# Procedural Review Voting Sheet
## 2014 Cycle 2

**REGION: Japan**
**COMMITTEE: Information and Control Committee**
**EVENT: Japan Spring 2014 Meetings**
**DATE OF MEETING: 2014/4/16**
**PLACE OF MEETING: SEMI Japan, Tokyo**
**COMMITTEE CO-CHAIRS: Takayuki Nishimura/Dainippon Screen MFG., Mitsuhiro Matsuda/Hitachi Kokusai Electric**
**SEMI STAFF: Chie Yanagisawa**

**A&R Voter: Name/Company**
**Date: 200X/MM/DD**

## I. Document Number & Title

| Document 5538A | Document Title: NEW STANDARD: SPECIFICATION FOR PRODUCTION RECIPE CACHE (PRC) |
|---|---|

## II. Tally (Staff to fill in)

**Voting Tally: As-cast tally after close of voting period**

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 | 52 | ÷ | 83 | = | 62.7% | >=60% |
| Lilac & Others | 28 | | | | | |
| ---------------------------------------------------------------------- | | | | | | |
| Total Vote | 80 | | | | | |
| Reject | 2 | | | | | |
| Accept | 18 | | | | | |

| A&R | ☐ | **Not approved** |
|---|---|---|
| | **Reason:** | |

# III. Rejects
## Reject 1 (Thierry de Villeneuve / STMicroelectronics)
**Negative 1 of Reject 1**

<table>
<tr><td rowspan="2"><strong>Negative</strong></td><td><strong>Referenced Section</strong></td><td colspan="4"><em>*TF/Committee to fill in if necessary</em></td></tr>
<tr><td rowspan="2"><strong>Reason</strong></td><td colspan="4"><em>*Original negative comment and justification should be included.</em></td></tr>
<tr><td></td><td colspan="4"><strong>The proposed ballot is only ONE way to address the issue. This should not become a SEMI standard as there are other technical solutions that do not require new software to be implemented on all pieces of equipment such as this ballot requests. How does this proposed ballot interfaces with E139 RaP?   Such a Recipe Cache is not a mandatory requirement for IC maker with an adequate FICS system that prevents Production Recipes corruptions.</strong></td></tr>
<tr><td colspan="2" rowspan="2"><strong>Withdrawal</strong></td><td><strong>X</strong></td><td>No withdrawal made</td><td><strong>GO TO "Related" section</strong></td></tr>
<tr><td></td><td>Withdrawal document received by staff on XXXX</td><td><strong>GO TO "Final" →<br>(A)</strong></td></tr>
<tr><td rowspan="11"><strong>Related</strong></td><td rowspan="5"><strong>Motion and Reason</strong></td><td rowspan="4"><strong>X</strong></td><td colspan="3">"Related" is mutually agreed upon.</td></tr>
<tr><td colspan="3"><strong><em>*This motion can be appended to the motion for Persuasive (See Persuasive Section)</em></strong></td></tr>
<tr><td colspan="3">Negative is related <strong>(needs over 1/3 votes to pass)</strong></td></tr>
<tr><td colspan="3">Negative is not related <strong>(needs 2/3 or more votes to pass)</strong></td></tr>
<tr><td style="background:black"></td><td>Reason</td><td colspan="2"></td></tr>
<tr><td colspan="2"><strong>Motion by/2nd by</strong></td><td colspan="4"></td></tr>
<tr><td colspan="2"><strong>Discussion</strong></td><td colspan="4"></td></tr>
<tr><td rowspan="5"><strong>Result of Vote (check ONE)</strong></td><td colspan="4">XX-XX</td></tr>
<tr><td></td><td colspan="2">[Negative is related] > 1/3</td><td rowspan="2"><strong>GO TO "Persuasive"</strong></td></tr>
<tr><td></td><td colspan="2">[Negative is not related] < 2/3</td></tr>
<tr><td></td><td colspan="2">2/3=< [Negative is not related]</td><td><strong>GO TO "Final" → (B)</strong></td></tr>
<tr><td></td><td colspan="3"></td></tr>
<tr><td rowspan="6"><strong>Persuasive</strong></td><td rowspan="3"><strong>Motion and Reason</strong></td><td></td><td colspan="3">Negative is related and persuasive <strong>(needs over 1/3 votes to pass)</strong></td></tr>
<tr><td><strong>X</strong></td><td colspan="3">Negative is related and not persuasive <strong>(needs 2/3 or more votes to pass)</strong></td></tr>
<tr><td style="background:black"></td><td>Reason</td><td colspan="2"><strong>No technical reason is given.<br>Also, no alternative is technically described.<br>SEMI Standard does not need to adopt an only technical solution.<br>This Standard is independent from RaP.<br>Implementation of SEMI Standard is not a mandatory requirement.  Adoption is up to the agreement of device manufacturer and suppliers.</strong></td></tr>
<tr><td colspan="2"><strong>Motion by/2nd by</strong></td><td colspan="4">Yoshihisa Takasaki (Dainippon Screen Mfg.) / Naoko Murata (Tokyo Electron)</td></tr>
<tr><td colspan="2"><strong>Discussion</strong></td><td colspan="4">None</td></tr>
<tr><td colspan="2"><strong>Result of Vote</strong></td><td colspan="4">8-0</td></tr>
</table>

| | | | | |
|---|---|---|---|---|
| | **(check ONE)** | | [Negative is related and persuasive] > 1/3 | **GO TO "Final" →** **(E)** |
| | | | [Negative is related and not persuasive] < 2/3 | |
| | | | 2/3=<[Negative is related and not persuasive] <90% | **GO TO "Final" →** **(C)** |
| | | **X** | 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)**

| | | | |
|---|---|---|---|
| ■■■■ | **X** | 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** | | | |
| **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) |
| | **X** | **(D)** | not significant (counted under **j** in disposition) |
| | | **(E)** | related and persuasive     **DOCUMENT FAILS** |
| | | Comment generated. See comment #x | |

| | | |
|---|---|---|
| **A&R** | | **Not approved** |
| | | **Reason:** |

## Disposition of Reject 1

| | | | |
|---|---|---|---|
| **1** | Original number of Negatives | | **(g)** |
| **0** | # of Negatives withdrawn | | **(h)** |
| **0** | # of Negatives found not related | | **(i)** |
| **1** | # of Negatives found not significant | | **(j)** |
| **Final** | **X** | **g**-(**h**+**i**+**j**)=0 | ☐ Reject **is Not Valid and is not** 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 | ☐**Not Valid** |

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 |
|-----|---|--------------|
| | | **Reason:** |

## Reject 2 (Chris Winemiller / Cimetrix)
### Negative 1 of Reject 2

<table>
<tr><td rowspan="3"><strong>Negative</strong></td><td><strong>Referenced Section</strong></td colspan="4"><td colspan="4">*TF/Committee to fill in if necessary<br>**Section 8 (PRC Space Recommendations)**</td></tr>
<tr><td rowspan="2"><strong>Reason</strong></td><td colspan="4">*Original negative comment and justification should be included.</td></tr>
<tr><td colspan="4">Section 8 says it is only a recommendation, not a requirement.   But it then proceeds to give detailed folder structure implementation directions. This section should not be part of the standard at all because it gives no requirements and will only confuse implementers who will treat it as a requirement.   This section should have been an appendix containing an example of folder structure.<br><br>(March 25<sup>th</sup>)<br>This section says it is not a requirement.   Therefore, it is not allowed to be part of the standard.</td></tr>
<tr><td colspan="2" rowspan="2"><strong>Withdrawal</strong></td><td>X</td><td colspan="2">No withdrawal made</td><td>GO TO "Related" section</td></tr>
<tr><td></td><td colspan="2">Withdrawal document received by staff on XXXX</td><td>GO TO "Final" → (A)</td></tr>
</table>

| | **Motion and Reason** | | "Related" is mutually agreed upon. | | |
|---|---|---|---|---|---|
| **Related** | | X | *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) | |
| | | | | | |
| **Persua sive** | **Motion and Reason** | | Negative is related and persuasive (needs over 1/3 votes to pass) | | |
| | | X | Negative is related and not persuasive (needs 2/3 or more votes to pass) | | |

| | | Reason | **No technical reason is specified.**<br><br>**The chapter clearly says it is a recommendation, and does not cause any technical issues.**<br>Chapter 8 describes concept rather than application instances as "Recommendations"<br>Recommendations can be placed in the document body.<br><br>**According to "SEMI Standard Style Manual Version 5.1", recommendation can be included in the main body of Standard by using 'should'**<br>● **Table 4 Grammar and Language Rules, 4-4 Should and Shall**<br>   ➢ **(4) Use 'shall' for all required elements and use 'should' only for recommended elements of Specifications, Test Methods, Practices, and similar Standards in the main body and Appendix; in Notes or Related Information sections, do not use 'shall'.** |
|---|---|---|---|
| | **Motion by/2nd by** | | Naoko Murata (Tokyo Electron) / Mitsuhiro Matsuda (Hitachi Kokusai Electric) |
| | **Discussion** | | **None** |
| | **Result of Vote (check ONE)** | | **8-0** |
| | | | [Negative is related and persuasive] > 1/3 — **GO TO "Final" → (E)** |
| | | | [Negative is related and not persuasive] < 2/3 — **GO TO "Final" → (E)** |
| | | | 2/3=<[Negative is related and not persuasive] <90% — **GO TO "Final" → (C)** |
| | | **X** | 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)**

| | | |
|---|---|---|
| **X** | 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) |
| **X** | **(D)** | not significant (counted under **j** in disposition) |
| | **(E)** | related and persuasive — **DOCUMENT FAILS** |
| | | Comment generated. See comment #x |

| **A&R** | | **Not approved** |
|---|---|---|

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| | | Reason: | |
|---|---|---|---|

## Negative 2 of Reject 2

<table>
<tr><td rowspan="2"><strong>Negative</strong></td><td rowspan="2"><strong>Referenced Section</strong></td><td colspan="3"><span style="color:orange">*TF/Committee to fill in if necessary</span></td></tr>
<tr><td colspan="3"><strong>9.1.1 Single Point of Control (SPOC) — All PRC Operation is done between the host and Equipment. The host side (e.g., something like an Equipment Interface) should maintain which node in the host takes care of which functionality of PRC operation.</strong></td></tr>
<tr><td rowspan="2"><strong>Reason</strong></td><td colspan="3"><span style="color:orange">*Original negative comment and justification should be included.</span></td></tr>
<tr><td colspan="3"><strong>9.1.1 Implied host structuring, and optional behavior?<br><br>Section 9.1.1 uses the word "should" instead of "shall", implying that this section is optional, not a requirement. Furthermore, this section attempts to define host implementation rather than strictly defining the interface between host and equipment. The notion of the host as a collection of "nodes" is an implementation decision that is the responsibility of host implementers.<br><br>(March 25th)<br>This section dictates host implementation. No standard may dictate the implementation by host or equipment.</strong></td></tr>
</table>

<table>
<tr><td rowspan="2"><strong>Withdrawal</strong></td><td>X</td><td>No withdrawal made</td><td><strong>GO TO "Related" section</strong></td></tr>
<tr><td></td><td>Withdrawal document received by staff on XXXX</td><td><strong>GO TO "Final" →<br>(A)</strong></td></tr>
</table>

<table>
<tr><td rowspan="11"><strong>Related</strong></td><td rowspan="5"><strong>Motion and Reason</strong></td><td rowspan="3">X</td><td colspan="2">"Related" is mutually agreed upon.</td></tr>
<tr><td colspan="2"><span style="color:orange">*This motion can be appended to the motion for Persuasive (See Persuasive Section)</span></td></tr>
<tr><td colspan="2">Negative is related <span style="color:orange">(needs over 1/3 votes to pass)</span></td></tr>
<tr><td></td><td colspan="2">Negative is not related <span style="color:orange">(needs 2/3 or more votes to pass)</span></td></tr>
<tr><td></td><td>Reason</td><td>XXXX</td></tr>
<tr><td><strong>Motion by/2nd by</strong></td><td colspan="3">Name (Company)/Name (Company)</td></tr>
<tr><td><strong>Discussion</strong></td><td colspan="3"></td></tr>
<tr><td rowspan="4"><strong>Result of Vote (check ONE)</strong></td><td colspan="3">XX-XX</td></tr>
<tr><td></td><td>[Negative is related] > 1/3</td><td rowspan="2"><strong>GO TO "Persuasive"</strong></td></tr>
<tr><td></td><td>[Negative is not related] < 2/3</td></tr>
<tr><td></td><td>2/3=< [Negative is not related]</td><td><strong>GO TO "Final" → (B)</strong></td></tr>
</table>

<table>
<tr><td rowspan="4"><strong>Persuasive</strong></td><td rowspan="3"><strong>Motion and Reason</strong></td><td></td><td colspan="2">Negative is related and persuasive <span style="color:orange">(needs over 1/3 votes to pass)</span></td></tr>
<tr><td>X</td><td colspan="2">Negative is related and not persuasive <span style="color:orange">(needs 2/3 or more votes to pass)</span></td></tr>
<tr><td></td><td><strong>Reason</strong></td><td><span style="color:blue"><strong>No technical reason is specified.</strong></span><br><span style="color:darkred"><strong>This section does not define host side requirement. This section simply describes and reminds that this Standard also expects SPOC concept which is in the base of GEM300 Standards set.<br><br>In addition, there is no rule that SEMI Standard cannot define the host side requirements.</strong></span></td></tr>
<tr><td><strong>Motion by/2nd by</strong></td><td colspan="3">Terry Asakawa (Tokyo Electron) / Mitsuhiro Matsuda (Hitachi Kokusai Electric)</td></tr>
</table>

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| | | | | |
|---|---|---|---|---|
| | **Discussion** | **None** | | |
| | **Result of Vote (check ONE)** | | **8-0** | |
| | | | [Negative is related and persuasive] > 1/3 | **GO TO "Final" →** **(E)** |
| | | | [Negative is related and not persuasive] < 2/3 | |
| | | | 2/3=<[Negative is related and not persuasive] <90% | **GO TO "Final" →** **(C)** |
| | | **X** | 90% =< [Negative is related and not persuasive] | **GO TO** "**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)**

| Not Significant Finding Option | | | | |
|---|---|---|---|---|
| | ■ | **X** | 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) |
| **X** | | **(D)** | not significant (counted under **j** in disposition) |
| | | **(E)** | related and persuasive     **DOCUMENT FAILS** |
| | | | Comment generated. See comment #x |

| **A&R** | | |
|---|---|---|
| | ■ | **Not approved** |
| | **Reason:** | |

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## Negative 3 of Reject 2

<table>
<tr>
<td rowspan="2"><strong>Negative</strong></td>
<td rowspan="2"><strong>Referenced Section</strong></td>
<td colspan="3"><span style="color:orange">*TF/Committee to fill in if necessary</span></td>
</tr>
<tr>
<td colspan="3"><strong>9.1.4 Copy Out of the Recipes Already Referred (Recipe Queue Space and Recipe Execution Space) — Recipes already used to create PJs shall be copied from the PRC to other protected recipe spaces such as Recipe Queue Space or Recipe Execution Space which hold the recipes while the PJs are queued or executed accordingly, so that recipes in PRC can be overwritten or deleted at any time.</strong></td>
</tr>
</table>

| | | |
|---|---|---|
| **Referenced Section** | *TF/Committee to fill in if necessary | |
| | **9.1.4 Copy Out of the Recipes Already Referred (Recipe Queue Space and Recipe Execution Space) — Recipes already used to create PJs shall be copied from the PRC to other protected recipe spaces such as Recipe Queue Space or Recipe Execution Space which hold the recipes while the PJs are queued or executed accordingly, so that recipes in PRC can be overwritten or deleted at any time.** | |

**Negative**

**Reason**

*Original negative comment and justification should be included.

**9.1.4 The standard requires a specific implementation**

**Section 9.1.4 states that a recipe used by a PJ must be "copied" from PRC so that the recipe in the PRC may be overwritten or deleted without affecting the PJ.   This is an implementation detail that must be decided by the equipment supplier, not the standard.   There are other ways to achieve the desired behavior.   This section should state the desired behavior rather than dictate an implementation.**

**(March 25th)**
**This section dictates the equipment implementation. No standard may dictate the implementation by host or equipment.**

| **Withdrawal** | X | No withdrawal made | **GO TO "Related" section** |
|---|---|---|---|
| | | Withdrawal document received by staff on XXXX | **GO TO "Final" → (A)** |

**Related**

| **Motion and Reason** | X | "Related" is mutually agreed upon. | |
|---|---|---|---|
| | X | *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)** |
| | | | |

**ua**

| **Motion and Reason** | | Negative is related and persuasive (needs over 1/3 votes to pass) |
|---|---|---|
| | X | Negative is related and not persuasive (needs 2/3 or more votes to pass) |

| | | | | |
|---|---|---|---|---|
| | | **Reason** | No technical reason is specified.<br>9.1 is not an implementation detail.<br>Conceptually, the recipes in PRC may be changed after a PJ creation to prepare for following PJs.<br>If a PJ continuously uses the recipe in PRC after its creation, the PJ cannot use proper recipe in case the recipe in PRC will be overwritten or deleted.<br>As a corollary of above, the copy out of the recipe is needed regardless of a method. This standard does not define the method as it is an implementation detail.<br>This section is reminding this conceptual precondition. | |

| | |
|---|---|
| **Motion by/2nd by** | Naoko Murata (Tokyo Electron) / Mitsuhiro Matsuda (Hitachi Kokusai Electric) |
| **Discussion** | **None** |

| | | | |
|---|---|---|---|
| **Result of Vote (check ONE)** | | **8-0** | |
| | | [Negative is related and persuasive] > 1/3 | **GO TO "Final" →** **(E)** |
| | | [Negative is related and not persuasive] < 2/3 | |
| | | 2/3=<[Negative is related and not persuasive] <90% | **GO TO "Final" →** **(C)** |
| | **X** | 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)

| | | | |
|---|---|---|---|
| | **X** | 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) | |
| | **X** | **(D)** | not significant (counted under **j** in disposition) | |
| | | **(E)** | related and persuasive | **DOCUMENT FAILS** |
| | | | Comment generated. See comment #x | |

| | | |
|---|---|---|
| **A&R** | | **Not approved** |
| | **Reason:** | |

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<table>
<tr><td rowspan="2"><b>Negative</b></td><td rowspan="2"><b>Referenced Section</b></td><td colspan="3"><span style="color:orange">*TF/Committee to fill in if necessary</span></td></tr>
<tr><td colspan="3"><span style="color:blue"><b>9.2.1 Use of Recipes in PRC — Recipes in PRC shall be used for process execution only in the PEM On state. Conventional Recipe Space shall be used in the PEM Off state.</b></span></td></tr>
</table>

| | | |
|---|---|---|
| | | <span style="color:orange">*Original negative comment and justification should be included.</span> |
| | **Reason** | <span style="color:blue">**9.2.1 Use of Recipes in PRC**<br><br>**Can a recipe be "in" PRC space and conventional space at the same time? If the factory desires to use the same recipe both in PEMJ ON and OFF states, must the equipment maintain 2 copies?   The standard does not explain the relationships of Conventional and PRC space clearly enough to answer these questions.**<br><br>**(March 26<sup>th</sup>)**<br>**Section 9.2.1 says that the recipe used by an equipment depends on whether PEM is On or Off.   When PEM is On, the recipe must be in PRC space.   When PEM is Off, the recipe must be in Conventional Recipe Space.   This section does not explain whether or not a given recipe may be held in both PRC and Conventional Recipe Space at the same time.   If a recipe can be in both spaces at the same time, must the equipment hold 2 copies of the recipe?   Section 9.2.1 does not provide enough information to answer these questions.   The resulting ambiguity will hinder implementation by the equipment.**</span> |

| | | | | |
|---|---|---|---|---|
| | **Withdrawal** | X | No withdrawal made | **GO TO "Related" section** |
| | | | Withdrawal document received by staff on <span style="color:blue">XXXX</span> | **GO TO "Final" →** <span style="color:red">**(A)**</span> |

<table>
<tr><td rowspan="8"><b>Related</b></td><td rowspan="5"><b>Motion and Reason</b></td><td></td><td colspan="3">"Related" is mutually agreed upon.</td></tr>
<tr><td rowspan="2">X</td><td colspan="3"><span style="color:orange"><b>*This motion can be appended to the motion for Persuasive (See Persuasive Section)</b></span></td></tr>
<tr><td colspan="3">Negative is related <span style="color:orange">(needs over 1/3 votes to pass)</span></td></tr>
<tr><td></td><td colspan="3">Negative is not related <span style="color:orange">(needs 2/3 or more votes to pass)</span></td></tr>
<tr><td style="background:black"></td><td>Reason</td><td colspan="2"><span style="color:blue">XXXX</span></td></tr>
<tr><td><b>Motion by/2nd by</b></td><td colspan="4"><span style="color:blue">Name (Company)/Name (Company)</span></td></tr>
<tr><td><b>Discussion</b></td><td colspan="4"></td></tr>
<tr><td rowspan="4"><b>Result of Vote (check ONE)</b></td><td colspan="4"><span style="color:blue">XX-XX</span></td></tr>
</table>

| | | | |
|---|---|---|---|
| | | [Negative is related] > 1/3 | **GO TO "Persuasive"** |
| | | [Negative is not related] < 2/3 | |
| | | 2/3=< [Negative is not related] | **GO TO "Final" →** <span style="color:red">**(B)**</span> |
| | | | |

<table>
<tr><td rowspan="2"><b>Persuasive</b></td><td rowspan="2"><b>Motion and Reason</b></td><td></td><td>Negative is related and persuasive <span style="color:orange"><b>(needs over 1/3 votes to pass)</b></span></td></tr>
<tr><td>X</td><td>Negative is related and not persuasive <span style="color:orange"><b>(needs 2/3 or more votes to pass)</b></span></td></tr>
</table>

| | | | |
|---|---|---|---|
| | | **Reason** | **No technical reason is specified.** **This Standard defines the exclusive use of PRC and Conventional Recipe Space per PEM on and off, but does not define any restrictions on duplication of the contents between those two spaces as it is out of scope of this Standard and is totally up to user of this Document.   As a result, duplicated storage of the same recipe in those two spaces is not prohibited.** |
| | **Motion by/2nd by** | | Naoko Murata (Tokyo Electron) / Yuko Toyoshima (Hitachi High-Technologies) |
| | **Discussion** | | None |
| | **Result of Vote (check ONE)** | **8-0** | |
| | | | [Negative is related and persuasive] > 1/3 | **GO TO "Final"** → **(E)** |
| | | | [Negative is related and not persuasive] < 2/3 | |
| | | | 2/3=<[Negative is related and not persuasive] <90% | **GO TO "Final"** → **(C)** |
| | | **X** | 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)**

| | | | |
|---|---|---|---|
| | **X** | 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) |
| | **X** | **(D)** | not significant (counted under **j** in disposition) |
| | | **(E)** | related and persuasive    **DOCUMENT FAILS** |
| | | | Comment generated. See comment #x |

| **A&R** | | **Not approved** |
|---|---|---|
| | **Reason:** | |

**Negative 5 of Reject 2**

<table>
<tr><td rowspan="4"><strong>Negative</strong></td><td rowspan="2"><strong>Referenced Section</strong></td><td colspan="3"><span style="color:orange">*TF/Committee to fill in if necessary</span></td></tr>
<tr><td colspan="3"><span style="color:blue"><strong>9.2.2 Recipe Security Control of PRC — To ensure the security of the recipes in PRC, the entire recipes in PRC may be cleared by the host or privileged user upon the change of Recipe User Group which is indicated by RUGNumber attribute of PRC.</strong></span></td></tr>
<tr><td rowspan="2"><strong>Reason</strong></td><td colspan="3"><span style="color:orange">*Original negative comment and justification should be included.</span></td></tr>
<tr><td colspan="3"><span style="color:blue"><strong>9.2.2 Recipe Security Control of PRC<br><br>Section 9.2.2 says the PRC "may" be cleared upon change of Recipe User Group.   Under what conditions is this permitted?   Without a list of such conditions, it is impossible to be compliant to this section.<br><br>(March 25th)<br>This section fails to specify the conditions under which it is permissible to clear the PRC.</strong></span></td></tr>
</table>

<table>
<tr><td rowspan="2"><strong>Withdrawal</strong></td><td><span style="color:blue"><strong>X</strong></span></td><td>No withdrawal made</td><td style="background:pink"><strong>GO TO "Related" section</strong></td></tr>
<tr><td></td><td>Withdrawal document received by staff on <span style="color:blue">XXXX</span></td><td style="background:pink"><strong>GO TO "Final" → (A)</strong></td></tr>
</table>

<table>
<tr><td rowspan="8"><strong>Related</strong></td><td rowspan="5"><strong>Motion and Reason</strong></td><td rowspan="2"><span style="color:blue"><strong>X</strong></span></td><td colspan="2">"Related" is mutually agreed upon.</td></tr>
<tr><td colspan="2"><span style="color:orange"><strong>*This motion can be appended to the motion for Persuasive (See Persuasive Section)</strong></span></td></tr>
<tr><td></td><td colspan="2">Negative is related <span style="color:orange"><strong>(needs over 1/3 votes to pass)</strong></span></td></tr>
<tr><td></td><td colspan="2">Negative is not related <span style="color:orange"><strong>(needs 2/3 or more votes to pass)</strong></span></td></tr>
<tr><td style="background:black"></td><td>Reason</td><td><span style="color:blue">XXXX</span></td></tr>
<tr><td><strong>Motion by/2nd by</strong></td><td colspan="3"><span style="color:blue">Name (Company)/Name (Company)</span></td></tr>
<tr><td><strong>Discussion</strong></td><td colspan="3"></td></tr>
<tr><td rowspan="4"><strong>Result of Vote (check ONE)</strong></td><td colspan="3"><span style="color:blue">XX-XX</span></td></tr>
</table>

| | | |
|---|---|---|
| | [Negative is related] > 1/3 | **GO TO "Persuasive"** |
| | [Negative is not related] < 2/3 | |
| | 2/3=< [Negative is not related] | **GO TO "Final" → (B)** |
| | | |

<table>
<tr><td rowspan="11"><strong>Persuasive</strong></td><td rowspan="4"><strong>Motion and Reason</strong></td><td></td><td colspan="2">Negative is related and persuasive <span style="color:orange"><strong>(needs over 1/3 votes to pass)</strong></span></td></tr>
<tr><td><span style="color:blue"><strong>X</strong></span></td><td colspan="2">Negative is related and not persuasive <span style="color:orange"><strong>(needs 2/3 or more votes to pass)</strong></span></td></tr>
<tr><td style="background:black"></td><td rowspan="2">Reason</td><td rowspan="2"><span style="color:blue"><strong>No technical reason is specified.</strong></span><br><span style="color:darkred"><strong>The final decision of the cases in which PRC shall be cleared should be made by user of this Document, because the cases depend on fab operation.</strong></span></td></tr>
<tr><td></td></tr>
<tr><td><strong>Motion by/2nd by</strong></td><td colspan="3"><span style="color:blue">Naoko Murata (Tokyo Electron) / Yuko Toyoshima (Hitachi High-Technologies)</span></td></tr>
<tr><td><strong>Discussion</strong></td><td colspan="3"><span style="color:blue"><strong>None</strong></span></td></tr>
<tr><td rowspan="5"><strong>Result of Vote (check ONE)</strong></td><td colspan="3"><span style="color:blue"><strong>8-0</strong></span></td></tr>
<tr><td></td><td>[Negative is related and persuasive] > 1/3</td><td rowspan="2" style="background:pink"><strong>GO TO "Final" → (E)</strong></td></tr>
<tr><td></td><td>[Negative is related and not persuasive] < 2/3</td></tr>
<tr><td></td><td>2/3=<[Negative is related and not persuasive] <90%</td><td style="background:pink"><strong>GO TO "Final" → (C)</strong></td></tr>
<tr><td><span style="color:blue"><strong>X</strong></span></td><td>90% =< [Negative is related and not persuasive]</td><td style="background:pink"><strong>GO TO "Not Significant Finding Option"</strong></td></tr>
</table>

| | | | | | |
|---|---|---|---|---|---|
| **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) | | | | |
| | | **X** | 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) | | |
| | **X** | **(D)** | not significant (counted under **j** in disposition) | | |
| | | **(E)** | related and persuasive | **DOCUMENT FAILS** | |
| | | | Comment generated. See comment #x | | |
| **A&R** | | | **Not approved** | | |
| | | | **Reason:** | | |

## Negative 6 of Reject 2

| | | |
|---|---|---|
| **Negative** | **Referenced Section** | *TF/Committee to fill in if necessary |
| | | 9.2.3 No Concurrent PRC Reference for Multiple Recipe Request — Equipment may have multiple recipe reference requirements simultaneously, however, concurrent requests for multiple recipes to PRC (such as a new recipe request during Query Recipe state) are not allowed. Recipes shall be requested one by one. |
| | **Reason** | *Original negative comment and justification should be included. |
| | | 9.2.3 No Concurrent PRC Reference for Multiple Recipe Request<br><br>I have no idea what this section is saying.   Is it, or is it not, permissible to download multiple recipes in a single request?   What are "multiple recipe reference requirements simultaneously"?   This phrase is incomprehensible.<br><br>(March 25th)<br>The wording of this section makes it confusing.   I cannot understand what it means. |
| **Withdrawal** | | **X** No withdrawal made | **GO TO "Related" section** |
| | | Withdrawal document received by staff on XXXX | **GO TO "Final" → (A)** |
| **Related** | **Motion and Reason** | "Related" is mutually agreed upon. |
| | | **X** *This motion can be appended to the motion for Persuasive (See Persuasive Section) |
| | | Negative is related (needs over 1/3 votes to pass) |

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| | | | |
|---|---|---|---|
| **Persuasive** | | | 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 |
| | | | [Negative is not related] < 2/3 |
| | | | 2/3=< [Negative is not related] |
| | | | |

| | | | | |
|---|---|---|---|---|
| **Persuasive** | | | | Negative is related and persuasive **(needs over 1/3 votes to pass)** |
| | | **X** | | Negative is related and not persuasive **(needs 2/3 or more votes to pass)** |
| | **Motion and Reason** | | **Reason** | **No technical reason is specified.** |

Section continuation of Result of Vote table:

| Column headers | | |
|---|---|---|
| [Negative is related] > 1/3 | | GO TO "Persuasive" |
| [Negative is not related] < 2/3 | | |
| 2/3=< [Negative is not related] | | GO TO "Final" → **(B)** |

Reason text:
**No technical reason is specified.**
**The first half of the section simply says that equipment may have a case in which multiple recipe references from PRC are required, for example, in PJ creation.**

**The last half of this section defines that PRC cannot execute multiple recipe services at the same time.   While a recipe reference during PJ creation, PRC may cause cache miss which requires a query to the recipe server in the host, however, PRC does not allow an interleaving of query for simplicity.   Thus, concurrent multiple recipe reference is not allowed.**

| | |
|---|---|
| **Motion by/2nd by** | Naoko Murata (Tokyo Electron) / Yuko Toyoshima (Hitachi High-Technologies) |
| **Discussion** | **None** |

**Result of Vote (check ONE)**

**8-0**

| | | |
|---|---|---|
| | [Negative is related and persuasive] > 1/3 | GO TO "Final" → **(E)** |
| | [Negative is related and not persuasive] < 2/3 | |
| | 2/3=<[Negative is related and not persuasive] <90% | GO TO "Final" → **(C)** |
| **X** | 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)**

| | | |
|---|---|---|
| **X** | 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) |
| **X** | **(D)** | not significant (counted under **j** in disposition) |

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| | | | (E) | related and persuasive | DOCUMENT FAILS |
|---|---|---|---|---|---|
| | | | | Comment generated. See comment #x | |
| **A&R** | | | **Not approved** | | |
| | | | **Reason:** | | |

## Negative 7 of Reject 2

| | | | | |
|---|---|---|---|---|
| **Negative** | **Referenced Section** | *TF/Committee to fill in if necessary | | |
| | | 9.2.4 Recipe Consistency Management by the Host — In case recipe modification under the same Recipe ID or recipe deletion occurred on Recipe Server, overwrite or deletion of the recipe in PRC shall be done accordingly by the host (Recipe Server) in order to maintain consistency of recipes between Recipe Server and PRC. | | |
| | **Reason** | *Original negative comment and justification should be included. | | |
| | | 9.2.4 Recipe Consistency Management by the Host<br><br>When the host deletes or modifies a recipe, it must command all equipment to delete the recipe from their PRCs.   There are at least 2 problems with this:<br>1.   The host must maintain knowledge of the contents of every equipment's PRC, or it must broadcast a delete command to every equipment.   Either way, this is a very expensive operation.<br>2.   What happens if the host experiences a communication failure with some equipments while this operation is executing?   What is the recovery from this?   None is specified.<br><br>(March 25th)<br>Here, the host must ensure consistency between its recipes and those held in the equipments. This is not practical for the reasons I stated in my document. | | |
| **Related** | **Withdrawal** | X | No withdrawal made | **GO TO "Related" section** |
| | | | Withdrawal document received by staff on XXXX | **GO TO "Final" → (A)** |
| | **Motion and Reason** | X | "Related" is mutually agreed upon. | |
| | | | *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)** |
| | | | | |
| **ua** | **Motion and Reason** | | Negative is related and persuasive (needs over 1/3 votes to pass) | |
| | | X | Negative is related and not persuasive (needs 2/3 or more votes to pass) | |

| | | | Reason | **No technical reason is specified.**<br>**1. Broadcast is the way PRC requires. The action to reflect the changes which occurred in the server to clients is required in any server-client system, and is not a PRC specific overhead.**<br>**2. The error situation should be recognized as both write and delete services have return values. So, user may retry upon user's decision.**<br>**How to deal with complete communication channel failure is out of scope of this Document.**<br><br>**As references;**<br>**1. PRC clear is specified for error recovery process, and can be used upon user decision.**<br>**2. Even in case of communication channel fail, the equipment may continue processing as long as the recipes in PRC are used.** |
|---|---|---|---|---|

| | **Motion by/2nd by** | Naoko Murata (Tokyo Electron) / Mitsuhiro Matsuda (Hitachi Kokusai Electric) | | |
|---|---|---|---|---|
| | **Discussion** | **None** | | |

**Result of Vote (check ONE)** — **8-0**

| | | | |
|---|---|---|---|
| | [Negative is related and persuasive] > 1/3 | **GO TO "Final" → (E)** |
| | [Negative is related and not persuasive] < 2/3 | |
| | 2/3=<[Negative is related and not persuasive] <90% | **GO TO "Final" → (C)** |
| X | 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)**

| | | | |
|---|---|---|---|
| X | 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) |
| X | **(D)** | not significant (counted under **j** in disposition) |
| | **(E)** | related and persuasive    **DOCUMENT FAILS** |
| | | Comment generated. See comment #x |

| **A&R** | **Not approved** |
|---|---|
| | **Reason:** |

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| | | | | | |
|---|---|---|---|---|---|
| **Negative** | **Referenced Section** | *TF/Committee to fill in if necessary | | | |
| | | 9.2.5 Recipe Management per Equipment — Recipe Server may separately manage the master copies of the PEM Recipes which are optimized for particular equipment, and may manage variable parameters as well. | | | |
| | **Reason** | *Original negative comment and justification should be included. | | | |
| | | 9.2.5 Recipe Management per Equipment<br><br>Once again, this section is recommending a host implementation rather than either saying nothing, or stating a requirement.   This section is meaningless and its presence will be confusing to host implementers.<br><br>(March 25th)<br>This section says it is a recommendation and therefore cannot be in the standard. | | | |
| **Withdrawal** | | X | No withdrawal made | | **GO TO "Related" section** |
| | | | Withdrawal document received by staff on XXXX | | **GO TO "Final" → (A)** |
| **Related** | **Motion and Reason** | X | "Related" is mutually agreed upon. | | |
| | | | *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)** | |
| | | | | | |
| **ua** | **Motion and Reason** | | Negative is related and persuasive (needs over 1/3 votes to pass) | | |
| | | X | Negative is related and not persuasive (needs 2/3 or more votes to pass) | | |

| | | | |
|---|---|---|---|
| | | **Reason** | **No technical reason is specified.**<br><br>**Recommendations can be in Standard.**<br>**This section is not recommending but just showing a possibility that the server may have dedicated area per equipment when the PEM recipes are optimized per equipment.**<br><br>**According to "SEMI Standard Style Manual Version 5.1", recommendation can be included in the main body of Standard by using 'should**<br>● **Table 4 Grammar and Language Rules, 4-4 Should and Shall**<br>  ➢ **(4) Use 'shall' for all required elements and use 'should' only for recommended elements of Specifications, Test Methods, Practices, and similar Standards in the main body and Appendix; in Notes or Related Information sections, do not use 'shall'.** |

| | |
|---|---|
| **Motion by/2nd by** | Terry Asakawa (Tokyo Electron) / Mitsuhiro Matsuda (Hitachi Kokusai Electric) |
| **Discussion** | **None** |

| | | | |
|---|---|---|---|
| **Result of Vote (check ONE)** | **8-0** | | |
| | | [Negative is related and persuasive] > 1/3 | **GO TO "Final"** → **(E)** |
| | | [Negative is related and not persuasive] < 2/3 | |
| | | 2/3=<[Negative is related and not persuasive] <90% | **GO TO "Final"** → **(C)** |
| | **X** | 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)**

| | | | |
|---|---|---|---|
| | **X** | 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) | |
| **X** | **(D)** | not significant (counted under **j** in disposition) | |
| | **(E)** | related and persuasive | **DOCUMENT FAILS** |
| | | Comment generated. See comment #x | |

| | | |
|---|---|---|
| **A&R** | | **Not approved** |
| | **Reason:** | |

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## Negative 9 of Reject 2

<table>
<tr><td rowspan="2" colspan="2" align="center"><strong>Negative</strong></td><td colspan="3"><span style="color:orange">*TF/Committee to fill in if necessary</span></td></tr>
<tr><td rowspan="2" align="center"><strong>Referenced Section</strong></td><td colspan="3"><strong>Table 12<br>PEMJState<br>Boolean:<br>FALSE = "The equipment does not operate in PEM"<br>TRUE = "The equipment operates in PEM"</strong></td></tr>
</table>

| Negative | Referenced Section | Table 12<br>PEMJState<br>Boolean:<br>FALSE = "The equipment does not operate in PEM"<br>TRUE = "The equipment operates in PEM" | | |
|---|---|---|---|---|
| | | *TF/Committee to fill in if necessary | | |
| | | *Original negative comment and justification should be included. | | |
| | **Reason** | **Table 12 PEMJ Attribute Definition**<br><br>**If "PEMJState" is the identity of a state, its value should be an identifier, not a Boolean. Any future attempt to add another state value will require changing from Boolean to something else. This will cause incompatibility with older versions of the standard.**<br><br>**(March 25th)**<br>**PEMJState is the identity of a state. But its value is a Boolean rather than a string or integer. A Boolean has only two values. If there arises a future need for additional states, it will be impossible to add them without changing from Boolean to some other data type. And changing data type will introduce incompatibility with prior versions of the standard.** | | |

| | | | | | |
|---|---|---|---|---|---|
| **Withdrawal** | | X | No withdrawal made | **GO TO "Related" section** |
| | | | Withdrawal document received by staff on XXXX | **GO TO "Final" → (A)** |
| **Related** | **Motion and Reason** | | "Related" is mutually agreed upon. | | |
| | | X | *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** | | Negative is related and persuasive (needs over 1/3 votes to pass) | | |
| | | X | Negative is related and not persuasive (needs 2/3 or more votes to pass) | | |
| | | ■ | Reason | For PEMJState, only two states are required as PEMState represents two exclusive states. | |
| | **Motion by/2nd by** | Naoko Murata (Tokyo Electron) / Yuko Toyoshima (Hitachi High-Technologies) | | | |
| | **Discussion** | None | | | |
| | **Result of Vote (check ONE)** | 8-0 | | | |
| | | | [Negative is related and persuasive] > 1/3 | **GO TO "Final" →** | |

| | | | | |
|---|---|---|---|---|
| | | | [Negative is related and not persuasive] < 2/3 | **(E)** |
| | | | 2/3=<[Negative is related and not persuasive] <90% | **GO TO "Final" →** **(C)** |
| | | **X** | 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)** | | |
| | (black) | **X** | It is mutually agreed upon to term the negative "not significant" | **GO TO →** **(D)** |
| | (black) | | 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) | |
| | **X** | **(D)** | not significant (counted under **j** in disposition) | |
| | | **(E)** | related and persuasive | **DOCUMENT FAILS** |
| | | | Comment generated. See comment #x | |

| | | |
|---|---|---|
| **A&R** | (purple) | **Not approved** |
| | **Reason:** | |

## Disposition of Reject 2

| | | | |
|---|---|---|---|
| **9** | Original number of Negatives | | **(g)** |
| **0** | # of Negatives withdrawn | | **(h)** |
| **0** | # of Negatives found not related | | **(i)** |
| **9** | # of Negatives found not significant | | **(j)** |
| **Final** | **X** | **g**-(**h**+**i**+**j**)=0 | ☐ Reject **is Not Valid and is not** 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 | ☐**Not Valid** |

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** | (purple) | **Not approved** |
| | **Reason:** | |

# IV. Comments

## Comment 1

<table>
<tr>
<td rowspan="4"><strong>Comment</strong></td>
<td colspan="2"><strong>Referenced Section</strong></td>
<td colspan="2"><em>*TF/Committee to fill in if necessary</em></td>
</tr>
<tr>
<td colspan="2"><strong>From</strong></td>
<td colspan="2"><strong>Chris Winemiller (Cimetrix)</strong></td>
</tr>
<tr>
<td colspan="2"><strong>Comment</strong></td>
<td colspan="2"><strong>This standard seems far too complex for the problem it is trying to solve. The problem is: How does the factory ensure that some equipment is using the correct "version" of some recipe (and its sub-recipes) specified by a ProcessJob?<br><br>The easy answer: Each time the equipment needs a recipe for a ProcessJob:<br>1.   If it doesn't have the recipe, request it from the host.<br>2.   If it has the recipe, ask the host to verify if it is the same one on the host.  This is easy if every recipe has a unique attribute (like a guid) that changes each time the recipe is created or modified on the host.<br><br>By doing these things, there is no need to worry about synchronization between the host and all the equipment in the factory.  The deletion / modification issue of section 9.2.4, for example, evaporates.<br><br>(March 25<sup>th</sup>)<br>There are far simpler approaches to ensuring that the equipment has the correct version of a given recipe.  My general comment gives one example of an alternative approach.  Therefore I believe this proposed standard should be withdrawn and replaced with something simpler.</strong></td>
</tr>
<tr>
<td colspan="2"><strong>Discussion</strong></td>
<td colspan="2"><strong>"The easy answer:" is one of the operations PRC is proposing; in which the recipes have a unique ID and "9.3.6 Pre-Execution Check Function (Optional)" is used.   The key difference is that PRC uses a protected space for PEM recipes for security purpose.<br><br>In addition, this Standard is trying to cover other cases from different device manufacturers such as;<br># To have a secure recipe space separately from the conventional recipe space which is used for various purposes by various users.<br># Uniqueness of Recipe ID is not 100% maintained.<br># Full Download from recipe server (Cache works as a temporary buffer)<br># Pre-Download of required recipes</strong></td>
</tr>
<tr>
<td rowspan="8"><strong>Action proposed</strong></td>
<td rowspan="6"></td>
<td colspan="3"><strong>The committee agreed to do one of the following actions.</strong></td>
</tr>
<tr>
<td colspan="3"><em>*No motion is required in this step.</em></td>
</tr>
<tr>
<td><strong>X</strong></td>
<td colspan="2">No further action was taken by the committee.</td>
</tr>
<tr>
<td></td>
<td colspan="2">Refer to the task force for more consideration.</td>
</tr>
<tr>
<td></td>
<td colspan="2">New Business</td>
</tr>
<tr>
<td></td>
<td colspan="2">Other</td>
</tr>
<tr>
<td rowspan="1"><strong>Editorial Change</strong></td>
<td colspan="3"></td>
</tr>
<tr>
<td></td>
<td colspan="3"><strong>Case 1: No vote in this section :</strong></td>
</tr>
</table>

| | | | |
|---|---|---|---|
| | | | **To be included and voted on in § 5. Summary of Editorial Changes.** |
| | | | **Case 2: Voted in this section :** |
| | | | **Original section number and at least one full sentence are required in "FROM" and "TO" fields.** |
| | | **1** | **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:** |

## Comment 2

| | | | |
|---|---|---|---|
| **Comment** | **Referenced Section** | | *TF/Committee to fill in if necessary<br><br>**9.1.3 PRC as Temporary Recipe Space — PRC shall be considered as a temporary recipe space which may be cleared whenever the host or privileged user decides for consistency or security reasons.** |
| | **From** | | **Chris Winemiller (Cimetrix)** |
| | **Comment** | | **9.1.3 User- and Host-initiated Cache Clearing defeats the purpose of the standard.**<br><br>**The standard relies heavily upon the notion of cached recipes (in the equipment). Yet it gives the host and a privileged user the ability to clear the cache because of "consistency or security reasons" (9.1.3). If this standard does not trust the security or consistency of the cache, then why implement it?**<br><br>**(March 25th)**<br>**The entire standard requires the use of the cache. And it requires the cache to contain correct copies of the recipes. Yet this section says the host or privileged user may clear the cache for "consistency or security reasons". If the cache is trustworthy, then one should not clear it. If the cache is not trustworthy, then why create a standard around it?** |
| | **Discussion** | | **Whatever systems may lose the consistency of its data in the case of unexpected situations such as communication line failure, EMO, or inappropriate operations by operators occur. In those cases, it is a normal approach to entrust the recovery operations to the privileged user. This thought is also applicable to Standards. Reduction of the number and frequency of such cases is an issue for implementation.** |
| **Action proposed** | | | **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** | | |
| | | | **Case 1: No vote in this section :** |
| | | | **To be included and voted on in § 5. Summary of Editorial Changes.** |
| | | | **Case 2: Voted in this section :** |
| | | | **Original section number and at least one full sentence are required in "FROM" and "TO" fields.** |
| | | **1** | **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:** |

## Comment 3

| | | | |
|---|---|---|---|
| **Comment** | | **Referenced Section** | *TF/Committee to fill in if necessary |
| | | **From** | **Rob van Wezel (Salland Engineering Europe BV)** |
| | | **Comment** | **The PDF does not describe if there is any provisioning for recipe versioning / traceability, that may be something to keep in mind. However the context is not 100% clear to me so I will abstain from voting.** |
| | | **Discussion** | **Recipe versioning or traceability is out of scope of this Standard.**<br>**Doc # 5618 Recipe Integrity is under development for versioning and PRC may refer in future.** |
| **Action proposed** | | | **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 |

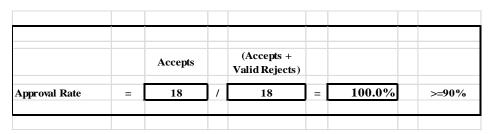| | | |
|---|---|---|
| **Editorial Change** | | |
| | | **Case 1: No vote in this section :** |
| | | **To be included and voted on in § 5. Summary of Editorial Changes.** |
| | | **Case 2: Voted in this section :** |
| | | **Original section number and at least one full sentence are required in "FROM" and "TO" fields.** |
| | **1** | **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

There is no editorial change at this section.

# 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.**

| | | **Accepts** | **(Accepts + Valid Rejects)** | | | |
|---|---|---|---|---|---|---|
| **Approval Rate** | = | **18** | / **18** | = | **100.0%** | >=90% |

| A&R | | Not approved |
|---|---|---|
| | | Reason: |

# VII. Safety Check

See § 14 of the Regulations for further information

| | | |
|---|---|---|
| **Motion:** | X | 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. |

| Motion by/2nd by | Yoshihisa Takasaki (Dainippon Screen Mfg.) / Mitsuhiro Matsuda (Hitachi Kokusai Electric) |
|---|---|
| Discussion | None |
| Vote | 8-0 Motion passed |

| A&R | | Not approved |
|---|---|---|
| | | Reason: |

# 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

| X | | 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. | |
|---|---|---|---|
| | X | No potentially material patented technology or copyrighted items are known | **GO TO SECTION IX** |
| | | 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. | **GO TO SECTION IX** |
| | | 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 | |
| | **MOTION** | Ask ISC for special permission to publish | |
| | | Quit activity | |
| | | Wait for LOA for patented technology or release of copyrighted items. | |
| | Motion by/2nd by | Name (Company)/Name (Company) | |
| | Discussion | XXXX | |
| | Vote | XX-XX | |
| | Final Action | | Motion Passed |
| | | | Motion Failed |
| A&R | | Not approved | |

A&R Ballot Report Template Revision 7.7

| | | Reason: |
|---|---|---|

* 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

| | | |
|---|---|---|
| **Motion** | **X** | 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. |
| | | This document failed committee review and will be returned to the task force for rework. |
| | | This document failed committee review and work will be discontinued. |
| **Motion by/2nd by** | | Yoshihisa Takasaki (Dainippon Screen Mfg.) / Naoko Murata (Tokyo Electron) |
| **Discussion** | | **None** |
| **Vote** | | **8-0** |
| **Final Action** | **X** | Motion passed |
| | | Motion failed |
| **A&R** | | **Approved** |
| | | **Not approved** |
| | Reason: | |

A&R Ballot Report Template Revision 7.7