED PLASMA EMISSION SPECTROMETER
	<b>TO: Section</b> Delete
	<b>Justification: (If necessary)</b>
<b>Motion</b>	To approve the above editorial changes
<b>Motion by/2nd by</b>	Name (Company)/Name (Company)
<b>Discussion</b>	XXXX
<b>Vote</b>	XX-XX Motion passed (or failed)
<b>A&amp;R</b>	<b>Not approved</b>
	<b>Reason:</b>

## VI. Approval Conditions Check

**APPROVAL CONDITION 1:** All negatives have been discussed and were withdrawn, found not related, or not persuasive. (Regulations ¶9.6.2)

**APPROVAL CONDITION 2:** At least 90% of the sum of the valid accept and reject votes must be accept. (Regulations ¶9.6.3)

**Note:** if both approval conditions are not satisfied, the document fails.

	<b>Accepts</b>	/	<b>(Accepts + Valid Rejects)</b>	=	<b>#DIV/0!</b>	<b>&gt;=90%</b>
<b>Approval Rate</b>	<input style="width: 80px; height: 20px;" type="text"/>	/	<input style="width: 80px; height: 20px;" type="text"/>	=	<input style="width: 80px; height: 20px;" type="text"/>	

<b>A&amp;R</b>		<b>Not approved</b>
<b>Reason:</b>		

## VII. Safety Check

See § 14 of the Regulations for further information

<b>Motion:</b>		This is not a Safety Document: when all safety-related information is removed, the document is still technically sound and complete.
		This is a Safety Document: when all safety-related information is removed, the document is not technically sound and complete.
		Safety Checklist (Regulations ¶ 14.3) is complete and has been included with the document throughout the balloting process.
<b>Motion by/2nd by</b>		Name (Company)/Name (Company)
<b>Discussion</b>		XXXX
<b>Vote</b>		XX-XX Motion passed or failed
<b>A&amp;R</b>		<b>Not approved</b>
<b>Reason:</b>		

## VIII. Intellectual Property Check

**Note: This ballot may be all or part of a Standard or Safety Guideline. This IP check applies to the entire Standard or Safety Guideline. See § 15 of the Regulations for further information**

		The meeting chair asked those present in person or by electronic link, if they were aware of any potentially material patented technology or copyrighted items* in the Standard or Guideline.	
		No potentially material patented technology or copyrighted items are known	<b>GO TO SECTION IX</b>
		Potentially material patented technology or copyrighted items are known but a Letter of Assurance (LOA) or copyright release for such material has been obtained or presented to the committee.	<b>GO TO SECTION IX</b>
		Potentially material patented technology or copyrighted items are known but an LOA or copyright release for some of the material(s) has NOT been obtained or presented to the committee	
<b>MOTION</b>		Ask ISC for special permission to publish	
		Quit activity	
		Wait for LOA for patented technology or release of copyrighted items.	
<b>Motion by/2<sup>nd</sup> by</b>		Name (Company)/Name (Company)	
<b>Discussion</b>		XXXX	
<b>Vote</b>		XX-XX	
<b>Final Action</b>			Motion Passed
			Motion Failed
<b>A&amp;R</b>		<b>Not approved</b>	
		<b>Reason:</b>	

\* Note: Such potentially material patented technology or copyrighted items might have become known since the Standard or Safety Guideline was last reviewed, or might become relevant due to this ballot.

## IX. Action for this document

<b>Motion</b>		This document passed committee review as balloted and will be forwarded to the A&R for procedural review.
		This document passed committee review with editorial changes and will be forwarded to the A&R for procedural review.

	<input type="checkbox"/>	This document failed committee review and will be returned to the task force for rework.
	<input type="checkbox"/>	This document failed committee review and work will be discontinued.
<b>Motion by/2nd by</b>	Name (Company)/Name (Company)	
<b>Discussion</b>	XXXX	
<b>Vote</b>	XX-XX	
<b>Final Action</b>	<input type="checkbox"/>	Motion passed
	<input type="checkbox"/>	Motion failed
<b>A&amp;R</b>	<input type="checkbox"/>	Approved
	<input type="checkbox"/>	Not approved
	Reason:	